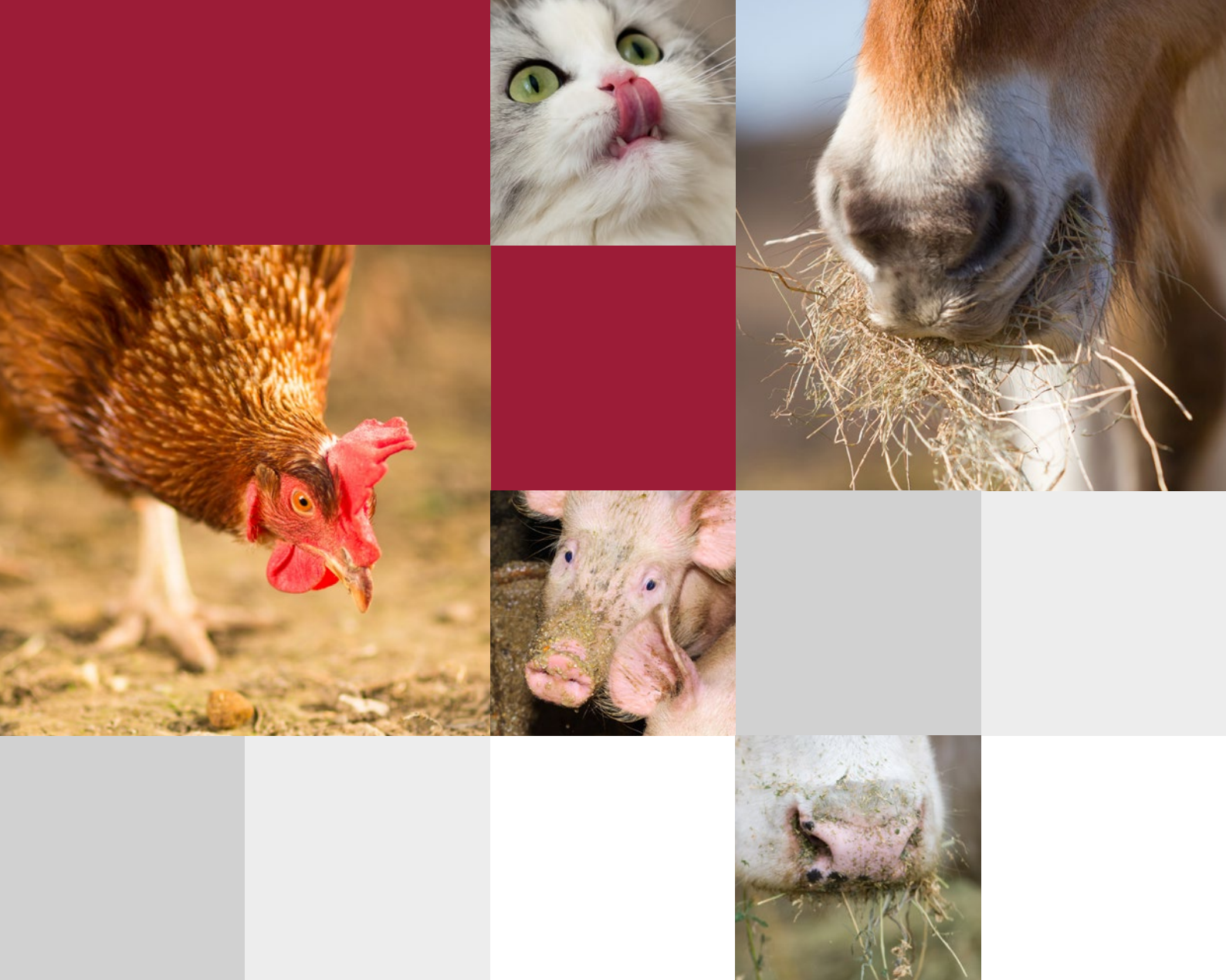




2023

# Annual Report



Photos of five different animal species engaged in eating, i.e., nutrient intake, will guide you through this year's annual report of the Vetmeduni Vienna. They stand for the various animal patients at the University Clinics, as well as for research and teaching at the Vetmeduni Vienna.

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University of Veterinary Medicine, Vienna (Vetmeduni Vienna)  
 Veterinaerplatz 1, 1210 Vienna  
 T +43 1 25077-0, [communication@vetmeduni.ac.at](mailto:communication@vetmeduni.ac.at)

### Content:

Felizitas Theimer

### Project management and editing:

Aleksandra Klepić

### Editorial assistants:

Franziska Erlwein, Georg Mair, Felizitas Theimer

Layout: Birgit Rieger ([www.br-design.at](http://www.br-design.at))

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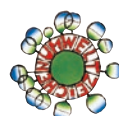
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# Forewords



Photo: © Doris Kucera/Vetmeduni Vienna

## Petra Winter

### Rector designate and Vice-Rector for Study Affairs and Clinical Veterinary Medicine

The year 2016 unfurled under the banner of “20 years campus”. The University of Veterinary Medicine, Vienna’s move to the new campus in Floridsdorf, Vienna’s 21<sup>st</sup> district, in 1996 brought about significant development opportunities in the areas of research, teaching and clinical and scientific services. The annual increases in patient intake, the numerous research projects and the gratifying numbers of graduates are proof positive that we have a healthy and sustainable university here. In the coming year too, it will be vital to shape

our future together and to generate innovations for society on many levels. Daily operations must be maintained and quality assurance and optimization ensured through a continuous improvement process. As the newly selected Rector, I am especially pleased to be able to accompany the University of Veterinary Medicine, Vienna on a part of its way over the next few years.

## Otto Doblhoff-Dier

### Vice-Rector for Research and International Relations

Conducting scientific research into complex issues in the spheres of veterinary medicine, food safety, biomedicine and One Health – this is the daily work of our scientists, whereby the focus is increasingly on interdisciplinary research. For this, it is particularly important that fruitful alliances are cultivated. In 2016 we were once again successful in attracting funding for numerous new projects. Our young scientists, however, represent the greatest potential for our university’s future. As they prepared for their national and international scientific careers, our young researchers were supported during the previous year by clearly defined educational programmes and strong mentoring.



Photo: © Daniel Gebhart de Koekoek/Vetmeduni Vienna



Photo: © Daniel Gebhart de Koekoek/Vetmeduni Vienna

## Christian Mathes

### Vice-Rector for Resources

In order to put the University of Veterinary Medicine, Vienna on stable footing, in 2016 we devoted a great deal of energy to developing alternative financing sources. Where public funding is becoming scarce, we are working on being able to realize our many proposals for research projects with philanthropic support from individuals and private foundations. The goal is to fund part of our annual budget through such types of financing in the future. Above all though, the greatest source of capital at our university is our staff. Here too, it will be a matter of creating the conditions for them to be able to fulfil their assignments efficiently and autonomously and in this way enabling them to actively contribute towards shaping the future of the University of Veterinary Medicine, Vienna.



## Veronika Sexl und Sabine Hammer

### Chairperson and Deputy Chairperson of the Senate of the University of Veterinary Medicine, Vienna

The Vetmeduni Vienna can look back on an extremely successful year. As a small university, we can take great pride in our successful third-party fundraising in the clinical, translational realm as well as in the foundational realm, which reflects on our activity and attractiveness. However, if one follows current events

nowadays, one is presented with a frightening view worldwide. Whether in the USA, in Turkey or in Austria, the socio-political changes are cause for concern. Education and critical thinking are important avenues for countering these developments. Schools and universities are faced with a challenge that is not to be underestimated. We should not seek to convey only pure fact-based knowledge to our veterinarians and researchers, but to teach young people critical thinking and constant questioning, in order to foster in them open and courageous attitudes and a culture of discussion.

## Edeltraud Stifinger

### Head of the University Council

High-quality teaching, innovative research and responsible veterinary medical care in the spirit of the Third Mission – this is what the Vetmeduni Vienna has represented for 251 years. The focus therein has always been on the social contract: to be dedicated equally to animals, humankind and the environment. It is with a great sense of responsibility that the staff of the Vetmeduni Vienna care for around 51,000 animal patients annually, optimize administrative processes, work with such commitment to the education and continuing education of the next generation of qualified veterinarians and scientists, and propel research in pioneering topics. On behalf of the entire University Council, I would like to thank them for their dedication! 2016 was also marked by the appointment of a new rector. As you know, this became necessary with Sonja Hammer-schmid's swearing in as Federal Minister of Education. As of now, Petra Winter is the first veterinarian to hold the top job at the Vetmeduni Vienna. Her many years of clinical experience and professional expertise in addition to her leadership qualities will advance high-quality education, scientific expertise and clinic operations. This will ensure that the University of Veterinary Medicine, Vienna will chart a successful course well into the future.



# Facts and Figures

## Sites of the Vetmeduni Vienna

1. Campus (Vienna, Floridsdorf)
2. Messerli Research Institute (Vienna, Floridsdorf)
3. Department for Integrative Biology and Evolution (Vienna, Floridsdorf)
4. Kremesberg estate (Pottenstein, Lower Austria)
5. Rehgras estate (Furth/Triesting, Lower Austria)
6. Haidlhof estate (Bad Vöslau, Lower Austria)
7. Medau estate (Berndorf, Lower Austria)
8. Satellite of the ornithological station (Seebarn/Grafenwörth, Lower Austria)
9. Reproduction Center Wieselburg (Wieselburg, Lower Austria)

- Teaching and Research Farm
- Inter-university establishment

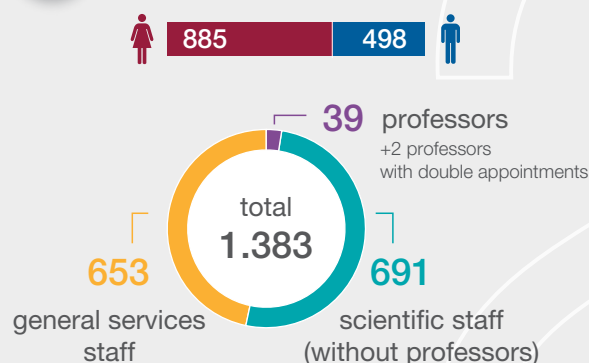
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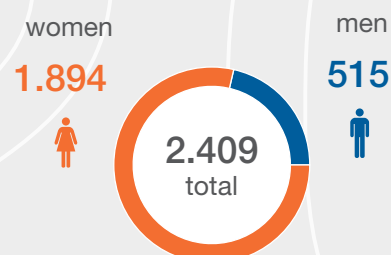
## Other University establishments

- Messerli Research Institute  
(together with the Medical University of Vienna and the University of Vienna)
- Graf Lehnendorff Institute for Equine Science  
(together with the Brandenburg Stud Farm Foundation in Neustadt, Germany)
- Inter-university Department for Agrobiotechnology – IFA Tulln  
(together with the University of Natural Resources and Life Sciences, Vienna and the Vienna University of Technology)

### Staff as of 5 Jan 2017



### Students as of 5 Jan 2017





Photos: © 1. Johannes Zinner/Vetmeduni Vienna | 2. Vetmeduni Vienna | 3. Michael Bernkopf/vetmeduni Vienna | 4. Felizitas Theimer/Vetmeduni Vienna | 8. Ernst Hammerschmid/Vetmeduni Vienna | 9. Michael Bernkopf/Vetmeduni Vienna



### Animal patients

In 2016  
**51.400** animal patients  
 visited five species-specific  
 University Clinics.



### University Clinics

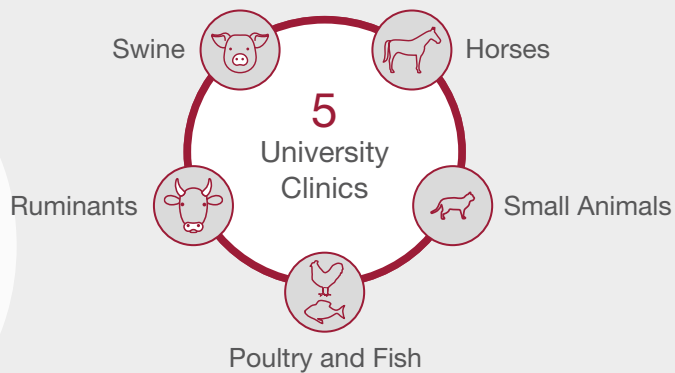




Photo: © Johannes Zimmer/Vetmeduni Vienna



## Unique in Austria – internationally recognized

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The Vetmeduni Vienna is the only university in Austria specializing in veterinary medicine. In Europe, the Vetmeduni Vienna is considered to be one of the leading veterinary medical research and education institutions and it is one of the few veterinary universities to be fully accredited (since 2013) by the quality assurance agency of the European Association of Establishments for Veterinary Education (EAEVE).



## Courses of study

---

- Diploma and doctoral programmes in veterinary medicine
- Bachelor's and master's programmes in biomedicine and biotechnology
- Bachelor's programme in equine sciences<sup>1</sup>
- Master's programme in biomedicine and biotechnology / comparative biomedicine
- Interdisciplinary master's programme in human-animal interactions
- Master's programme in wildlife ecology and wildlife management<sup>1</sup>
- Master's programme in evolutionary systems biology<sup>2</sup>
- European master's programme in comparative morphology (EUCOMOR)<sup>3</sup>
- PhD programme

1 In cooperation with the University of Natural Resources and Life Sciences, Vienna

2 In cooperation with the University of Vienna, first offered in the winter semester 2016/17

3 In cooperation with the Universities of Antwerp (Belgium), Giessen (Germany), Poznan (Poland) and Naples (Italy)



## Research

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The research activities of the Vetmeduni Vienna are concentrated around the following core topics:

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





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Education

# Education

## Studying at the Vetmeduni Vienna: Competence for the future

The Vetmeduni Vienna offers students a scientifically based and hands-on education. The curriculum is structured around clearly defined learning objectives and hones necessary competences, in order to prepare students for the demands of clinical and research enterprises.

### Focus on: Interplay of clinic and science

In pursuing their courses of studies, such as, for example, the diploma degree programme in veterinary medicine, students at the Vetmeduni Vienna prepare themselves for manifold activities in clinical practice, science or industry. The curricula at the Vetmeduni Vienna are based on a student-centred learning approach. This means that autonomous learning is in the foreground.

Clinical and scientific education both begin early in a course of studies. Thus, in the framework of the curriculum, students acquire essential competences for professional practice and for their scientific activities. Over the course of their education, students learn to plan studies and scientific work and to analyse data, while also continually improving their practical skills.

*Students taking the Objective Structured Practical Examination prove not only their theoretical knowledge, but more so their practical skills.*



Photo: © Michael Bernkopf/Vetmeduni Vienna



Photo: © Georg Mair/Vetmeduni Vienna

At the Vetmeduni Vienna, written examinations are administered via the electronic testing platform Q[kju:]–Online.

### Theory and practice: Quality assurance for exams

- **Written examinations** at the Vetmeduni Vienna are administered via the electronic testing platform Q[kju:]–Online. All instructors develop questions pertaining to various learning objectives for their respective courses. Before being used on a test, every question undergoes a so-called “six eyes” review, whereby formal and technical criteria are evaluated. With regard to form, attention is paid to whether questions are unambiguously formulated and whether all the options for answers are unequivocal. Technical questions are assessed in advance to make sure they are correct in terms of content and relevance. This type of standardized test enables comprehensive quality assurance. This digital testing platform has been in use at the Vetmeduni Vienna since 2014.
- **Practical examinations** must also be completed as part of a curriculum at the Vetmeduni Vienna. One example is the practical part of the first diploma exam for students of veterinary medicine: the Objective Structured Practical Examination (OSPE). During this part of the first diploma exam administered at the end of the fourth semester, test-takers must prove that they possess not only theoretical knowledge, but also practical skills. The test covers what has been learned up to that point: from the structure and function of organs to communicating with animal owners in order to collect a case history to laboratory, pharmacology and feedstuffs. Students must demonstrate their abilities at twelve testing stations at several locations on the campus of the Vetmeduni

Vienna. Students’ practical skills are evaluated at the stations, including such things as examination of organs, general examination procedures or applying medication. The practical demonstration or “show” in answer to an assignment is characteristic of the Objective Structured Practical Examination. Every test question first undergoes internal and external assessment. This double review process ensures that generally accepted standards are being evaluated.



### Courses of study

- Diploma and doctoral programmes in veterinary medicine
- Bachelor’s and master’s programmes in biomedicine and biotechnology
- Bachelor’s programme in equine sciences<sup>1</sup>
- Master’s programme in biomedicine and biotechnology / comparative biomedicine
- Interdisciplinary master’s programme in human-animal interactions
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- Master’s programme in evolutionary systems biology<sup>2</sup>
- European master’s programme in comparative morphology (EUCOMOR)<sup>3</sup>
- PhD programme

1 In cooperation with the University of Natural Resources and Life Sciences, Vienna  
 2 In cooperation with the University of Vienna, first offered in the winter semester 2016/17  
 3 In cooperation with the Universities of Antwerp (Belgium), Giessen (Germany), Poznan (Poland) and Naples (Italy)

# Teaching: Innovative and competence-oriented

In its teaching, the Vetmeduni Vienna values innovative educational concepts such as simulation-based learning. Additionally, students' progress is evaluated via Competence Checks and regular Progress Tests. Also, the quality and efficiency of teaching is assessed and developed through research in the field of education science.

## **Simulation-based learning: Training on a dummy**

The motto of the VetSim Skills Lab at the University of Veterinary Medicine, Vienna is “simulating vet’s life”. This lab consists of specially furnished classrooms where students can learn and practice clinical and practical skills before performing them on animal patients. There, prospective veterinarians can rehearse skills like changing bandages, intubation and working with ultrasound equipment. Student gain confidence through this type of regular training. The Skills Lab is open to students for most of the day, during which time it can be used for training. VetSim training prepares students for their work in a practice. Tutors

are available at the site to help students, explain organizational procedures and demonstrate the instruments. Corresponding classes are also held in the Skills Lab, e.g., exercises for the correct application of a bandage on a small animal under the tutelage of course assistants. Students can rehearse this important practical skill on their own and perfect their technique for use at the University Clinics and in veterinary practices. Thus, the Skills Lab provides a dedicated bandaging station with special animal models, so-called “Rescue Critter Dummies”. This gives students the opportunity to practice this technique on a dummy and to get valuable advice for continually improving their bandaging techniques as part of an orthopaedic curriculum.

*In the Skills Lab at the Vetmeduni Vienna students rehearse practical skills – such as applying a bandage – on animal models*



Photo: © Michael Bernkopf/Vetmeduni Vienna



Photo: © Frauke Lejaune/Vetmeduni Vienna

*Vetmeduni Vienna students practice leading conversations with animal owners.*

### Measuring progress in learning: The Progress Test in Veterinary Medicine (PTT)

The Progress Test in Veterinary Medicine (Progress Test Tiermedizin or PTT) is offered at the Vetmeduni Vienna. Students can opt to take the PTT knowledge test once a year to gauge their own educational progress. The Progress Test in Veterinary Medicine provides snapshots of the level and advancement of specialized knowledge across an entire curriculum. It is not relevant in terms of passing/failing and it is not graded. The test consists of multiple choice questions in a standardized blueprint. Students work only on the questions they can answer. All the rest can be answered with a “Don’t know” option. The further a student advances in a course of studies, the more questions can be answered correctly. Hence, progress over time is represented. The Progress Test gives students an overview of how their academic progress compares to that of their classmates. Results are shared only with the individual taking the test and are sent to each respective student personally.

### Ongoing evaluation via the Competence Check

The Vetmeduni Vienna has defined a goal of doing its utmost to nurture students in the development of their competencies. How well this is succeeding is determined on a regular basis through the Competence Check, which is an essential instrument for quality assurance in higher education. In order to get as comprehensive a view as possible, students, as well as teachers and instruc-

tors, are asked to provide an assessment of the students’ competencies in the middle and at the end of the course of studies. In the process, the students gauge the state of their knowledge and moreover assess at what level this knowledge was conveyed through the teaching. Thus, the Competence Check does not prompt for knowledge, but much more serves as a way for students to check their own and others’ appraisal of their competencies. The online questionnaire was developed on the basis of the previously drafted Competency Profile, which specifies the milestones that ought to be reached by certain points in time.

### Soft skills augment technical know-how

Successful treatment of animal patients depends not only on technical know-how, but on successful communication with animal owners. To hone this important soft skill, classes on conducting conversations with animal owners begin in the third semester of the diploma programme in veterinary medicine. After an introductory lecture designed to enhance sensitivity to communication issues, cases are worked through in structured role plays. The screenplays for these role plays, also known as case vignettes, define the most important parameters: where the conversation is taking place, the experience of the veterinarian, data about the animal patient, and also some personal characteristics and life circumstances of the owner. In this way, prospective veterinarians – already during their university studies – learn how to glean relevant information from an introverted animal owner or vice versa, how to filter essential information out of the profusion of information given by an extraverted animal owner.



Photo: © Ernst-Hammerschmid/Vetmeduni Vienna

Rector designate Petra Winter with Gerhard Eder, who was honoured with the "Instructor of the Year 2016" award.

### Teaching vets: Practicing veterinarians support students

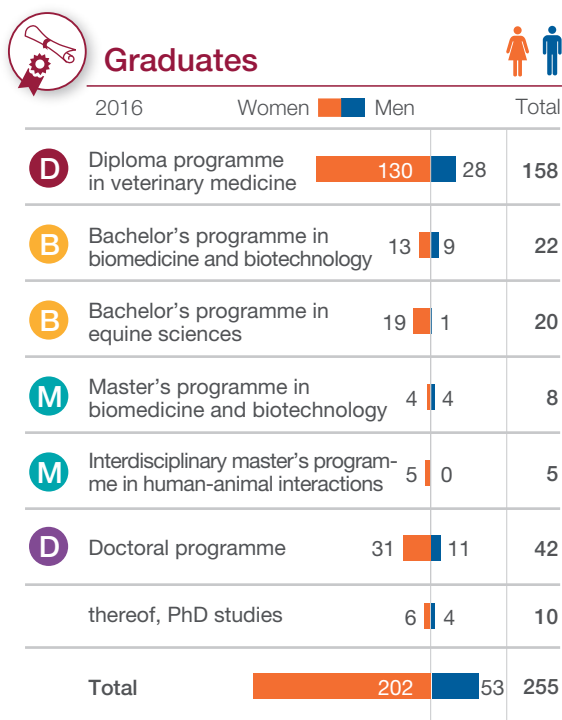
Students of veterinary medicine at the Vetmeduni Vienna are also supported by practicing veterinarians, known as instructors. Since 2015, the Vetmeduni Vienna has further intensified its collaboration with these external teachers. Every year they are invited to the "Teaching Vets Symposium". At this venue, instructors can engage in dialogue about their experiences guiding students and the evolution of their teaching skills. The Teaching Vets Symposium #2 was dedicated to the latest developments in the sphere of education, illuminated best practices examples in teaching and placed innovative education into the foreground. E-learning in veterinary medicine was a key topic. The education symposium also provided the occasion for presenting the "Instructor of the Year" award to the best instructor. Gerhard Eder was awarded this distinction in 2016.

### Teaching vets on tour: Networking with practicing veterinarians all over Austria

Experienced practicing veterinarians are integrated into the education of prospective veterinarians as designated instructors. For all of these instructors in Austria, the Vetmeduni Vienna offers special teacher training as a way to exchange information. Through the "Teaching Vets on Tour" programme, they are informed about current educational design at the Vetmeduni Vienna on the one hand, while on the other obtaining pedagogic inspiration for student-centred learning. With "Teaching Vets on Tour", the Vetmeduni Vienna is bringing its continuing education offering in the fields of teaching and education directly to the states.

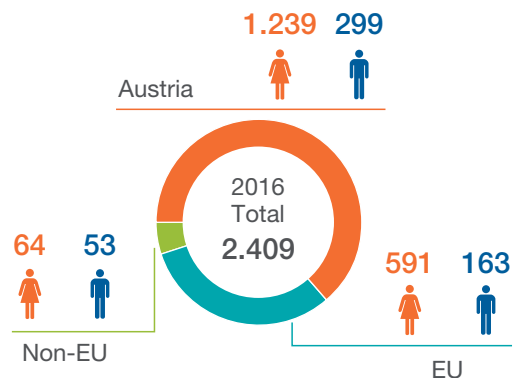
### Impulses for educators

Every month, the Office of the Vice-Rector for Study Affairs and Clinical Veterinary Medicine invites all educators at the Vetmeduni Vienna to an "Impulse Breakfast". This morning continuation education offering combines valuable inputs from experts in the fields of education and pedagogy with a relaxed breakfast. It gives educators an opportunity to learn about the latest insights in university teaching. Videos of the presentations may be viewed at <http://vetmediathek-gallery.vetmeduni.ac.at/impulsfruehstueck>



### Students by country of origin

as of 5 Jan 2017



# Awards for teachers

Innovative university teaching is oriented around competencies and puts the focus on students. Educators who in their teaching are particularly dedicated to these principles are candidates for the Teacher of the Year award. Every year, 350 educators at the Vetmeduni Vienna have the opportunity to apply for the categories “Junior Teacher of the Year” (without habilitation) and “Senior Teacher of the Year” (with habilitation). In 2016 the favourites were selected – after short speeches by all of the candidates – directly via audience voting at the Teaching Vets Symposium. The Department of Cultural Affairs of the City of Vienna (Municipal Department 7) supports these awards.

## Junior Teachers of the Year 2016

- 1<sup>st</sup> Place:** Barbara Braus, Small Animal Surgery
- 2<sup>nd</sup> Place:** Michaela Gumpenberger, Diagnostic Imaging
- 3<sup>rd</sup> Place:** Alexandra Hund and Thomas Wittek, University Clinic for Ruminants

*Barbara Braus was pleased to win first place in the category “Junior Teacher of the Year”.*

Photo: © Ernst Hammerschmid/Vetmeduni Vienna



Photo: © Ernst Hammerschmid/Vetmeduni Vienna

## Senior Teachers of the Year 2016

- 1<sup>st</sup> Place:** Birgit Hladschik-Kermer and Michael Leschnik, Internal Medicine Small Animals
- 2<sup>nd</sup> Place:** Anja Joachim, Institute of Parasitology
- 3<sup>rd</sup> Place:** Florian Buchner, Equine Surgery

*Birgit Hladschik-Kermer and Michael Leschnik (Internal Medicine Small Animals) were pleased to win first place in 2016 in the category “Senior Teacher of the Year”*

**Vetucation® Award:  
To honour the best e-learning-projects**

For the past 11 years, the Vetucation® Award has been bestowed on an existing e-learning course, as well as on an e-learning course in development. The Vetucation® learning platform can be used by students and teachers alike to upload interactive teaching modules, videos or other educational materials. These materials may be used to prepare for or follow up on various classes. Students have gladly accepted this offer: As of this writing, 690 courses are offered on this learning platform, resulting in 12,500 clicks per day. Out of all the e-learning concepts, the best are honoured annually with the Vetucation® Award.



Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Monika Zandra and Johannes Baumgartner (not pictured) were pleased with their Vetucation® Award for existing e-learning projects. For her e-learning project in development, Ulrike Auer was presented the Vetucation® Award by Mehrzad Hamzelo (photo, l.), head of the e-learning and AV media working group in IT Services.

**The winners of the 2016 Vetucation® Awards**

- **For existing e-learning projects:**  
Johannes Baumgartner and Monika Zandra, Institute of Animal Husbandry and Animal Welfare
- **For e-learning projects in development:**  
Ulrike Auer, Anaesthesiology and perioperative Intensive-Care Medicine



**Vetmeduni Vienna applicants**



2016		Women	Men	Total
Online applicants	1.432			300
Completed the aptitude test	869			168
Admitted	270			51



# Awards for students

## Students of the Year 2016

Melissa Schedlbauer, Claudia Johanna Greiner (diploma degree programme in veterinary medicine) and Jessica Pfeiffer (bachelor's programme in biomedicine and biotechnology) were the "Students of the Year 2016". Every year the Office of the Rector of the Vetmeduni Vienna honours the top graduates in each course of studies. Criteria for the award are grade point average and duration of studies. The Department of Cultural Affairs of the City of Vienna (Municipal Department 7) supports these awards.



Photo: © Ernst Hammerschmid/Vetmeduni Vienna

*Claudia Johanna Greiner (photo, r.) won the Student of the Year 2016 in the field of veterinary medicine. Also Melissa Schedlbauer, on whose behalf Kira Schmitt (photo, l.) accepted the award.*



Photo: © University of Kansas

*Thomas Hill, doctoral student at the Vetmeduni Vienna and winner of the Award of Excellence, is currently doing research at the University of Kansas (USA).*

## Award of Excellence 2016

In 2016, the State Prize for the best Austrian doctoral and PhD theses was awarded by the Federal Ministry of Science, Research and Economy (BWF) to Thomas Hill of the Vetmeduni Vienna's Institute of Population Genetics. For his thesis, he researched the increasing occurrence of mobile genetic elements in a species of fruit fly (*Drosophila simulans*), which prior to 2006 had not exhibited any such elements. By analysing 186 different strains of *D. simulans*, Hill was able to identify 20% as causes of the hybrid dysgenesis.

## Outstanding student prize 2016

Every year since 1990, the 50 best graduates of diploma and master's programmes at all Austrian universities and technical colleges have been recognized with the Outstanding Student Prize, a 3,000-euro State Prize awarded by the Federal Ministry of Science, Research and Economy (BMWFW). The 2016 prize-winner for the Vetmeduni Vienna was Rouven Schulz, a student in the biomedicine and biotechnology master's programme. He completed his thesis entitled "Discovery of mimotopes for pathogenic anti-aquaporin-4 autoantibodies in neuromyelitis optica via phage display" at the Center for Brain Research at the Medical University of Vienna.



Photo: © Medizinische Universität Wien

*After completing his master's degree at the Vetmeduni Vienna, prize-winner Rouven Schulz commenced PhD studies.*



Photo: © Melvin Bagot

## EUCOMOR – Best Student 2016

The second graduating class of EUCOMOR, the European Master in Comparative Vertebrate Morphology, recently completed its studies in Antwerpen, Belgium. In the course of the diploma celebration, Khan Junatas, a graduate supervised by the Vetmeduni Vienna, was honoured with a Best Student Award. The EUCOMOR course of studies is coordinated by five European universities and sponsored by the European Commission.

*Vetmeduni Vienna mentee Khan Junatas of the Philippines was honoured with a Best Student Award by the EUCOMOR international master's programme.*



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Research

# Research

## Current research projects

Research areas at the Vetmeduni Vienna are manifold. On the following pages, drawing from all fields, we will present a selection of new projects begun in 2016.

### European Research Council (ERC) Advanced Grant: Studying a cancer trigger

In our cells, special enzymes like CDK6, a type of kinase, regulate processes like the cell cycle or cell growth. Often, abnormal cells overproduce kinases and foster tumour development through hyperactivity. For this reason enzymes have become a focus of tumour research. CDK6 is an important kinase mainly in haematopoietic tumour cells and is suspected to be a possible aggressor and tumour promoter. Concrete evidence of such an enzyme would open the door for a specifically targeted therapy and indicate treatment with inhibitors. However, Veronika Sexl and her team at the Vetmeduni Vienna's Institute of Pharmacology and Toxicology recently demonstrated that inhibitors do not completely suppress the tumour-pro-

moting aspect of CDK6. In many cancer patients, the enzyme regulates tumour-promoting genes and the formation and proliferation of blood vessels wholly without kinase activity. Sexl is concentrating on new ways to inhibit this second, kinase-independent function of CDK6 and to stymie a possible "global player" in tumour development in a much more targeted way. This is being made possible by one of the coveted European Research Council (ERC) Advanced Grants.

### COMET Competence Centre for safe and sustainable foodstuffs

In the last few years, consumers have become increasingly conscious of food safety, quality and sustainability. On 30 June 2016, the Austrian Research Promotion Agency (FFG) approved FFG-QSI, a COMET Competence Centre committed to exactly these important topics. FFG-QSI stands for Feed and Food Quality, Safety & Innovation. The goal of the Vetmeduni Vienna's first K1 Centre is to make domestic food- and feedstuff production better, safer and more sustainable and to be a catalyst for innovation. This also extends to the production pathways and systems necessary for producing and processing foodstuffs. Future research will encompass thematic focal points along the entire value chain of plant- and animal-based food. Industry partners will be able to derive long-term benefits from the achievements and innovations that FFG-QSI will contribute to the value chain of food- and feedstuffs. This will enhance the quality and safety of production processes and products. Martin Wagner of the Vetmeduni Vienna's Institute of Milk Hygiene is the scientific head of the K1 Centre. Scientific

*ERC (European Research Council) prize-winner  
Veronika Sexl of the Vetmeduni Vienna's Institute of  
Pharmacology and Toxicology.*



Photo: © Michael Bernkopff/Vetmeduni Vienna



Photo: © Michael Bernkopf/Vetmeduni Vienna

*Martin Wagner, head of the Institute of Milk Hygiene, is doing research for the Vetmeduni Vienna's first K1 Centre.*

partners in addition to the Vetmeduni Vienna are the University of Natural Resources and Life Sciences; the University of Applied Sciences Upper Austria, the Austrian Institute of Technology GmbH (AIT), the Austrian Agency for Health and Food Safety and RECENDT (Research Center for Non Destructive Testing).

### Rejuvenating cartilage

The inflammatory joint disease osteoarthritis causes cartilage to steadily deteriorate. The regenerative capacity of adult cells is insufficient to counter this and treatments to date have only been able to alleviate concomitant symptoms. By contrast, foetal cartilage can completely regenerate after an injury. Thus, insights into the process of foetal healing can provide valuable clues for improving cartilage healing in adults. In the project “Cartilage Regeneration – a biomimicry approach recapitulating fetal-like regeneration”, Florian Jenner of the University

*Florian Jenner, head of Equine Surgery at the Vetmeduni Vienna, and her team are conducting research to improve cartilage healing.*



Photo: © Aleksandra Klepic/Vetmeduni Vienna

Equine Clinic at the Vetmeduni Vienna and her team are working with industry and university partners to identify processes in foetal cells, with the goal of ultimately developing novel treatment strategies. The aim is to stimulate the natural processes of foetal healing in adult cartilage. The Austrian Research Promotion Agency (FFG) approved a Bridge-Early Phase grant for the project.

### A hand over poultry

Advancing diet and health in poultry production is the goal of the new Centre of Excellence for Poultry Innovation (CEPI). Financed by the Interreg V-A Austria-Hungary programme, the Centre of Excellence, an alliance between the Clinical Unit of Poultry Medicine at the Vetmeduni Vienna and the Georgikon Faculty at the University of Pannonia in Keszthely (Hungary), aims to fuse veterinary medical and agricultural knowledge and to make this available to poultry producers and students. Pathogens that can be transmitted to humans (zoonoses) and the avoidance of genetically altered feed are only two of the topics being worked on by the alliance. In the long run, the goal is to support and efficiently promote the economic stability of poultry production enterprises. CEPI is the successor project to the CEPO – Centre of Excellence for Poultry, which has already been successfully concluded by both establishments.

Photo: © Aleksandra Klepic/Vetmeduni Vienna



*Michael Hess, head of the University Clinic for Poultry and Fish Medicine, is using his project to promote inter-university dialogue about poultry health.*



Photo: © Aleksandra Klepic/Vetmeduni Vienna

*Stephanie Lürzel of the Institute of Animal Husbandry and Animal Welfare is studying which interactions with humans have a particularly positive effect on the wellbeing of cattle.*

**Wellbeing in cattle:  
The role of interaction with humans**

Friendly handling of cattle fosters a good relationship between human and animal and has a positive impact on the animals' wellbeing. Stephanie Lürzel of the Institute of Animal Husbandry and Animal Welfare at the Vetmeduni Vienna is studying which interactions with humans have a particularly positive effect on the wellbeing of cattle. The hypothesis: Positive contact with humans can lead not only to a reduction in negative emotions, but also to the presence of positive ones. At the heart of her research is the question: Under what circumstances do human-animal interactions trigger positive emotions and which physiological processes are elicited that might positively influence the animals' health? The project is being supported by funding from the Austrian Science Fund (FWF).

**Evolutionary immune specialists**

Camels can adapt extremely well to harsh environmental conditions and demonstrate resistance to diseases that can be problematic for other pets. The three types of Old World camels live in different geographical regions and thus are exposed to varying environmental influences and pathogens. This makes them interesting for researching what is known as the immunogenome, i.e., the genes responsible for the immune response that make up about 5% of our genome. Despite its functional significance, very little is known about the development of immune defences in camels. With her project "Characterization of the immunogenome of Old World camelids", Pamela Burger from the Research Institute of Wildlife Ecology wants to close this gap and find new impulses for understanding immunoevolution. With funding from the Austrian Science Fund (FWF), she intends to study the diversity, evolution and selection of immunogens. Genomic regions such as the major histocompatibility complex I and II (which code important proteins for immune recognition) and also their binding sites with natural killer cell receptors are crucial factors for this. Historical probes of wild dromedaries, both extinct and domesticated early on, ought to provide important clues about selective pressure in immunogens during domestication. This might lead to a targeted breeding of camels, which are playing a significant socio-economic role in the growing milk and meat sectors of arid regions.

*Pamela Burger of the Research Institute of Wildlife Ecology at the Vetmeduni Vienna is researching the immunogen of Old World camelids.*



Photo: © Aleksandra Klepic/Vetmeduni Vienna



Photo: © Aleksandra Klepic/Vetmeduni Vienna

### High tech in veterinary practice: Morals in the veterinary profession

Artificial hips, dialysis, pacemakers, diagnostic imaging and oncology have become integral components of veterinary medicine. In his project “Morals in the veterinary medical profession”, Herwig Grimm of the Messerli Research Institute of the Vetmeduni Vienna poses the question to what extent high tech leads to changes in the moral self-conception of the veterinary medical profession. Central to the inquiry is that new technical possibilities also cause veterinarians to be confronted with moral uncertainties and challenges. In the first part of this project financed by the Austrian Science Fund (FWF), a theoretical foundation will be developed focussing on the veterinarian–animal owner–animal patient relationship, concepts in veterinary medical activities (e.g., diagnosis and treatment) and external influence factors (e.g., an animal owner’s financial situation). In the second empirical part, focus groups and a questionnaire survey will be conducted with Austrian veterinarians. The goal is to describe (in an empirically informed manner) and to analyse the elevated convictions and attitudes of veterinarians – the “internal morality” – with regard to high-tech veterinary medicine. As a result, this project aims to contribute to an improved and an empirically informed understanding of the existing conflicts and ethical dilemmas confronting veterinarians.

*Brigitte Lukas of the Institute of Animal Nutrition and Functional Plant Compounds is studying and comprehensively defining the species *Cistus creticus*.*

*Herwig Grimm wants to find out if new technological possibilities are causing veterinarians to be confronted with moral challenges in their daily working lives.*

### Multi-faceted: Pink rock-rose

*Cistus creticus*, aka pink rose-rose or hoary rock-rose, is an attractive blooming shrub that is widespread in the Mediterranean region. The etheric oils of the pink rock-rose are rich in various labdane-type diterpenes. These special botanical substances can have a positive effect on health. Among other things, they exhibit strong cell-killing and tumour-inhibiting characteristics. This circumstance makes the essential oil of *Cistus Creticus* interesting for applications in cancer treatment. What is known about the pink rock-rose, however, is that its external characteristics are very rich in variations. A research team headed by Brigitte Lukas of the Institute of Animal Nutrition and Functional Plant Compounds at the Vetmeduni Vienna are studying and comprehensively defining the species *Cistus creticus*. This will be accomplished by linking data from comparative analyses of different structural, genetic and biochemical plant characteristics.



Photo: © Aleksandra Klepic/Vetmeduni Vienna

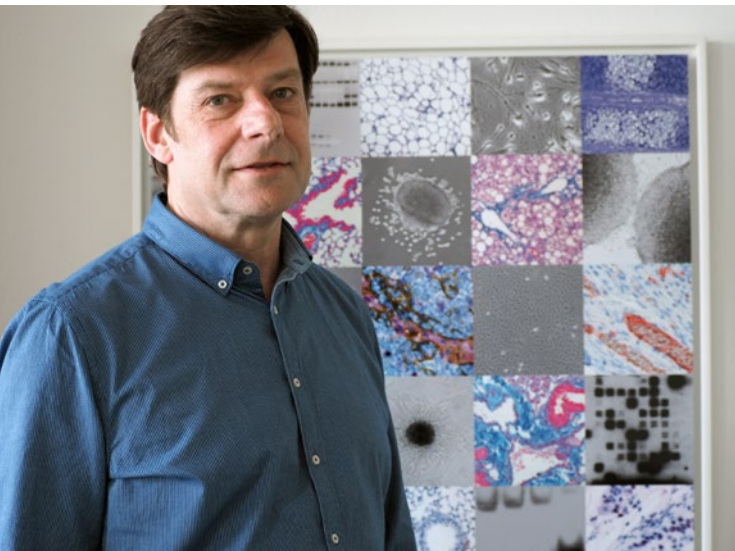


Photo: © Aleksandra Klepic/Vetmeduni Vienna

*Mathias Müller is studying important signalling pathways in human and animal cells, particularly as regards diseases.*

### Hierarchies and monarchies in the packaging and activity of DNA in illnesses

Signalling molecules ensure that cells react during their development, in cases of environmental irritation and immune responses. They activate a complex signalling network, consisting of individual cascades that are communicating with each other, i.e., chain reactions. This causes external irritations to be transmitted from the cell surface to the cell nucleus, where they affect the DNA level (gene expression). Signalling pathways are the central objects of study in comparative medicine, since their fundamental molecular structure and function are evolutionarily highly conserved. Hence, insights can be transferred quite well from one species to another. One of these cascades is the JAK-STAT signalling pathway, which plays a key role in infections, inflammation and cancer. Signal transduction takes place in a hierarchical system. Illness leads to changes in signal transmission; signals are transmitted in altered form to the cell nucleus, where DNA is present in its packaged form, chromatin. A research programme coordinated by Mathias Müller has set a goal of tracking down the influence of the JAK and STAT molecules on the so-called chromatin landscape during illness. The focus is on cancer, as well as infectious and inflammatory diseases. The objective is to link the disturbance in the hierarchical structures of the JAK-STAT signalling pathway and its network to changes in the chromatin landscape. If the chromatin landscape – thus the DNA packaging – changes, genes are regulated differently. Possible consequences are inflammation and cancer. The investigation of the JAK-STAT kingdom and its hierarchies as regards the design of the chromatin functions is being

financed by the Special Research Programmes (SFB) of the Austrian Science Fund (FWF). Also involved are other Vetmeduni Vienna’s researchers (Veronika Sexl, Birgit Strobl, Richard Moriggl), as well as researchers from the Medical University of Vienna, Max F. Perutz Laboratories (MFPL) of the University of Vienna and the Center for Molecular Medicine (CeMM) of the Austrian Academy of Sciences.

### Binary safeguarding of evolution studies

Evolution means variations, whereby one can differentiate between qualitative (e.g., eye colour) and quantitative (e.g., height) variations. The molecular basis of these changes, such as mutations, is a contested research field. Better understanding can improve the yield of crops and help in tailoring medical treatments. While modern analytical methods simplify the determination of genetic qualitative features, this decryption is one of the greatest challenges of our time. Even the example of two new sequencing methods, Evolve and Resequencing (E&R) and Pool-GWAS (genome-wide association studies), shows that while molecular changes in an experimental population can be measured and genetic differences identified between groups with extreme expression of a characteristic (such as, for example, large and small flies), it is nonetheless completely unclear whether these new methods are any better than those previously used (GWAS) or how these studies can be optimized. Robert Kofler of the Institute of Population Genetics of the Vetmeduni

*Robert Kofler of the Institute of Population Genetics is developing analytical methods for determining genetic changes.*

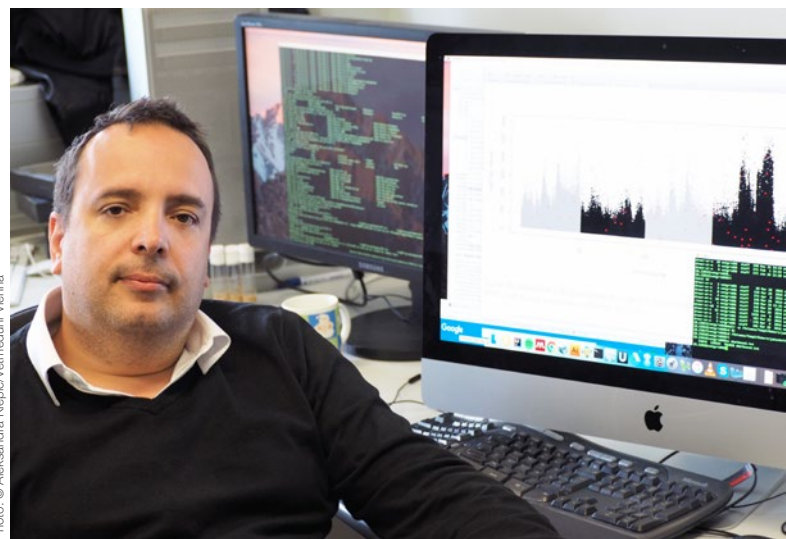


Photo: © Aleksandra Klepic/Vetmeduni Vienna



Vienna intends to use comprehensive computer simulation to compare the advantages and disadvantages of these new approaches with GWAS and derive recommendations for an optimized experimental approach. The study is being supported by funding from the Austrian Science Fund (FWF).

Research Institute of Wildlife Ecology of the Vet-meduni Vienna is heading one of the project's work packages for the analysis and, as needed, improvement of Alpine wildlife management strategies, as well as combatting wildlife-related criminality.

### Protection for the Alpine realm

Ecological networks form the foundation for protecting alpine and global living space and species. An integrative concept for the protection of ecosystems and biodiversity in the Alps requires a lot of work, however. The project ALPBIONET2030 aims to improve the prerequisites for implementing measures by ecological alliances in the Alpine space and contribute to the implementation of national biodiversity strategies. The project is simultaneously also a contribution to the Alpine Convention's Implementation Protocols for Nature Protection and to the macro-regional strategy for the Alpine Region (EUSALP), whose goals overlap with those of the Alpine Convention, but go beyond the borders of the Alpine Region as defined in the Convention. The

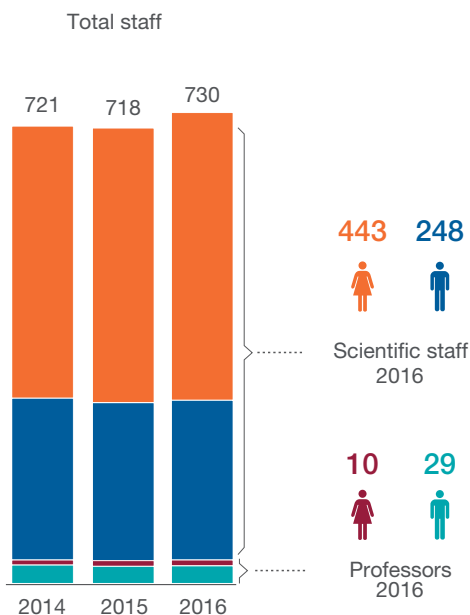


Photo: © Felicitas Theimer/Vetmeduni Vienna

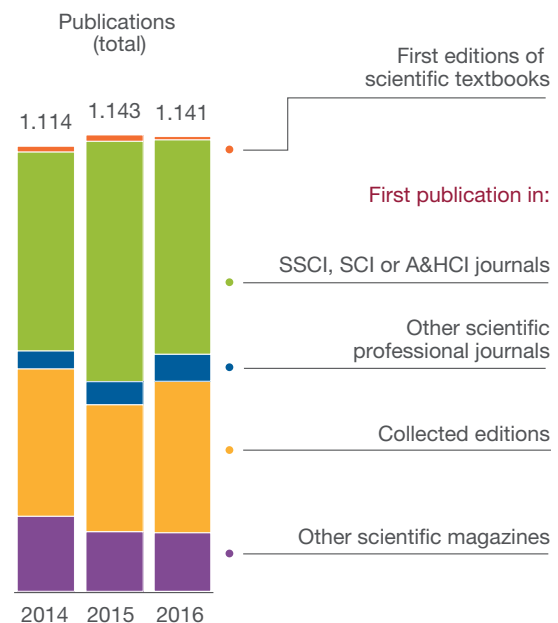
With his research for the project ALPBIONET2030, Chris Walzer is supporting measures necessary for maintaining the fauna and flora of the Alpine Region.



### Scientific staff



### Scientific publications



# Science for all

Through scientific journals and conferences, researchers share their insights and research findings with scientists all over the world. The discoveries and insights of Vetmeduni Vienna researchers are just as interesting for a lay audience and leave a lasting impression on society. The Vetmeduni Vienna's PR efforts ensure that all interested parties get glimpses into the University's research endeavours.

## Science Camp 2016

In an exciting week, the Vetmeduni Vienna's Science Camp provides interested youths with a first impression of the veterinary profession in the areas of livestock and food safety. In addition to scientific experiments, the programme includes workshops and excursions. Again in 2016, 20 schoolchildren and prospective students between the ages of 17 and 20 took part in the Science Camp. Scientists and veterinarians from the Department of Biomedical Sciences at the Vetmeduni Vienna participated as lecturers.



Photo: © Vetmeduni Vienna

*At the Science Camp, 20 schoolchildren and prospective students got a taste of daily life at a university*



Photo: © Thomas Suchanek/Vetmeduni Vienna

*The Science Slam 2016 victors*

## 2<sup>nd</sup> Science Slam@Vetmeduni Vienna

In November 2016, the largest lecture hall at the Vetmeduni Vienna again became the stage for thinkers and performers. At the second Science Slam, young scientists showcased their research projects and findings in 5- to 8-minute presentations. The evening's winner were Matthias Münnich and Poulad Pourazad, both from the Institute of Animal Nutrition and Functional Plant Compounds, and also Giulia Cimarelli from the Messerli Research Institute. Around 300 people filled the lecture hall and a duo from the cabaret group Vetophil served as moderators throughout the evening.



Photo: © Vetmeduni Vienna

*At the Children's University, children aged 7-12 get acquainted with the broad range of topics at the Vetmeduni Vienna.*

### Vetmed Children's University

This year the Vetmeduni Vienna once again was the venue of the Children's University Vienna. From 21 to 22 July, in a variety of learning events, around 1,400 children aged 7-12 experienced the broad range of topics at the Vetmeduni Vienna and breathed university air for the first time.

### Garden Day – from anise to lemon balm

On the first Garden Day in May 2016, visitors could discover the Botanical Garden of the University of Veterinary Medicine, Vienna. Further to a tour of the Botanical Garden, blossoms and leaves were examined under a microscope and all questions pertaining to the topic "Animals and Plants" answered.

*Around 500 visitors gathered information at the Garden Day event on the campus of the Vetmeduni Vienna.*



Photos: © Ernst Hammerschmid/Vetmeduni Vienna



# Science communication and public relations

Science communication opens a window into research in its diverse facets and enhances understanding throughout the community for the working methods and perspectives of scientists. The Vetmeduni Vienna places value on proactive science communication and offers journalists and the general public comprehensive information about its various research and teaching areas: from press releases to press conferences to the preparation of scientific content for online media and social media channels.



## Public Relations

2016



**56** press release  
(1-2 per week)

About **80** media inquiries  
per year



**Website**

[www.vetmeduni.ac.at](http://www.vetmeduni.ac.at)  
with ca. **2.000.000** page views per year  
(ca. 2.500-3.000 unique  
visitors per day)

**Uni-Campus**

**107** campus tours  
with about **1.500** participants



More than **7.000** Facebook fans  
[www.facebook.com/vetmeduni.vienna](http://www.facebook.com/vetmeduni.vienna)



Over **3.000** subscribers  
to the University magazine VETMED  
(4 issues per year)



More than **300** Twitter followers  
[@VetmeduniVienna](https://twitter.com/VetmeduniVienna),  
[www.twitter.com/vetmedunienna](http://www.twitter.com/vetmedunienna)



About **80** brochures



About **50** YouTube videos  
[www.youtube.com/user/vetmedvienna](http://www.youtube.com/user/vetmedvienna)



### VETMED – The magazine

VETMED is the official University magazine. Topical content focusses on all the important happenings in University life – in research, teaching, clinical work, and administration and management. The magazine is published 4 times per year with a print run of 5,200 to 6,000 copies. Readership includes staff, students, veterinarians and other important Vetmeduni Vienna stakeholders in the areas of universities, research, politics, business, health and media. Each current issue is mailed to over 3,000 domestic subscribers, including members of the Society of Friends of the University of Veterinary Medicine, Vienna, and to about 150 international subscribers.

### Vetmeduni Vienna @ Social Media

The Vetmeduni Vienna's social media channels provide information on the topics of academics, research and teaching. This not only offers new insights into everyday life at the Vetmeduni Vienna, but also allows the University to actively engage in dialogue with its community.

- **Facebook**

This platform provides information and updates to over 7,000 fans about academics, teaching, research activities and everyday life on the Vetmeduni Vienna campus.
- **Twitter**

Scientific opinion leaders, as well as journalists and students obtain the latest news from research and teaching through this channel.
- **YouTube**

This is where video interviews and short films about all the thematic areas of the Vetmeduni Vienna can be found.



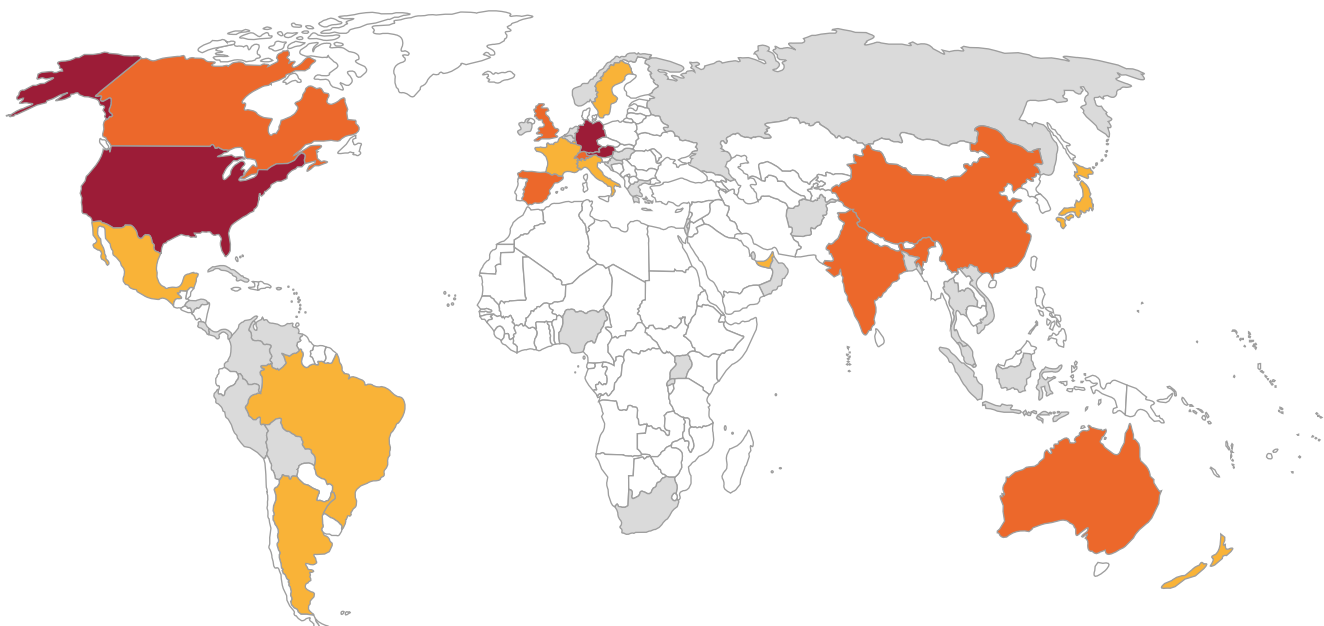
# Media resonance

In 2016 the Corporate Communications Department sent 56 press releases to national and international media and answered 80 media inquiries about researchers' scientific findings, current developments in teaching and clinical expertise.

Among them: Austrian daily newspapers like "Der Standard", "Die Presse", and also the daily newspapers "Kurier" and "Kronen Zeitung". Several magazines, including "News", "Trend" and "Profil", have also reported on Austria's only veterinary medical university. Inquiries from film and online media came from numerous formats broadcast by the Austrian Broadcasting Corporation (ORF), including, for example, "Guten Morgen Österreich", "Heute Mittag", "Konkret Leben", the science show "Newton" or the news show "Zeit im Bild" (ZIB). In 2016, experts from the Vet-

meduni Vienna made themselves available for interviews with privately owned television stations Servus TV, ATV and Puls4, as well as with numerous radio stations (Ö1, Njoy). International interest in the activities of the Vetmeduni Vienna also continued unabated. Even the international media reported on various research projects and findings: among them, the British newspaper "Daily Mail", BBC television and even the USA-based "New York Times".

## 2016 international media presence

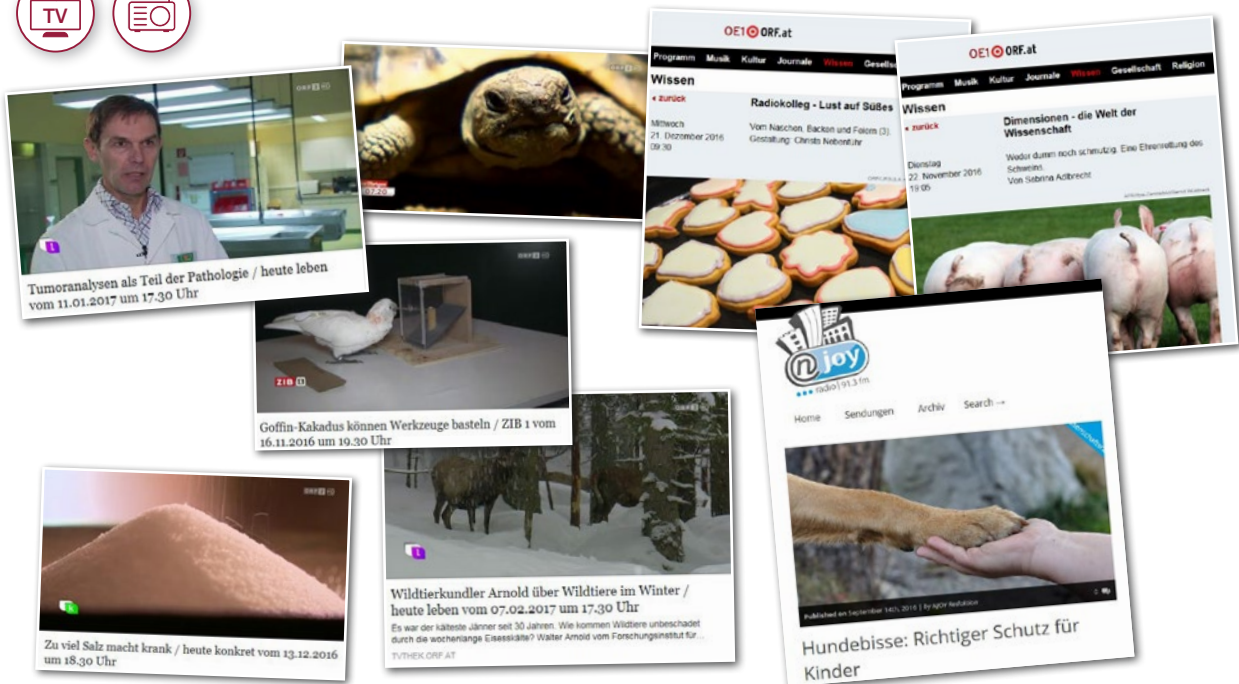
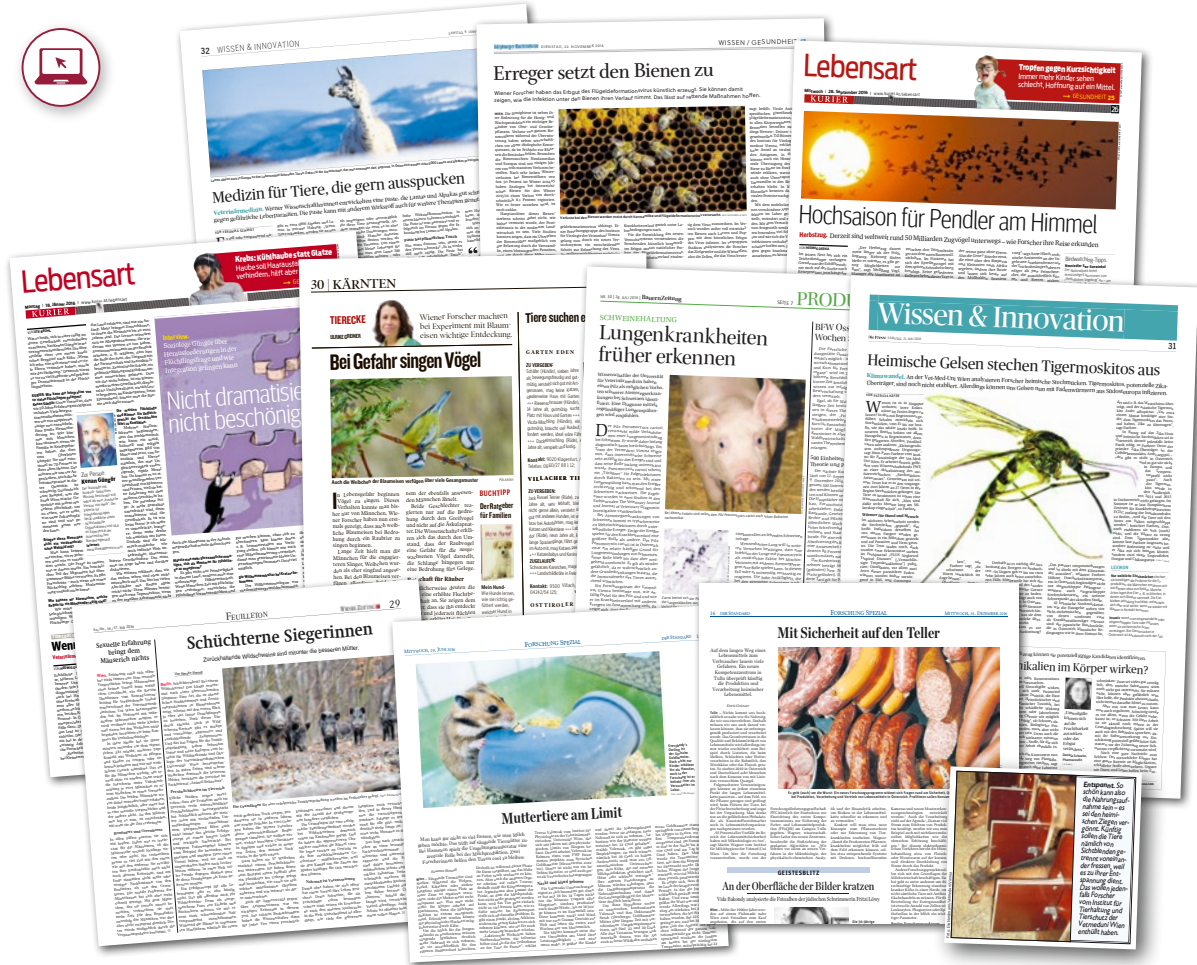


### Legend:

- Very high resonance (>200 reports)
- High resonance (21 to 200 reports)
- Medium resonance (6 to 20 reports)
- Low resonance (1 to 5 reports)

Source: © Melwater

In 2016 many project proposals submitted by scientists at the Vetmeduni Vienna received funding. These are the new projects.



# Research projects at a glance

In 2016 many project proposals submitted by scientists at the Vetmeduni Vienna received funding. These are the new projects:

Funding agency	Title	Project leader
EU	An avian model for understanding adaptations and modulatory drivers of avian migration	Leonida Fusani
EU	Establishment of Centre of Excellence for Poultry Innovation	Michael Hess
EU	A cross-sectorial platform for the Integration of genomics in surveillance food-borne pathogens	Friederike Hilbert
EU	EU Pig Innovation Group – Eu PiG	Andrea Ladinig
EU	Towards enduring mouse resources and services advancing research into human health and disease	Thomas Rüllicke
EU	CDK6 in transcription – turning a foe into a friend	Veronika Sexl
EU	Integrative Alpine wildlife and habitat management for the next generation	Christian Walzer
FFG	Selected nutrition-related strategies to reduce the Campylobacter burden in chickens	Wageha Awad
FFG	Wildlife management in times of climate change: Studies on thermo-regulation in wild boar	Claudia Bieber
FFG	Influence of mycotoxins on the porcine immune system and the efficacy of pig vaccination	Wilhelm Gerner
FFG	Heat detection in dairy cows by use of motion sensors and the economic evaluation of sensor use	Michael Iwersen
FFG	Cartilage Regeneration – a biomimicry approach recapitulating fetal-like regeneration	Florien Jenner
FFG	Austrian Competence Centre for Feed and Food Quality, Safety and Innovation	Martin Wagner
FFG	BioFer	Qendrim Zebeli
FWF	Polyunsaturated fatty acids and seasonal acclimatization	Walter Arnold
FWF	Technical Innovativeness in the Goffin's cockatoo ( <i>Cacatua goffiniana</i> )	Alice Auersperg
FWF	Tool Manufacture in the Goffin's cockatoo ( <i>Cacatua goffiniana</i> )	Alice Auersperg
FWF	Characterization of the immunogenome in Old World camelids	Pamela Burger
FWF	The role of SOCS Proteins in salmonid whirling disease	Mansour El-Matbouli
FWF	The Internal Morality of the Veterinary Profession	Herwig Grimm
FWF	Persistent Staphylococcus aureus chronic bovine mastitis	Tom Grunert
FWF	Histone Deacetylases HDAC1 and HDAC2 as regulators of skin tumorigenesis	Lukas Kenner
FWF	Dynamics of a natural transposable element invasion	Robert Kofler
FWF	Optimizing novel methods for dissecting complex traits	Robert Kofler
FWF	Gentle human interactions and positive emotions in cattle	Stephanie Lürzel
FWF	Species boundaries and genetic and phytochemical diversity of <i>Cistus creticus</i> L.	Brigitte Lukas
FWF	Host factors contributing to Yersinia ruckeri's invasiveness	Simon Menanteau-Ledouble
FWF	Associate in SFB – Myeloproliferative Neoplasms	Richard Moriggl
FWF	Monarchies and Hierarchies in Shaping Chromatin Landscapes	Mathias Müller
FWF	Associate DK – Inflammation and Immunity	Mathias Müller
FWF	Interference of adaptive gene expression by experim. evolution	Christian Schlotterer
FWF	Associate DK – Inflammation and Immunity	Veronika Sexl
FWF	Associate in SFB – Myeloproliferative Neoplasms	Veronika Sexl
FWF	Malaria and related haemosporidiosis in wild birds: Common but underestimated causes of avian mortality?	Herbert Weissenböck



EU	European Union
FFG	Austrian Research Promotion Agency
FWF	Austrian Science Fund
ÖAD	Austrian Agency for International Mobility and Cooperation
ÖAW	Austrian Academy of Sciences
WWTF	Vienna Science and Technology Fund
ZIT	Vienna Business Agency

Funding agency	Title	Project leader
Klimafonds	Climate change and future pig and poultry production: implications for animal health, welfare, performance, environment and economic consequences	Günther Schaubberger
Klimafonds – ACRP	Newly emerging impacts in riverine ecosystems: combined effects of climate change and malacosporean infections on brown trout	Mansour El-Matbouli
Land NÖ	Lynx project OÖ/NÖ	Felix Knauer
Land Salzburg	Evaluation of the wildlife ecological spatial planning in the province of Salzburg	Susanne Reimoser
Land Vorarlberg	Evaluation and compatibility check of the Vorarlberg game-damage control system (WSKS)	Susanne Reimoser
Leibniz Inst. für Pflanzengenetik und Kulturpflanzenforschung	KAMEL. Development of the basics for a sterile chamomile cultivar	Johannes Novak
Ministerien	Determination of the sublethal dose of acaricides on <i>I. ricinus</i>	Georg Duscher
Ministerien	Professional Ethics für Veterinarians	Herwig Grimm
Ministerien	Parasitic pathogens of military dogs and its influence on the breeding performance and efficiency	Anja Joachim
Ministerien	Sino-Austrian TCM research on lifestyle related diseases: The potential of TCM and TMM for the treatment of colorectal cancer	Wolf-Dieter Rausch
Ministerien	Characterisation of stallion lines in Austria horse breeds with Y-chromosomal markers	Barbara Wallner
Ministerien	Study on disbudding of goat kids and calves using eugenol and isoeugenol	Thomas Wittek
Niederösterreichische BildungsgesmbH	Compartment-specific in-depth analysis of blood plasma nucleic acids for highly sensitive detection of early metastatic events in melanoma disease	Jörg Burgstaller
NÖ Landesjagdverband	Research project on how sex and age specific culling affects the sex ratio in red deer calves	Walter Arnold
ÖAD	Local cattle breeds of Burkina Faso – characterization and sustainable utilization	Pamela Burger
ÖAW	The role of households at the Dawn of the Bronze Age – Contextualizing Social Organization	Gerhard Forstenpointner
Privater gemeinnütziger Sektor (Vereine)	Chimpanzee telomere length	Steven Smith
Wiener und NÖ Landesjagdverband + 5 weitere	Urban wild animals	Zink Richard
Wirtschaftskammer Wien	Potential of Viennese old bread as safe feedstuff	Humer, Elke
WWTF	A new look at domestication: the role of oxytocin in wolves' and dogs' social relationships with conspecific and human partners.	Marshall, Sarah
ZIT	Mite Invasion Control Camera (MIC-Cam)	Lamp, Benjamin

N.b.: This table shows those research projects that were granted funding in 2015. Due to confidentiality clauses, not all projects can be publicized.

# Timeline

A selection of scientific conferences, symposia and discussions co-organized in 2016 by researchers of the Vetmeduni Vienna:

## January

About 100 participants took part in the “**2<sup>nd</sup> Symposium of the Graduate School for Pig and Poultry Medicine**“ held on the campus of the Vetmeduni Vienna.

## March

**Symposium “150 Years of Mendelian Rules: From Pea Counting to Gene Editing”**

On the occasion of the 150<sup>th</sup> anniversary since Gregor Mendel published his seminal work, an expansive conference on the topic was held under the scientific leadership of Gottfried Brem (Vetmeduni Vienna) together with the Austrian Academy of Sciences (ÖAW), the University of Natural Resources and Life Sciences (BOKU), the National Academy of Sciences Leopoldina and the Gregor Mendel Society of Vienna.

## April

The Institute of Population Genetics ushered in springtime with the mini-symposium “**Frontiers of Population Genetics III**”, which was attended by about 50 people. During the mini-symposium, four internationally renowned evolution researchers shared new insights into how genetic variations can affect the traits and behaviour of living beings.

## May

At the international “**Conference on Ethics and the future Veterinary Professional**”, the Vetmeduni Vienna was represented inter alia by Herwig Grimm from the Messerli Research Institute. During the conference, ethical questions in veterinary medicine were illuminated in an interdisciplinary fashion.

## July

At the beginning of July, the Clinical Unit of Poultry Medicine’s “**3<sup>rd</sup> International Symposium on Parasite Infections in Poultry**” took place on the campus of the Vetmeduni Vienna. For two days 135 scientists from 18 countries shared information about various areas of poultry parasitology.

The Institute of Anatomy, Histology and Embryology hosted the first joint conference of the **EAVA (European Association of Veterinary Anatomists)** and the **WAHVM (World Association for the History of Veterinary Medicine)**.

The Institute of Physiology, Pathophysiology and Biophysics hosted the “**BONE – KIDNEY – HEART**” mini-symposium.

## August

With a combination of scientific and industrial perspectives, the first “**Summer School for Nutrition and Animal Gut Health**” hosted by the Institute of Animal Nutrition and Functional Plant Compounds of the Vetmeduni Vienna offered a platform for participating specialists and researchers in the field of animal nutrition.

*6<sup>th</sup> Symposium Animal Gut Health*



## September

The **FIS (Research Information System)/CRIS (Current Research Information System) Austria Meet-Up** took place for the first time. Managers and staff involved with research information systems from all Austrian universities came together at the Vetmeduni Vienna.

## December

To cap off the year, the **international “6<sup>th</sup> Symposium Animal Gut Health”** hosted by the Institute of Animal Nutrition and Functional Plant Compounds was held on the campus of the Vetmeduni Vienna. In break-out sessions, participants shared their knowledge about different topics and current developments.

*3<sup>rd</sup> International Symposium on Parasite Infections in Poultry*



Photo: © Vetmeduni Vienna

# Prizes for Vetmeduni Vienna researchers

## Internal scientific prizes

Prize	Person	Organizational Entity
<b>Inventor of the Year (Hard IP)</b>	Johannes Schramel and Christian Peham	University Equine Clinic
	Stefanie Krieger, Peter Kanz and Michael Iwersen	Institute of Animal Nutrition and Functional Plant Compounds
<b>Scientific citations</b> Staff of the non-clinical Institutes over 35 years of age	Christian Schlötterer	Institute of Population Genetics
<b>Scientific citations</b> Staff of the non-clinical Institutes under 35 years of age	Susanne Franssen	Institute of Population Genetics
<b>Scientific citations</b> Staff of the Clinics over 35 years of age	Mansour El-Matbouli	Clinical Unit of Fish Medicine
<b>Scientific citations</b> Staff of the Clinics under 35 years of age	Natascha Ille	Insemination and Embryotransfer Platform
<b>Highest proportion of third-party funding</b> Staff of the non-clinical Institutes over 35 years of age	Johannes Novak	Institute of Animal Nutrition and Functional Plant Compounds
<b>Highest proportion of third-party funding</b> Staff of the non-clinical Institutes under 35 years of age	Alice Auersperg	Messerli Research Institute
<b>Highest proportion of third-party funding</b> Staff of the Clinics over 35 years of age	Marc Drillich	Clinical Unit of Herd Health Management for Ruminants
<b>Highest proportion of third-party funding</b> Staff of the Clinics under 35 years of age	Regina Wald	Clinical Unit of Ruminant Medicine
<b>Major project funding</b>	Martin Wagner and team for the Competence Centre FFoQSI (Feed and Food Quality, Safety & Innovation)	Institute of Milk Hygiene
<b>Senior Teacher of the Year 2016</b>	1 <sup>st</sup> Place: Birgit Hladschik-Kermer und Michael Leschnik	Internal Medicine Small Animals
	2 <sup>nd</sup> Place: Anja Joachim	Institute of Parasitology
	3 <sup>rd</sup> Place: Florian Buchner	Equine Surgery
<b>Junior Teacher of the Year 2016</b>	1 <sup>st</sup> Place: Barbara Braus	Small Animal Surgery
	2 <sup>nd</sup> Place: Michaela Gumpenberger	Diagnostic Imaging
	3 <sup>rd</sup> Place: Alexandra Hund und Thomas Wittek	University Clinic for Ruminants

Prize	Person	Organizational Entity
<b>Vetucation®-Awards 2016</b>	For existing e-learning projects: Johannes Baumgartner und Monika Zandra	Institute of Animal Husbandry and Animal Welfare
	For e-learning projects in development: Ulrike Auer	Anaesthesiology and perioperative Intensive-Care Medicine
<b>Instructor of the Year 2016</b>	Gerhard Eder	
<b>Student of the Year 2016</b>	Melissa Schedlbauer	Diploma degree programme in veterinary medicine
	Claudia Johanna Greiner	Diploma degree programme in veterinary medicine
	Jessica Pfeiffer	Bachelor's programme in biomedicine and biotechnology
<b>Poster Prizes 2016 – Jury of journalists</b>	1 <sup>st</sup> Place: Sabrina Karl	Messerli Research Institute
	2 <sup>nd</sup> Place: Dragos Scarlet	Clinical Unit of Obstetrics, Gynaecology and Andrology
	3 <sup>rd</sup> Place: Marconi Maria Adelaide	Konrad Lorenz Institute of Ethology
<b>Poster Prizes 2016 – Scientific Advisory Committee</b>	1 <sup>st</sup> Place: Constanze Hartmann	Clinical Unit of Obstetrics, Gynaecology and Andrology; Insemination and Embryotransfer Platform
	2 <sup>nd</sup> Place: Dragos Scarlet	Clinical Unit of Obstetrics, Gynaecology and Andrology
	3 <sup>rd</sup> Place (ex aequo): Martin Köhne	Clinical Unit of Obstetrics, Gynaecology and Andrology
	Stefanie Wetzels	Institute of Milk Hygiene
<b>Poster Prizes 2016 – “Usable und Innovative (U&amp;I)”</b>	1 <sup>st</sup> Place: Aruna Shrestha	Institute of Parasitology
	2 <sup>nd</sup> Place: Benjamin Lamp	Institute of Virology
	3 <sup>rd</sup> Place: Stefanie Wetzels	Institute of Milk Hygiene
<b>VetIdeas Students’ Challenge</b>	Jasmin Hatami Felix Holstein Julia Matschinger Sadaf Pashapour	Biomedicine and biotechnology course of studies

## External scientific prizes

Prize	Person	Organizational Entity
<b>Armin Tschermak von Seysenegg Prize</b> of the Society of Friends of the Vetmeduni Vienna	Jörg Burgstaller	Unit of Reproductive Biology
<b>Award of Excellence</b> of the Federal Ministry of Science, Research and Economy (BMWFV)	Thomas Hill	Institute of Population Genetics
<b>EUCOMOR – Best Student Award 2016</b>	Khan Junatas	Master’s programme in comparative vertebrate morphology
<b>Austrian Cynology Association Grant</b>	Karin Bauer	Clinical Unit of Internal Medicine Small Animals
<b>Garant Publication Award</b>	Evelyne Mann-Selberherr	Institute of Milk Hygiene
<b>Livestock 2015</b> of the Society of Friends of the Vetmeduni Vienna	Anna Schachner, Karen Wagener	Clinical Unit of Poultry Medicine; Unit of Functional Microbiology; Clinical Unit of Herd Health Manage- ment for Ruminants
<b>Livestock 2016</b> of the Society of Friends of the Vetmeduni Vienna	Johannes Raith	Institute of Veterinary Public Health
<b>Otto-von-Guericke Prize 2016</b>	Monika Ehling-Schulz	Institute of Microbiology
<b>German Zoological Society Prize</b>	Britta Mahlerlert	Research Institute of Wildlife Ecology
<b>R.F. Gordon Memorial Medal</b>	Michael Hess	University Clinic for Poultry and Fish Medicine
<b>Schaumann Prize</b> of the H. Wilhelm Schaumann Foundation	Melitta Neurauder	Diploma degree programme in veterinary medicine
Veterinary Medicine Austria <b>“Work of the Year”</b>	Ramona Mikscha	Clinical Unit of Internal Medicine Small Animals
<b>Austrian Economic Chambers Prize</b>	Elke Humer	Institute of Animal Nutrition and Functional Plant Compounds
<b>Outstanding Student Prize</b> of the Federal Ministry of Science, Research and Economy (BMWFV)	Rouven Schulz	Master’s programme in biomedicine and biotechnology
<b>Zietzschmann-Preuss Award</b>	Cordula Gabriel	Institute of Anatomy, Histology and Embryology



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University Clinics

# University Clinics

## Animal wellbeing is paramount

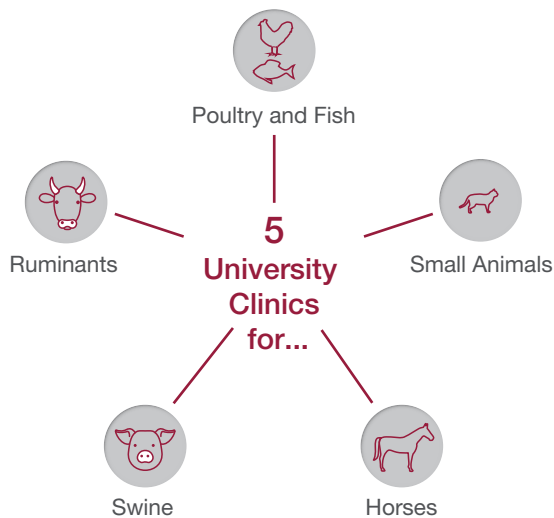
At the University Clinics of the Vetmeduni Vienna, animal patients are cared for around the clock. Clinically challenging cases yield new scientific insights. These results from clinical research are leveraged for diagnosis and treatment and in this way again benefit our animal patients.

About 51,000 patients were treated at the five University Clinics of the Vetmeduni Vienna in 2016. Specialists are available 365 days a year, 24 hours a day to treat sick and injured animals. The five species-specific University Clinics serve as a teaching hospital for students, as an educational venue for post-graduate education and

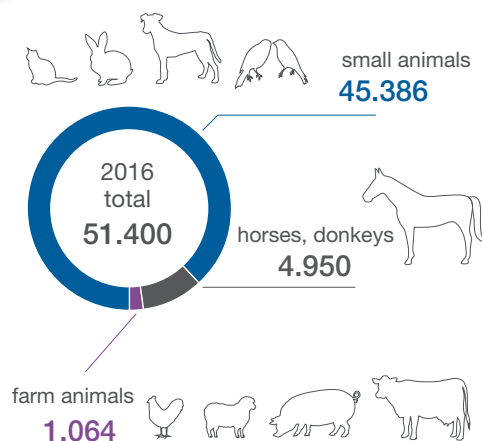
continuing education, as a referral clinic for local veterinarians, and can also be sought out by animal owners for necessary veterinary services. In 2016, about 31,000 of the animal patients were admitted as inpatients, while around 20,000 could be treated as outpatients.



### University Clinics



### Patient visits 2016



**31.316**  
outpatient



**20.084**  
inpatient





Photo: © Michael Bernkopf/Vetmeduni Vienna

### Emergency and intensive care treatment at the University Clinics

The University Clinics of the Vetmeduni Vienna stand at the ready for medical emergencies – even nights and weekends. In 2016, the process of reorganizing the walk-in emergency room and intensive care station were completed at the University Clinic for Small Animals and the adapted, shared premises occupied. This set-up allows veterinarians to decide on and perform treatments more efficiently and in an interdisciplinary manner. Most often, it is dogs and cats getting treatment in the Intensive Care Unit. On an exception basis, the intensive care team also observes reptiles and turtles as they awaken from

anaesthesia. The emergency room – the central place of care for small animals – is open at times when all other outpatient clinics are closed. The emergency room offers its services from 4 p.m. in the afternoon to 8 a.m. the next morning, as well as 24 hours a day on weekends and holidays. About 4,200 animal patients were treated in the emergency room this year. If required, the animal patients can subsequently be admitted as inpatients to the Intensive Care Unit of the University Clinic for Small Animals. In addition to emergency cases, admissions to the Intensive Care Unit also include patients in need of post-operative stabilization and care from the Clinical Units of Internal Medicine Small Animals; Surgery; and Obstetrics, Gynaecology and Andrology. The emergency and intensive care veterinary doctors at the Vetmeduni Vienna place a great deal of value on ongoing dialogue with referring veterinarians and veterinary specialists, who stay involved in treatment and eventually resume caring for their patients.

*Supplemental to the outpatient offices at the University Clinics, the Intensive Care Unit and emergency room at the Vetmeduni Vienna care for animal patients – round the clock, all year long.*



Photo: © Michael Bernkopf/Vetmeduni Vienna

Residency programmes are veterinary medical education programmes with an international character that offer intensive specialization in a clinical specialty field.



Photo: © Michael Bernkopf/Vetmeduni Vienna

## Leveraging the synergy of clinic, research and education

At the Vetmeduni Vienna, veterinarians and their assistants are involved not only at the University Clinics and research establishments. Another essential task for them is teaching. They instruct students in major parts of their practical education at the University Clinics. For veterinary doctors – who after having received their diplomas want to specialize in a certain professional field such as large animal surgery, anaesthesiology or ophthalmology – further education is necessary. This type of specialization is possible with the residency programme offered by the University. Residency programmes are veterinary medical education programmes with an international

character that offer intensive specialization in a clinical specialty field. The relevant field-specific colleges of the European Colleges for Veterinary Specialisation define unified educational standards valid throughout Europe for residency programmes. They also administer a centralized final examination. Whoever passes the exam after a 3- to 4-year education can henceforth be called a diplomate. At this time, the Vetmeduni Vienna offers residency programmes accredited by the respective college in a total of 16 different specialty fields. A new residency programme in Diagnostic Imaging was added at the Vetmeduni Vienna in 2016.



## Residency programmes

	<b>ANIMAL REPRODUCTION ECAR</b> (European College of Animal Reproduction)	<b>The Vetmeduni Vienna offers courses of study in 14 areas of specialization.</b>		<b>VETERINARY ANAESTHESIA AND ANALGESIA ECVAA</b> (European College of Veterinary Anaesthesia and Analgesia)	
	<b>POULTRY VETERINARY SCIENCE ECPVS</b> (European College of Poultry Veterinary Science)			<b>EQUINE INTERNAL MEDICINE ECEIM</b> (European College of Equine Internal Medicine)	
	<b>PORCINE HEALTH MANAGEMENT ECPHM</b> (European College of Porcine Health Management)		<b>VETERINARY INTERNAL MEDICINE, COMPANION ANIMALS ECVIM-CA</b> (European College of Veterinary Internal Medicine, Companion Animals)		<b>VETERINARY PARASITOLOGY EVPC</b> (European Veterinary Parasitology College)
	<b>BOVINE HEALTH MANAGEMENT ECBHM</b> (European College of Bovine Health Management)		<b>VETERINARY SURGERY, LARGE ANIMALS – EQUINE ECVS</b> (European College of Veterinary Surgery, Large Animals – Equine)		<b>VETERINARY PATHOLOGY ECVP</b> (European College of Veterinary Pathology)
	<b>VETERINARY INTERNAL MEDICINE, COMPANION ANIMALS, ONCOLOGY ECVIM-CA, Oncology</b> (European College of Veterinary Internal Medicine, Companion Animals, Oncology)		<b>VETERINARY SURGERY, SMALL ANIMALS ECVS</b> (European College of Veterinary Surgery, Small Animals)		<b>VETERINARY OPHTHALMOLOGY ECVO</b> (European College of Veterinary Ophthalmology)

# Knowledge transfer to animal owners and veterinarians

The Vetmeduni Vienna fosters dialogue between University specialists and veterinarians. Questions arising in practice and the latest research results are discussed in regularly held symposia and lecture series. In addition to cultivating this professional exchange between veterinarians, the Vetmeduni Vienna also routinely informs animal owners about clinical and research findings.

## Workshops and symposia for animal owners as well as conferences and continuing education events for veterinarians

The more comprehensively animal owners are informed, the better they can care for the wellbeing of their animals. Therefore, the experts at the Vetmeduni Vienna provide information about particular species at regularly held special symposia. Fostering dialogue between its University Clinics and Austria's practicing veterinarians is also of central importance for the Vetmeduni Vienna, which offers informational events, seminars and regularly held conferences to support this objective.

- Start of the **Pig & Poultry Seminar Series** at the University Clinic for Poultry and Fish Medicine (January 2016)
- **Kremesberger Conference** on herd health management in ruminants on the topic "Veterinarians and Farmers – united for animal health" (February 2016)
- **3<sup>rd</sup> Wiener Wiederkäuer Module:** "Pharmacology and pharmaceutical treatment in ruminants" – continuing education for farm animal veterinarians (March 2016)
- **Informational conference for dog breeders:** The Insemination and Embryotransfer Platform this year hosted another informational conference for dog breeders. (April 2016)

- Numerous veterinarians used their continuing education for the **Module on Veterinary Phytotherapy** and brushed up on their knowledge about botanicals. (May 2016)
- About 100 reptile friends received information about the reproductive tract in turtles, snakes and lizards at the second **Reptile Symposium** in September 2016.
- The **lecture series "Safe child and dog togetherness"** in September 2016 was geared towards dog owners with children. Workshops and lectures gave tips on conflict-free living with kids and dogs.
- At the **New World Camelid Conference for Veterinarians**, which takes place every two years, veterinarians from all over Austria gathered information on keeping, caring for and feeding New World camelids, as well as on symptoms of illness. (September 2016)



Photo: © Michael Bennekopf/Vetmeduni Vienna

- The **6<sup>th</sup> Equine Symposium** in October 2016 was held under the motto of “Skin, Hair und Hoof” and was dedicated to preventive measures for hoof and skin health. About 700 participants with interest in horses took part in the symposium.
- The **Cat Breeders Conference** in November 2016 provided information about preventive and treatment strategies for parasitic infections and urinary tract infections in breeding facilities.
- Entitled “Feeding and feed-related illnesses”, the two-day **Continuing Education Conference for Cattle Veterinarians** was held in November 2016.
- To conclude the year, the **4<sup>th</sup> Wiener Wiederkäufer Module** was followed by a gathering of all the practicing veterinarians who had referred patients to and worked together intensively with the experts at the University Clinic for Ruminants in 2016. (December 2016)

**Always informed:  
newsletters of the University Clinics**

Furthermore, the University Clinics of the Vetmeduni Vienna regularly inform veterinarians about their activities and current professional events through their respective newsletters.



Photo: © Felicitas Theimer/Vetmeduni Vienna

An audience of more than 700 people listened to the expert lectures at the 6<sup>th</sup> Horse-Symposium



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Organization

# Organization

## Working at the Vetmeduni Vienna

More than 1,300 staff are employed at the University of Veterinary Medicine, Vienna in the areas of teaching, clinical work, research and administration. In the diverse working environments at the Vetmeduni Vienna, staff have the opportunity to contribute their particular expertise to daily operations.

### New professorships at the Vetmeduni Vienna

Three new professors took up their posts at the Vetmeduni Vienna in 2016. Iwan Burgener, Annemarie Käsbohrer and Eberhard Ludewig configured their respective specialty areas at the Vetmeduni Vienna: Internal Medicine Small Animals, Veterinary Public Health and Diagnostic Imaging.

#### **Iwan Burgener: New Professor of Internal Medicine Small Animals and head of the University Clinic for Small Animals**

Iwan Burgener was appointed Professor of Internal Medicine Small Animals and also became head of the University Clinic for Small Animals at the Vetmeduni Vienna. As a diplomate of both the American as well as the European College of Veterinary Internal Medicine, the native-born Swiss is a doubly internationally certified specialty veterinarian. After getting his PhD, he completed his habilitation in 2011 in the field of Internal Medicine Small Animals at the University of Bern (Switzerland). After Leipzig (Germany) and Utrecht (Netherlands), Vienna is the third professorship for the small animal internist. His research focal points include gastroenterology, hepatology, endocrinology and clinical immunology. To date, Iwan Burgener has applied his knowledge to continue development on a canine cell culture system. Burgener aims to establish his improved cell culture system and to develop it further. He sees its utility in the significantly more realistic representation of processes in dogs' bodies.



Photo: © Michael Bernkopf/Vetmeduni Vienna

*Swiss Iwan Burgener took up his post as professor of Internal Medicine Small Animals in 2016.*



Photo: © Michael Bernkopf/Vetmeduni Vienna

*Antibiotic resistance is one of Annemarie Käsbohrer's main topic areas. At the EU level, she built a system for registering resistant germs.*

### **Annemarie Käsbohrer: New Professor of Veterinary Public Health**

In April 2016, Annemarie Käsbohrer was appointed the new Professor of Veterinary Public Health and also head of the Institute of the same name at the Vetmeduni Vienna. She began her career in veterinary medicine in 1985 in Germany, where she specialized in the treatment of livestock. She switched from practice to the laboratory and settled on microbiology. Research into microorganisms, and bacteria in particular, were a further milestone for her career and took her in the direction of food safety. The next stop for Annemarie Käsbohrer was epidemiology, a field intensively engaged with the spread of infectious diseases in animals and humans. Käsbohrer completed her habilitation in epidemiology at the University of Veterinary Medicine Hannover in 2014. Käsbohrer's excellent work was the foundation for the reporting system of the newly formed European Food Safety Authority. She worked inter alia for the German Federal Institute for Risk Assessment (BfR), where she led the specialty group for epidemiology, zoonoses and antibiotic resistance. Since April 2016 she has lent her expertise to the Vetmeduni Vienna. Her plan for the future is to expand the thematic highlights of the Veterinary Public Health area and make them more visible. She also plans to work on the reduction of antibiotic resistance, as well as on the spread of pathogens and intervention strategies in Austria.

*Diagnostic imaging has a very short half-life in terms of technology and analysis. In his teaching, newly appointed Professor Eberhard Ludewig is determined to keep abreast of this.*

### **Eberhard Ludewig: New Professor of Diagnostic Imaging**

Veterinary radiologist Eberhard Ludewig has been working at the Vetmeduni Vienna as the new professor for the specialty field of Diagnostic Imaging since March 2016. A specialty field that is subject to rapid technical developments and is of great importance in veterinary medicine, since about 70% of all diagnoses are based on results of diagnostic procedures such as computer tomography (CT), magnetic resonance tomography (MRT), ultrasound and X-ray imaging. Ludewig studied veterinary medicine in his hometown of Leipzig (Germany) and specialized in the field of radiology. He wrote his dissertation at Leipzig University. He is a veterinarian specializing in radiology and a diplomate of the European College of Veterinary Diagnostic Imaging. Eberhard Ludewig sets much store on the education and continuing education of future veterinary radiologists. Even prior to taking up his post, he advocated for the establishment at the Vetmeduni Vienna of a European College of Veterinary Imaging residency programme. He not only wants to devote his passion for radiology to teaching and clinical work, he also wants to apply it to new interdisciplinary research projects, such as those studying tumour development or respiratory illnesses.



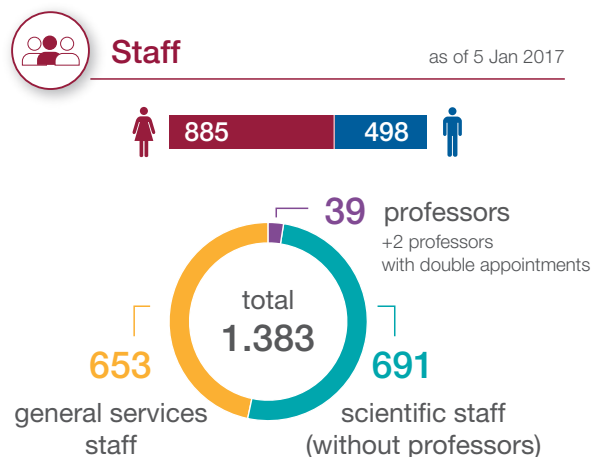
Photo: © Michael Bernkopf/Vetmeduni Vienna

## Career/studies and family at the Vetmeduni Vienna

The compatibility of family and career is of particular concern to the Vetmeduni Vienna. Our goal is to do the best possible job of helping all staff and students in various work and life situations balance career/studies and family. Thus, the Vetmeduni Vienna has enacted many measures and initiatives to facilitate balancing family with career or studies. In addition to a kindergarten on campus and special childcare options during vacation periods for staff members' children, staff with caretaking responsibilities are supported with offers for individual advice and support. For the Vetmeduni Vienna, family-friendliness means being an attractive employer for all staff and furnishing a working environment that leaves plenty of time for family. Family-friendliness is a crucial factor in career satisfaction and a key criterion for the Vetmeduni Vienna's success. Good family-career balance strengthens work motivation and University affiliation. A healthy work climate not only is significant for the staff, but also makes the Vetmeduni Vienna more competitive as an employer looking for the best people. For this reason, the Vetmeduni Vienna was the first Austrian university to conduct the "career&family" audit and also partook in the "university&family" audit as a pilot university.

## Internal communication on the new VetEasy platform

With VetEasy, staff at the Vetmeduni Vienna have available to them a central, internal information platform that fosters communication between staff in all disciplines across all locations. For the 1,300 staff members of the Vetmeduni Vienna, VetEasy is an Intranet solution that provides comprehensive information about all fields of work at the University and also a collaboration platform that significantly facilitates many processes involved in joint projects. Large projects involving numerous departments, such as the "Campus Open Day", for example, are coordinated across VetEasy. Documents being worked on by multiple authors and project leaders can be approved and released more efficiently with VetEasy. Following release, the documents are also available directly on the platform. Similarly, University committees, such as the Senate of the Vetmeduni Vienna, handle their meetings using the VetEasy platform. Moreover, the delivery of information via VetEasy is much more secure compared to traditional e-mail communication. To learn how to optimally use VetEasy and all its features, the teams of the Vetmeduni Vienna receive training in special workshops.





# Fostering alliances – leveraging synergies

In 2016 the Vetmeduni Vienna expanded its portfolio of alliances. Working together with central institutions and stakeholders means that joint efforts like food safety and animal health can be handled even more efficiently. Collaboration leads to insights that benefit animal wellbeing and society.

## Vetmeduni Vienna takes on veterinary care in the TierQuarTier Vienna animal shelter

Since March 2016 the Vetmeduni Vienna has been coordinating care of the animals sheltered in the TierQuarTier in Vienna's 22<sup>nd</sup> district. A team of five veterinarians from the Vetmeduni Vienna, three of them small animal specialists, has taken on responsibility for the initial care of new animals – vaccination, deworming and chipping – as well as treatment of smaller injuries in the examination rooms at the animal shelter. Castration of dogs, cats and other pets is performed on-site as well. For more complicated surgical procedures, animal patients are referred to the University Clinic for Small Animals at the Vetmeduni Vienna. In addition to providing optimal veterinary care for the affected animals, this alliance endows students of veterinary medicine

with a real-life education. During clinical rotations that take place in the fourth and fifth year of education, students assist in all medical activities. As part of their curriculum, they spend about two weeks in the TierQuarTier Vienna: holding the animals for vaccinations, applying dressings or handling a part of the initial examination. In close contact with on-duty veterinarians, they get better acquainted with a typical veterinary day in a realistic setting. This alliance also engenders exciting opportunities in clinical research. Due to the large inventory of animals – about 150 dogs, 300 cats and 100 small animals like hamsters and guinea pigs – routine examinations yield a lot of data. These can be used for descriptive research and flow directly into the optimization of examination and treatment plans at the animal shelter, as well as into the education of the students.

*A five-member team of Vetmeduni Vienna veterinarians has taken on responsibility for the initial care of new animals in the TierQuarTier animal shelter in Vienna's 22<sup>nd</sup> district.*



Photo: © Heudek/PID



*Alliance for Animal Health (from l.): AGES CEO Wolfgang Hermann; Ulrich Herzog, Chief Veterinary Officer of the Federal Ministry of Health and Women's Affairs; Petra Winter, Rector designate of the Vetmeduni Vienna.*

### **Working safely through joint use of the L3 facility**

In the past, many animal epidemics hardly came to attention in Europe because they were considered to be animal diseases of the African continent. Today, these erstwhile “exotics” like lumpy skin disease, African swine fever or bluetongue disease have arrived at local barn doors, if they haven’t already breached them. While generally harmless in humans, these pathogens are highly contagious and often deadly in animals. Research projects dedicated to the investigation of such pathogens require special infrastructure. As one of the most modern animal epidemic and zoonosis laboratories in Europe, AGES’s Centre for Biological Safety in the town of Mödling furnishes exactly these prerequisites. Virological, bacteriological, pathological, serological and molecular biological investigations up to Biosafety Level 3+ (BSL 3+) can be performed in this laboratory. This alliance between the Federal Ministry of Health and Women’s Affairs (BMGF), the Agency for Health and Food Safety (AGES) and the Vetmeduni Vienna allows synergies to be optimally leveraged in order to conduct important research projects involving pathogens under optimal conditions.

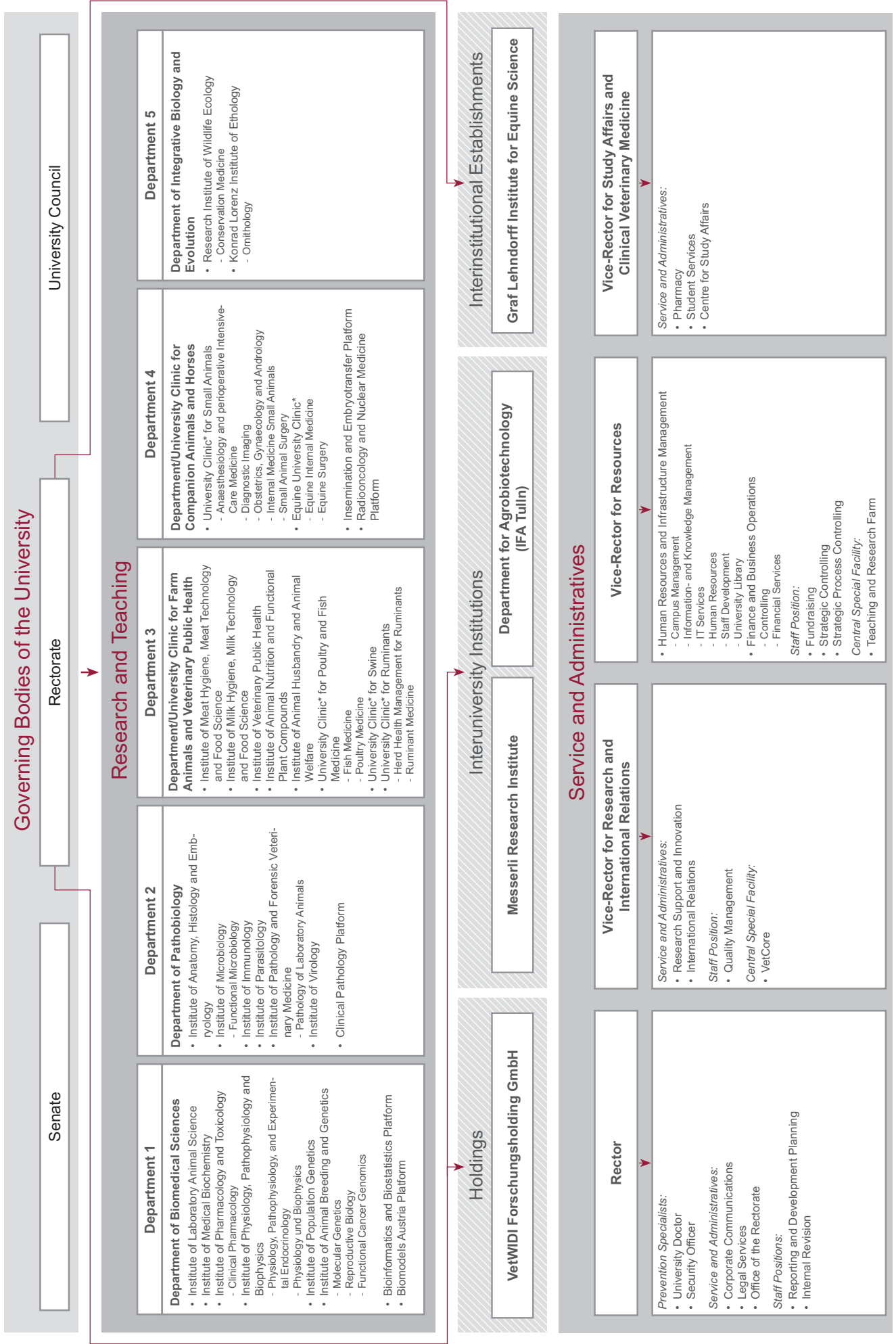
### **Bundling expertise: An alliance to research highly infectious pathogens**

The successful “VetAustria” alliance between the Vetmeduni Vienna, the Agency for Health and Food Safety (AGES) and the Federal Ministry of Health and Women’s Affairs (BMGF) was extended another four years in December 2016. Thematic focal points of this collaboration are inter alia the ongoing evaluation and optimization of strategies to combat and prevent animal epidemics, risk assessment of zoonoses, as well as the development of a foundation for economic valuation of such epizootic diseases, epidemics and zoonoses.

### **Vienna Biocenter (VBC)**

The Vetmeduni Vienna collaborates on scientific as well as administrative levels with the research establishments of the Vienna Biocenter (VBC) in Vienna’s St. Marx, and also with Max F. Perutz Laboratories, the Gregor Mendel Institute and the Institute of Molecular Pathology (IMP). Thus, for example, the Special Research Programmes (SFB) of the Austrian Science Fund (FWF) that are coordinated by the Vetmeduni Vienna: SFB “JAK-STAT Signalling – From Basics to Disease” and SFB “Monarchies and Hierarchies in Shaping Chromatin Landscapes” (approved in 2016), and also the FWF Doctoral Programmes “Population Genetics” and the SFB “Myeloproliferative Neoplasms” coordinated by the Medical University of Vienna. At this time, the Vetmeduni Vienna has also rented space at the Vienna Biocenter for housing laboratory animals, in order to ensure the proper facilities for keeping breeding lines with special requirements. The Vetmeduni Vienna is also cultivating intensive collaboration with the Vienna Biocenter Core Facilities (VBCF), particularly in the bioimaging area in the context of the “Correlated Multimodal Imaging Node Austria” (CMI) project. In the spirit of collaboration, the infrastructure of the Vienna Biocenter Core Facilities (VBCF) and the Vetmeduni Vienna’s own on-campus VetCore facilities are also being made available to alliance partners and external scientists.

# Organisational chart of the University of Veterinary Medicine, Vienna



\* In accordance with § 36 and § 20(5) of the 2002 Universities Act, the University Clinics do not represent organizational units



**University of Veterinary Medicine, Vienna**  
Veterinaerplatz 1, 1210 Vienna, Austria  
T +43 1 25077-0  
[communication@vetmeduni.ac.at](mailto:communication@vetmeduni.ac.at)  
[www.vetmeduni.ac.at](http://www.vetmeduni.ac.at)