2017

Annual Report

vetmeduni vienna

University of Veterinary Medicine, Vienna

Motion is the motto of this year's report of Vetmeduni Vienna. Pictures of five different animal species in motion will thus accompany you on the following pages. They are representative of the great variety of species that are studied, explored and treated at Vetmeduni Vienna.

vetmeduni vienna

University of Veterinary Medicine, Vienna

Contents

Forewords

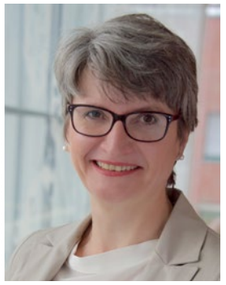

Photo: © Doris Kucera/Vetmeduni Vienna

Petra Winter

Rector

The year under report revolved around the Development Plan 2025. The strategy process was based on joint intensive work and discussion with the staff of all organisational units and university bodies. I wish to thank all those involved for their commitment. The result is a Strategy Document describing the way ahead for us, true to our motto ‘Act rather than react’. We want to meet the challenges of our time in teaching, research and clinical work with innovation, excellence and international visibility. By already exploring new topics along the lines of our university profile, we are shaping our future today. This is the only way in which we can fulfil our social responsibility for animal and public health.

Otto Doblhoff-Dier

Vice-Rector for Research and International Relations

Photo: © Doris Kucera/Vetmeduni Vienna

Research at Vetmeduni Vienna continues to ensure a high degree of international visibility. The growing number of publications in international quality journals and the large number of successful project submissions demonstrate yet again the competitive strength of our research activities. In view of the social relevance of our research topics and the unique expertise thus gained, we have become sought-after partners for cooperation with scientific institutions, public entities and private enterprises at home and abroad. No matter whether it was about fundamental science or applied clinical research, Vetmeduni Vienna and its findings made an important contribution to medical progress for animals and humans in 2017.

Photo: © Doris Kucera/Vetmeduni Vienna

Christian Mathes

Vice-Rector for Resources

VetFarm, our agricultural holding in Lower Austria, was subject to major repositioning in 2017. The aim was to move teaching and research centre stage in order to provide Vetmeduni Vienna with clear added value and benefit. The development phase for this fundamental reorientation has already been concluded successfully and the first necessary steps for implementation have been initiated. As a service enterprise focusing on livestock medicine, VetFarm is available to our students, teachers and researchers. With its optimised herds of cattle, pigs and sheep, VetFarm, in its new role, ensures that Vetmeduni Vienna is able to offer a top-notch teaching and research infrastructure as well as use resources efficiently.

Photo: © Doris Kucera/Vetmeduni Vienna

Sibylle Kneissl

Vice-Rector for Study Affairs

Vetmeduni Vienna attaches great importance to hands-on training with students and their needs at the heart of daily teaching and learning. The implementation of the new curriculum for veterinary medicine was consistently continued in 2017: for the first time it involved ninth semester students and included the premiere of 14 weeks of Clinical Rotation I organised in a farm animal and a companion animal block. Another new feature were the final examinations during which the students’ practical skills were tested on at least three species. The clinical/practical examination format (German acronym KLIPP-VET) includes four stations where examination candidates compile medical histories, carry out clinical examinations, make differential diagnoses and develop treatment plans.

Veronika Sexl and Sabine Hammer

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

Photo: © Michael Bernkopf/Vetmeduni Vienna

Quality assurance, digitalisation or entrepreneurship are new challenges for a modern university. Vetmeduni Vienna is eighth among the top ten of the Shanghai Global Ranking 2017, thus having established itself as one of the leading universities worldwide.

Motivated by this success, we are addressing future challenges. To this end, we will further consolidate our intra- and extramural cooperation in clinical, research and teaching matters, strengthen global networks and improve the required infrastructure. Accreditation by EAEVE needs to be renewed in 2019, and only a cosmopolitan outlook and exchange will enable us to establish the best structures in-house. In implementing these ambitious aims for the Development Plan 2025 we are hoping for the active support of our newly elected members of the University Council.

Photo: © Ludwig Rusch/Vetmeduni Vienna

Edeltraud Stiftinger

Chairwoman of the University Council

For Vetmeduni Vienna, 2017 was a year that meant both change and continuity. With the appointment of the three Vice-Rectors the leadership team was completed and a solemn investiture ceremony marked the culmination in this process. Numerous guests from academia, politics, agriculture and industry accepted the invitation to this festive event, with three federal ministers gracing Vetmeduni Vienna with their presence – an absolute first. This demonstrates the good foothold and importance of veterinary medicine in society. Based on their experience, the members of the Rectorate are ideally prepared for the challenges ahead. The top priority will be to enhance the profile of Vetmeduni Vienna so that, through innovation and excellence, it can continue to live up to the responsibility of being in a unique position at the interface of animal, human and environmental concerns.

Facts & Figures

Sites of Vetmeduni Vienna

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

- *VetFarm (research, training, regional, modern setting; teaching and research entity of Vetmeduni Vienna)*
- *Interuniversity Institution*

Other Establishments of the University

- Messerli Research Institute
  (together with the Medical University of Vienna and the University of Vienna)
- Graf Lehndorff Institute for Equine Science
  (together with the Brandenburg Stud Farm Foundation Neustadt/Dosse, Germany)
- Interuniversity Department for Agrobiotechnology – IFA Tulln
  (together with the University of Natural Resources and Life Sciences/Vienna and the Vienna University of Technology)
- Wolf Science Center (WSC)

Photos: © 1. Johannes Zinner/Vetmeduni Vienna; Vetmeduni Vienna | 2. Michael Bernkopf/Vetmeduni Vienna | 3. Felizitas Theimer/Vetmeduni Vienna | 7. Ernst Hammerschmid/Vetmeduni Vienna | 8. Michael Bernkopf/Vetmeduni Vienna

Staff

as of 31.12.2017

928 | 481

38 professors
+2 professors with double appointments

total 1,409

643 administrative and support staff

729 other academic staff

Students

as of 05.01.2018

women 1,832

men 506

2,338 total

Animal patients

2017

50,614 animal patients *

visited five species-specific University Clinics.

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

University Clinics

5 University Clinics

- Swine
- Horses
- Ruminants
- Small Animals
- Poultry and Fish

Unique in Austria – Internationally Recognised

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

Vetmeduni Vienna among the Top 10 in the Shanghai Global Ranking of Academic Subjects

The Shanghai Global Ranking of Academic Subjects 2017 places Vetmeduni Vienna among the leading universities. In the Shanghai study published in June 2017, it occupied the excellent 8th place of all universities worldwide included in the category of 'Veterinary Sciences'.

52 different subjects in the categories of Natural Sciences, Engineering, Life Sciences, Medical Sciences and Social Sciences of more than 4,000 universities worldwide have been reviewed and evaluated since 2009. In order to be included in this ranking, universities need a minimum number of points for scientific publications from 2011 up to the present.

Study Programmes

- **Diploma Programme:**
  Veterinary Medicine
- **Bachelor's Programme:**
  Biomedicine and Biotechnology
  Equine Sciences[3]
- **Doctoral Programme:**
  Veterinary Medicine
- **PhD Programme**
- **Master's Programmes:**
  European Master in Comparative Vertebrate Morphology (EUCOMOR, in English)[1]
  Interdisciplinary Master in Human-Animal Interactions (IMHAI, in English)
  Master in Evolutionary Systems Biology (in English)[2]
  Master in Biomedicine and Biotechnology/Comparative Biomedicine (in English)
  Master in Wildlife Ecology and Wildlife Management[3]

[1] In cooperation with the universities of Antwerp (BE), Gießen (DE), Poznan (PL) and Naples (IT)
[2] In cooperation with the University of Vienna
[3] In cooperation with the University of Natural Resources and Life Sciences, Vienna

Research Priorities

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

Inauguration

At a solemn inauguration ceremony the members of the new Rectorate of Vetmeduni Vienna were officially sworn in on 23 June 2017.

The Federal Ministers Sonja Hammerschmid, Pamela Rendi-Wagner and Andrä Rupprechter, academic dignitaries from Austria and abroad as well as other guests from academia and business congratulated the Rectorate and celebrated the investiture of Rector Petra Winter and her team together with families, staff and students.


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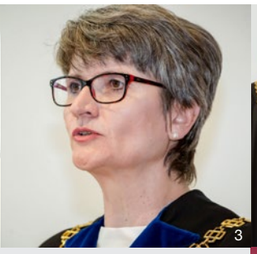
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The Rectorate team of Vetmeduni Vienna (from left to right): Sibylle Kneissl (Vice-Rector for Study Affairs), Otto Doblhoff-Dier (Vice-Rector for Research and International Relations), Petra Winter (Rector) and Christian Mathes (Vice-Rector for Resources).


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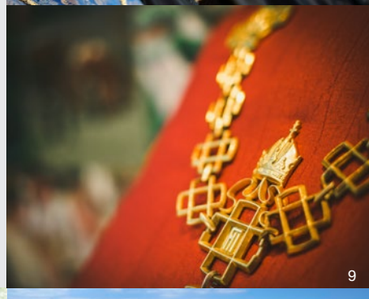
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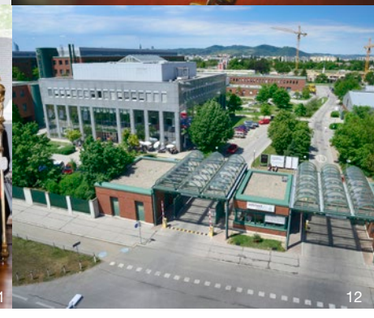
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Setting the Direction for the Future: the New Development Plan 2025

More than ever before, universities are facing turbulent times ahead. Be it future trends such as digitalisation or global challenges such as health, nutrition, climate and energy, there are many ways in which Vetmeduni Vienna is required to develop and move forward. In preparation for the Performance Agreement Period 2019-2021, Vetmeduni Vienna has devised a new Development Plan based on a very comprehensive and intensive discourse that involved not only the bodies of the university but also external experts.

This process has resulted in a strategy document highlighting the major projects until 2025, spearheaded by the motto ‘Act rather than react’ and the commitment to excellence and innovation in research, teaching and clinical matters. In order to strengthen its internationally unique profile, Vetmeduni Vienna plans to support top research projects that combine excellent fundamental research with fields of veterinary application. Competences and skills, practical preparation for the job and enhanced lifelong learning options are at the centre of efforts to further develop the range of study programmes. The newly built University Clinic for Small Animals sets a new benchmark in patient care.

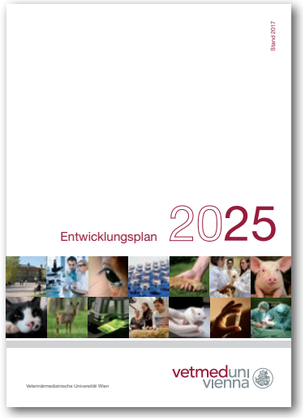


Photo: © Destina156/Dreamstime.com

Study

Studying at Vetmeduni Vienna: Competence for the Future

Teaching at Vetmeduni Vienna is structured around clearly defined learning objectives and hones the necessary competences and skills in order to prepare students for the demands of clinical and research practice and, in so doing, provide them with scientifically-based hands-on education and training.

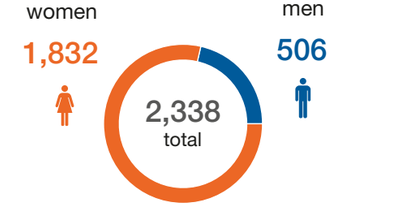
In Focus: Interaction of Clinical Practice and Research

In pursuing their studies, such as the diploma degree programme in veterinary medicine, students at Vetmeduni Vienna prepare themselves for manifold activities in clinical practice, research or industry. As teaching is based on the student-centred learning approach, the emphasis is on autonomous learning. Curricula provide for an early take-up of both clinical and scientific training. Students at Vetmeduni Vienna are thus able to acquire crucial skills and competences for professional practice and research including participation in research projects, planning of clinical studies or data analysis and processing.

Graduates

2017	Women	Men	Total
Diploma programme in veterinary medicine	123	33	156
Bachelor's programme in biomedicine and biotechnology	15	7	22
Bachelor's programme in equine sciences	9	0	9
Master's programme in biomedicine and biotechnology	11	6	17
Master's programme in wildlife ecology and wildlife management	2	1	3
Interdisciplinary master's programme in human-animal interactions	4	0	4
Doctoral programme	38	20	58
thereof PhD studies	14	4	18
Total	202	67	269

Students as of 05.01.2018



Students by country of origin as of 05.01.2018

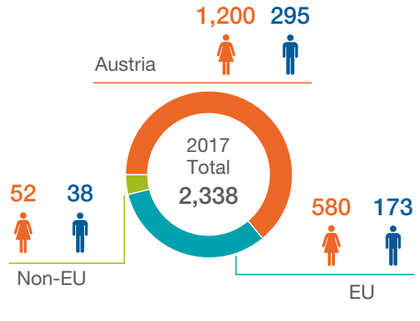


Photo: © Michael Bernkopf/Vetmeduni Vienna

In the KLIPP-VET examination, which follows on a 14-week rotation schedule, students demonstrate their practical skills on four patient animals each.

Theory and Practice: Quality Assurance for Examinations

Written examinations at Vetmeduni Vienna are carried out over an electronic examination platform called Q-Exam. All teachers prepare questions for their courses with a view to different learning objectives. Before being used in a test, every question undergoes a so-called 'six eyes review', whereby it is checked for formal and technical criteria. In formal terms, attention is given to whether questions are clearly worded and whether all the response options are unequivocal. In technical terms, reviewers check whether all questions are factually correct and of relevance. This type of standardised test enables comprehensive quality assurance. Tests over the digital examination platform were introduced at Vetmeduni Vienna as early as 2014. Meanwhile the platform holds a pool of 8,429 reviewed questions of different types. As of 2017 students may access the test results electronically.

Practical examinations are also part and parcel of the degree courses at Vetmeduni Vienna. One example is the practical part of the first diploma exam for students of veterinary medicine: the Objective Structured Practical Examination (OSPE). In this part of the first diploma examination taken at the end of the fourth semester, candidates are required to prove that they have not only theoretical knowledge but also practical skills. The test covers everything students have learned up to this point, its tasks – including for example one-on-one talks with animal owners – drawing on four different fields of subjects such as 'structure and function of organs' or 'laboratory, feeding stuff and pharmacology'. Twelve testing stations in different places of the Vetmeduni Vienna campus are available to students to demonstrate their abilities, including the examination of organs, one general examination procedure or the application of medication. A practical demonstration or 'show' in answer to an assignment is characteristic of the OSPE approach. To enable students to complete Clinical Rotation I successfully, a modified Objective Structured Clinical Examination has been introduced: KLIPP-VET (German acronym for clinical examination of professional veterinary activities) – livestock and companion animals. This examination, which follows a 14-week rotation schedule, tests the candidates' practical skills using four Entrustable Professional Activities (= work packages) on each of four patient animals. During this examination candidates are required to demonstrate that they are able to draw up medical histories, carry out initial and subsequent examinations and decide about appropriate therapy actions for the patients. Students are given immediate feedback to their test performance – 'red cards' alert them to any action that might for example jeopardise the life of a patient or persons nearby or the candidate herself/himself.

Daniel Möbs, IQUL, student Hannah von Butler (500,000th candidate) and Rector Petra Winter.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Revised Admission Procedure

Aptitude tests within the admission procedure for the academic year 2017/18 were the first to be carried out over the examination platform Q-Exam for all fields of study.

Photo: © Michael Bernkopf/Vetmeduni Vienna

These aptitude tests for the two master's programmes (master's course in comparative biomedicine and interdisciplinary master's course in human-animal interactions) were held on 27 and 28 June 2017 and those for the diploma degree programme in veterinary medicine and for the bachelor's programme in equine sciences and the bachelor's programme in biomedicine and biotechnology were held on 17-19 July 2017. 304 questions in total were newly developed for these five degree courses. In addition to multiple-choice questions, which tested the technical knowledge of the candidates, two new types of questions (classification and sequencing assignments) on the topic of 'Views on study and profession' were developed and used for the first time. Another novelty was that candidates were required to pay EUR 50 towards the test costs, with a total of 89 per cent of the registered candidates paying this fee in a timely and correct manner. For the first time the 2017/18 admission procedure also took into consideration the marks achieved by candidates in the mandatory subjects of German, Mathematics and one Modern Language (best mark) of the school leaving certificate (certificate of general matriculation standard as defined in §64 of the Austrian University Act). A total of 1,199 persons participated in the aptitude tests.

Courses of study

2017		Applicants Total	Applicants Women	Applicants Men	Admissions Total	Admissions Women	Admissions Men
D	Diploma programme in veterinary medicine	1,269	1,050	219	244	186	58
B	Bachelor's programme in biomedicine and biotechnology	177	126	51	38	25	13
B	Bachelor's programme in equine sciences	54	53	1	33	33	0
M	Master's programme in human-animal interactions	37	26	11	23	18	5
M	Master's programme in biomedicine and biotechnology	37	22	15	18	11	7
	Total	1,574	1,277	297	356	273	83

No figures are available for the Master's programmes in wildlife ecology and wildlife management, comparative morphology as well as evolutionary systems biology since admission to these programmes is not managed by Vetmeduni Vienna.

Teaching: Innovative and Competence-Based

Teaching at Vetmeduni Vienna relies on educational science research and innovative didactic concepts, including simulation-based learning, in order to enhance quality and efficiency. Competence checks and periodic progress tests are used to evaluate the progress made by students.

Simulation-Based Learning: Training on Dummies

Simulation-based learning has proved its worth, in particular in clinical training. The VetSim Skills Lab of Vetmeduni Vienna works under the motto 'simulating a vet's life'. Specially equipped classrooms are available to prospective vets where they may practice their clinical skills at roughly 70 different stations for all vet disciplines either independently or in the context of classes: they may change bandages and suture wounds or practice intubation and ultrasound examinations. The following equipment was introduced in 2017: a portable simulator, SIMVENT light, to train the basics of intermittent positive-pressure ventilation; a special model for training the taking of blood samples from the tail vein of cattle; and the haptic cow Henryetta to train simulator-assisted artificial insemination.

The cow Betsy and the mare Bonny, both simulation models as well, are reliable partners for students in learning how to perform gynaecological examinations and gestation diagnoses. A life-size haptic cow is used to learn the basic techniques of helping large animals give birth. The sterilisation of bitches and cats, one of the most frequent surgical interventions in veterinary medicine, is first practiced on realistic models as well. Moreover, the obstetrics and insemination team is working on the further development of VetSim models: haptic cow Henryetta still needs to be optimised to be ready for series production, while a model for bovine caesarean sections is currently being developed in the team's own workshop.

The Skills Lab is freely accessible to students for most of the day. This virtual type of training offers advantages to both humans and animals as regular training sessions help students prepare for their activities in vet practice and acquire the necessary routine and confidence.

Photo: © David Maißl/Vetmeduni Vienna

In the Skills Lab of Vetmeduni Vienna students may hone their skills, such as getting blood from the tail vein of cattle, on animal models made from synthetic material.

Practicing how to talk with animal owners is a key component of student training at Vetmeduni Vienna.

Photo: © Stephanie Scholz/Vetmeduni Vienna

Making Learning Progress Measurable: Progress Test in Veterinary Medicine (PTT)

The Progress Test in Veterinary Medicine (PTT) has been developed in cooperation with seven German-speaking veterinary universities and faculties within the framework of the KELDAT project (German acronym for competence centre for e-learning, didactics and training research in veterinary medicine) and is established at Vetmeduni Vienna. It involves a voluntary annual knowledge test for students to check and evaluate learning progress and the acquisition of specific technical knowledge over the course of the study programme. The Progress Test in Veterinary Medicine is routinely compiled and carried out. Its results remain unmarked and are reported back to each of the participating students individually. In 2017, a total of 337 students from different semesters took part in the PTT at Vetmeduni Vienna.

Ongoing Evaluation by means of Competence Checks

Vetmeduni Vienna has set itself the goal of nurturing students and developing their competences in the best possible way. How well we succeed in this is regularly tested by so-called ‘competence checks’ in which students assess not only their own level of knowledge but also the level at which this knowledge has been imparted in teaching, i.e. competence checks are not meant to test knowledge but rather serve the purpose of self-assessment and external assessment of skills and competence. In this connection, an online questionnaire has been developed on the basis of a previously compiled competence profile defining the levels to be attained at certain points in time. In June 2017, sixth and tenth semester students carried out the competence check; participation was mandatory for sixth semester students. A total of 185 students of the sixth semester and 136 students of the tenth semester completed the competence check, its results being communicated to the evaluation team, while possible measures were discussed with the relevant bodies.

Soft Skills: Communication Competence

Not only expert knowledge but also conversation techniques centred on the animal owner help in the successful treatment of animal patients. As early as in the third semester of the diploma degree programme in veterinary medicine, prospective veterinarians learn important communication skills through structured role playing. After an introductory lecture intended to make students aware of communication issues, so-called case vignettes are used in semester six to enhance these soft skills. Screenplays define the most important parameters: place of conversation, experience of the veterinarian, information on the animal patient as well as personal characteristics and life circumstances of the owner. In this way students are trained under supervision in outpatient service, for instance in the outpatient clinic or during Clinical Rotation, as to how veterinarians can optimise their responsiveness to animal keepers and request important information in a targeted manner.

Impetus for University Teaching

Committed lecturers are pivotal for outstanding university didactics. Every month all teachers of Vetmeduni Vienna are invited by the Office of the Vice-Rector for Study Affairs to a ‘kick-start breakfast’. This professional development programme combines valuable inputs from experts in didactics and education with a leisurely breakfast where teachers are informed about the most recent findings in university teaching. For videos of the lectures held at these breakfast sessions refer to:

http://vetmediathek-gallery.vetmeduni.ac.at/impulsfruehstueck

Teaching Vets: Didactic Progress

Students of veterinary medicine at Vetmeduni Vienna are also assisted by practicing veterinarians, or instructors as they are called. Vetmeduni Vienna has continuously enhanced cooperation with these external teachers since 2015. Every year they are invited to the Teaching Vets Symposium. The Teaching Vets Symposium #3 in October 2017 addressed didactic developments in university teaching and in particular ‘competence-based teaching in veterinary medicine’. Instructors were given the opportunity to exchange their experiences in assisting students and in the development of their own didactic skills. As in previous years, the event was concluded by a ceremony in which awards were presented in the categories of Teacher, Student and Instructor of the Year as well as two other awards, namely the Vetucation® Award of Vetmeduni Vienna and the Student Award of the Students‘ Union.

A Network throughout Austria: Teaching Vets on Tour

Introduced two years ago, the Teaching Vets on Tour programme has become very popular. It is intended for practicing veterinarians in the Austrian states who work as instructors training our students. During this half-day event, Vetmeduni Vienna offers the opportunity for an exchange of experiences and special didactic training to give fresh impetus to instructors for student-centred learning. In 2017 the tours covered Lower Austria and Styria. With its Teaching Vets on Tour initiative, Vetmeduni Vienna reaches out to regions providing professional development options in teaching and didactics.

In his keynote address, guest speaker Paul Zajic of the Medical University of Graz focused on examples and ideas of how competence-based programmes can be successfully implemented, e.g. in medical training in general, but also when it comes to integrate rapidly evolving disciplines, such as emergency medicine.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Awards for Teachers

Innovative university teaching is competence-based and moves students centre stage. Teachers who are particularly committed to these principles are candidates for the Teacher of the Year award.

At the Teaching Vets Symposium #3, the 2017 awards for Teacher, Student and Instructor of the Year as well as two other awards, the Vetucation® Award of Vetmeduni Vienna and the Student Award of the Students' Union, were presented. Funded by the City of Vienna, Municipal Department 7 – Cultural Affairs, the awards were given to students and teachers of Vetmeduni Vienna as well as to practicing veterinarians, our so-called instructors, who complement practical and research training during the students' mandatory internships.

Junior Teacher of the Year 2017

1st place: Stefanie Gaisbauer (Clinical Unit of Diagnostic Imaging)

2nd place: Gabriele Gradner (Clinical Unit of Small Animal Surgery)

3rd place: Brigitte Degasperi (Clinical Unit of Small Animal Surgery)

Senior Teacher of the Year 2017

Ulrike Auer (Clinical Unit of Anaesthesiology and Perioperative Intensive-Care Medicine)

S.U.P.E.R.: (German acronym, stands for students' award in praise of phenomenal commitment)

On behalf of the students, the Students' Union Chapter at Vetmeduni Vienna honoured staff members who had particularly catered to the needs, and supported the progress, of prospective graduates of our university during the year. The awards were presented in three categories:

- **Clinical Teachers:** Gerhard Forstenpointner (Institute of Topographic Anatomy)
- **Pre-clinical Teachers:** Hubert Simhofer (Clinical Unit of Equine Surgery)
- **Administrative and Support Staff:** Desiree Kada (University Library)

Vetucation® Award: Best E-Learning Projects Honoured

Awarded since 2010, this year the Vetucation® Award went to one existing and one planned e-learning course. The Vetucation® learning platform is available to both students and teachers to upload interactive teaching modules, videos or other educational materials. Students are keen to accept this offer: the number of courses available on the learning platform is constantly on the rise and so are the views and clicks per day. From among all these e-learning concepts, the very best are honoured with the Vetucation® Award every year.

Winners of the Vetucation® Awards 2017

- **Existing E-Learning Projects:** Eva Eberspächer-Schweda (Clinical Unit of Anaesthesiology and Perioperative Intensive-Care Medicine)
- **Emerging E-Learning Projects:** Christian Dürnberger (Ethics and Human-Animal Studies Unit)

Stefanie Gaisbauer celebrated her first place in the category of Junior Teacher of the Year. Ulrike Auer celebrated her first place in the category of Senior Teacher of the Yea.

Photos: © Ernst Hammerschmid/Vetmeduni Vienna

Eva Eberspächer-Schweda and Christian Dürnberger were honoured with the Vetucation® Award for their e-learning projects (each of them pictured with Vice-Rector Sibylle Kneissl and the Head of the E-Learning and AV Media Working Group Mehrzad Hamzelo).

Photos: © Ernst Hammerschmid/Vetmeduni Vienna

Awards for Students

Students of the Year 2017

Silvio Kau and Marie-Christine Wiedrich (diploma degree programme in veterinary medicine) as well as Bernadette Mödl (bachelor's programme in biomedicine and biotechnology) were honoured by the Rectorate of Vetmeduni Vienna as best graduates of their respective degree courses. The criteria for this accolade are average marks and duration of studies. The Municipal Department 7 – Cultural Affairs of the City of Vienna supports this award.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Student of the Year Marie-Christine Wiedrich with Vice-Rector Sibylle Kneissl.

Award of Excellence 2017 of the BMWFW

The Award of Excellence 2017, the State Prize conferred by the Federal Ministry of Science Research and Economy (BMWFW), went to Anjuli Barber from the Comparative Cognition Unit of the Messerli Research Institute in recognition of her excellent academic performance. The Award of Excellence honours the best dissertations and PhD theses of the year. In her thesis Barber explored whether and how dogs can process, and differentiate between, human emotions.

With her PhD thesis Anjuli Barber (centre) won the Award of Excellence 2017. Pictured with the first examiner of the thesis Ludwig Huber (left) and Iris Rauskala, Head of the BMWFW's Directorate General VI.

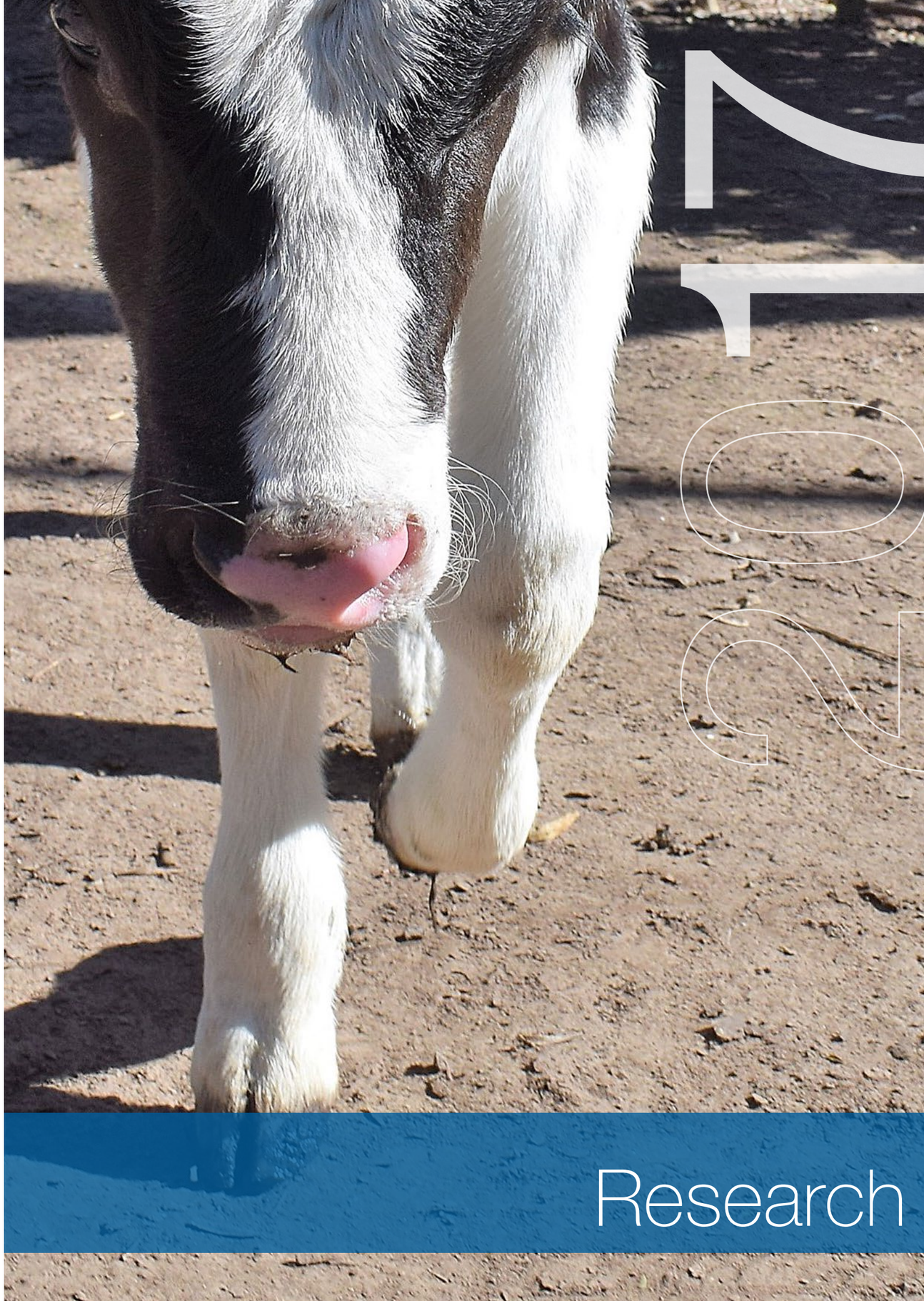
Achievement Award of the BMWFW 2017

Every year since 1990, the 50 best graduates of diploma and master's programmes at all Austrian universities and universities of applied sciences have been honoured with an Achievement Award, a EUR 3,000 State Prize conferred by the Federal Ministry of Science, Research and Economy (BMWFW).

Moritz Staltner, who graduated from the master's programme in biomedicine and biotechnology, was nominated for the BMWFW's Achievement Award 2017 in recognition of his excellent academic performance. 'Interaction of MMTV integrase with Hypoxia-inducible factor 1α enhances the infectivity of MMTV' is the title of his master thesis written at the Institute of Virology

Award winner Moritz Staltner (centre) with Peter Wanka, Deputy Head of the BMWFW's Directorate General VI, (left) and Alexander Marinovic, Head of the BMWFW's Division VI/6.

Photos: © Willy Haslinger



Research

Research

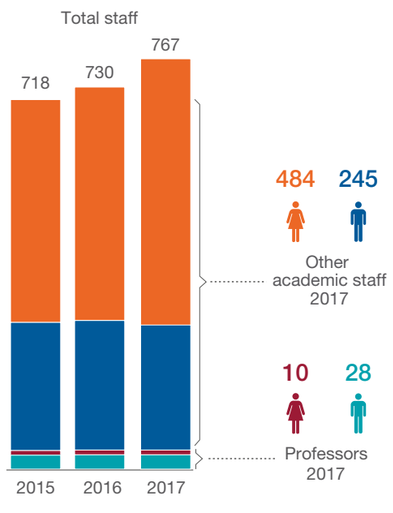
Current Research Projects

Research at Vetmeduni Vienna has many facets. Below is a selection of current research projects launched in 2017.

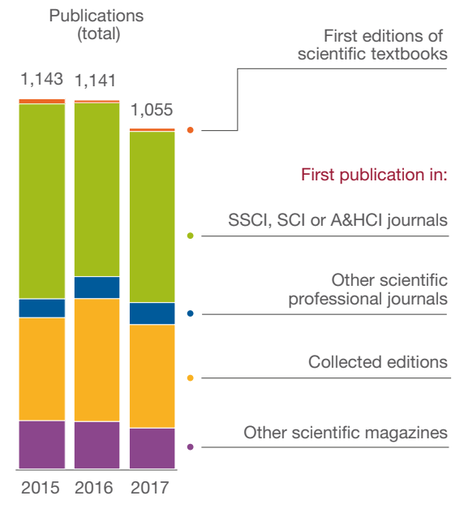
Photos: © Michael Bernkopf/Vetmeduni Vienna

Academic staff

as of 31.12.2017



Scientific publications



Wilhelm Gerner

CD Laboratory for optimised prediction of vaccination success in pigs

The success of vaccination depends on the formation of long-living pathogen-specific memory B and T cells within the immune system. Detailed exploration of the mechanism underlying the formation of appropriate memory cells in swine, however, is only possible to a very limited extent as the related reagents need to be species-specific and only a few reagents reacting with swine immune cells are commercially available. Therefore the CD Laboratory for optimised prediction of vaccination success in pigs, PIGVAC for short, pursues several strategies to improve analysis of the cellular immune response of pigs to vaccines. One strategy is to develop monoclonal antibodies (MABs) which are able to identify the molecules (markers) on memory B and T cells in swine and provoke a response by these immune cells. This should improve monitoring the development and functional characteristics of memory cells in the future. In addition, it should enable the examination of memory B and T cell subpopulations in experimental infection and vaccination studies as well as the analysis of functional characteristics of newly identified memory B and T cell subpopulations. Better understanding will ultimately result in a more rapid and targeted development of new vaccines, while helping reduce the number of laboratory animals required in the testing phase of vaccines. Christian Doppler laboratories are jointly funded by the public sector and the companies involved. The most important public funding agency is the Federal Ministry for Digital and Economic Affairs (BMDW).

Funding agency: Christian Doppler Research Association (CDG)/Federal Ministry for Digital and Economic Affairs (BMDW)

Photo: © Michael Bernkopf/Vetmeduni Vienna

Ludwig Huber

Cognition and Communication 2

Cognitive biology seeks to understand cognition, communication and behaviour in humans and animals from both proximate (mechanistic and developmental) and ultimate (phylogenetic and adaptive) perspectives, the emphasis being on experimental comparisons of several species (comparative method). The purpose of the doctoral candidates' programme 'Cognition and Communication 2' (CogCom2) is to pool the existing strengths of Viennese research in this field and create an internationally renowned centre for training the next generation of researchers in cognitive biology. Programme participants are trained in field and laboratory research, experimental design and comparative methodologies to address specific questions of neuronal, endocrine and cognitive mechanisms from developmental and evolutionary perspectives. This approach will provide in-depth preparation for the highly competitive interdisciplinary field of cognition research. The programme combines the expertise of ten internationally recognised researchers of Vetmeduni Vienna and the University of Vienna. Existing cooperation programmes with several international research centres offer additional opportunities for exchange visits and postdoc options.

Funding agency:
Austrian Science Fund (FWF)

Photo: © Michael Bernkopf/Vetmeduni Vienna

Julia Wilflingseder

Selective BET inhibition in kidney fibrosis

There is evidence of a constantly growing incidence of chronic kidney disease (CKD) among the general population of industrialised countries, engendering wide-ranging medical and socio-economic problems. In particular the demographic development towards ageing societies associated with an increasing number of medical comorbidities such as hypertension, diabetes, obesity and atherosclerosis are conducive to CKD development. Moreover, epidemiological studies have shown a clear and consistent link between acute kidney injury and progression towards chronic kidney disease. Up to now, there has been no specific therapy for managing or preventing this disease. With its focus on an epigenetic regulatory level, which is mediated by so-called regulatory enhancer and super enhancer elements, our research is based on an entirely new approach. The objectives of this interuniversity research project of the University of Veterinary Medicine, Vienna (Reinhold Erben), the Harvard Medical School (Joseph V. Bonventre) and the National Institute of Health (Lothar Hennighausen), both USA, are as follows: (i) to evaluate the therapeutic potential of selective BET (bromodomain and extra-terminal motif protein) inhibitors in AKI and CKD models; (ii) to identify the enhancer and super-enhancer landscape of the kidney with a focus on proximal tubular cells; and (iii) to validate possible causal pro-fibrotic regulatory enhancer elements. Highly selective BET inhibitors are currently being tested in clinical trials for cancer therapy, suggesting the need for their evaluation in pre-clinical studies of common illnesses such as chronic kidney disease. The possible therapeutic potential, but also undesirable side effects, can be analysed in this cohort of patients and further enhancer-dependent regulatory programmes might be identified as new treatment objectives.

Funding agency:
Austrian Science Fund (FWF)

Photo: © Private

Birgit Strobl

Molecular and cellular control of tissue homeostasis in health and disease

Besides rigidly controlled repair, rebuilding and regeneration processes, human tissue barriers like the skin or the gastrointestinal tract require ongoing immune surveillance which is provided by innumerable innate and adaptive immune cells of the barriers' micro-environment. Their interaction depends on complex mechanisms which ensure the identification of external signals or pathogenic damage and barrier-specific commensal microbes. For this communication to work properly, all functions at genetic, epigenetic and post-translational level need to be rigidly controlled. Any disturbance in communication among immune cells in the micro-environment may change the duration and intensity of inflammatory response and increase the risk of malignant transformation, autoimmune disorders or life-threatening invasive fungal infections. However, it is still not fully understood how the underlying molecular and cellular processes that control normal tissue homeostasis actually work. For this reason, TissueHome has been established as an interuniversity and interdisciplinary consortium together with an appropriately targeted PhD programme designed to decipher the molecular and cellular mechanisms in skin and gut and provide answers to three major research questions: (i) How do innate and adaptive immunity interact in health and disease? (ii) What communication mechanisms do specialised cells use in micro-environments to ensure barrier integrity? (iii) How do microbial pathogens influence immune surveillance and how does dysbiosis in the skin and gut microbiome lead to infections and autoimmune disorders? This biomedically relevant topic offers research within the concept of 'one health – one medicine' approach including comprehensive and in-depth training in modern immunology techniques as well as tailor-made skills and competence training.

Funding agency:
Austrian Science Fund (FWF)

Photo: © Michael Bernkopf/Vetmeduni Vienna

Shi Yan

Biosynthesis of helminth N-glycoproteins in insect cells

Haemonchus contortus is one of the major helminthic parasites which may infect sheep and goats. In comparison to anthelmintics, which may cause resistance to develop, vaccination appears to be more efficient and sustainable in managing these infections. Vaccination with a mixture of native Haemonchus gut glycoproteins (namely H11 antigens) has been shown to provide effective protection against *H. contortus* in lambs. Recombinant antigens, which were produced in different cell variants, did not have this effect. This ineffectiveness is associated with sugar modification, which is absent in synthetic proteins. Up to three monosaccharide residues formed by three fucosyltransferases are at the core of modification. In native proteins, it impacts their folding and antigenic effect. In order to ensure equivalent action in synthetically produced antigens, these natural sugar modifications and the intra-cellular pathway towards them need to be mimicked efficiently. The 'Biosynthesis of helminth N-glycoproteins in insect cells' project will use specially adapted cellular processes in insect cells, the purpose being to re-engineer the glycosylation mechanism by means of newly introduced genes to obtain the required modifications. The resulting cells equipped with additional glycosyltransferase genes are to produce recombinant H11 antigens closely mimicking the natural biochemical template. Proteomic and glycomic analyses with mass spectrometers will be used for comparison. If these structural differences were made good, this could be an effective contribution towards vaccination therapy against *Haemonchus* infections in future.

Funding agency:
Austrian Science Fund (FWF)

Photo: © Private

Wageha Awad

Tight junctions in chicken gut and Campylobacter infection

Although tight junctions (TJs), i.e. narrow membrane protein bands, are crucial for the physiological function of epithelial cells, they have not been characterised in chicken as yet. Their key role in gut health and integrity, in particular their involvement in strategies used by microorganisms to overcome the intestinal barrier, warrant further study. If we understand the mechanisms and functions of tight junctions, we will also be able to clarify microbial pathogenesis. The 'Tight junctions in chicken gut and Campylobacter infection' project focuses on one major zoonotic pathogen: *Campylobacter jejuni*. *C. jejuni* secretes bacterial toxins which target the structural components of TJs and may result in disruption of epithelial barrier integrity. In addition, the effects of 'disseminating' and 'non-disseminating' Campylobacter strains on the intestinal barrier need to be identified, all the more so as extra-intestinal bacteria in poultry increase the risk to public health. The mechanisms through which Campylobacter leaves the chicken gut (transcellular, paracellular pathways or both) remain unknown to date. Consequently, the project focuses on changes in the chicken gut barrier through *C. jejuni.*

Funding agency:
Austrian Science Fund (FWF)

Photo: © Private

Goklesh Kumar

In vivo induced genes of *Tetracapsuloides bryosalmonae*

Tetracapsuloides bryosalmonae is an endoparasite causing proliferative kidney disease (PKD) in various species of salmonids which are found in Europe and North America. PKD is considered to be one of the causes for the decline in brown trout and salmon populations in Europe, hence also a key factor impacting the business success of aquaculture operations. The pathogen completes its cycle of development in two hosts, one an invertebrate – the bryozoa – and the other a vertebrate – the brown trout. The proliferation of parasites induces granulomatous cellular response in the interstitial tissue, causing swelling of the kidney and the spleen. The pathogenic mechanisms of *T. bryosalmonae* have not been fully studied yet. Similarly, nothing is known so far about possible virulence genes that become activated and expressed during the course of the infection in the fish host and play a role in pathogenicity. Our working hypothesis is that the virulence genes of *T. bryosalmonae* are induced in the fish during the development of the parasites and multiplied in vivo. These genes may contribute to the virulence or pathogenicity of fish during the infection process. The project envisages first studies of the virulence genes and antigens of *T. bryosalmonae* which are expressed in vivo during the parasite development cycle. The results will provide insights into the mechanisms of proliferative kidney disease in salmonids like the brown trout. Newly found genes and antigens may become important also for applications in therapy and vaccines in future. Furthermore, transcriptome profiles of *T. bryosalmona*e furnish fundamental biological information and help us better understand the disease mechanisms related to these frequently found fish parasites.

Funding agency:
Austrian Science Fund (FWF)

Photo: © Private

Iwan Burgener

Establishment of canine intestinal organoids as alternative model for the assessment of biologics and drugs

Gastrointestinal diseases such as Inflammatory Bowel Disease (IBD), infectious diseases or tumours present critical and potentially fatal problems in humans as well as in animals. For years, research activities have focused on the complex interaction between the intestinal microbiome, the intestinal epithelium, the gastrointestinal-associated lymphatic tissue and the immune system. In this context, experimental animal models or cell cultures have a key role to play. Three-dimensional miniature organs, so-called organoids, are an in-vitro model that imitates the original organ on a smaller scale. Based on LGR5-positive stem cells, they present an authentic micro-anatomy. While the use of these organoids is well established with humans and mice, this is not the case for canines. However, as these organoids are genetically stable and able to grow infinitely as well as to differentiate into all possible kinds of bowel cell types, they would be ideally suited as an in-vitro model for studying intestinal diseases such as IBD, virus infections, and bacterial infections, as well as for drug testing in these animals. The purpose of this study is therefore to establish canine intestinal organoids and to provide a molecular and cellular characterisation for them, as these epithelial 3D cell cultures provide a better and more reliable species-specific model than tumour cell lines and can help reduce the amount of animal testing. The aim is thus to establish future canine intestinal organoids as a new research model in veterinary medicine. Subsequently, colonised organoids and an established murine model will be used to study antibiotics-induced *Clostridium difficile* infections. As a consequence, therapeutic approaches and a preventive effect of soluble polyclonal secretory-like immunoglobulin A (SIgA) are to be identified and compared against antigen-specific recombinant SIgAs and SIgGs.

Funding agency:
Austrian Research Promotion Agency (FFG)

Photo: © Michael Bernkopf/Vetmeduni Vienna

Monika Ehling-Schulz

Synergies and spreading of emetic *B. cereus* toxins in food and development of strategies to block the formation of toxins

The bacterium *Bacillus cereus* is able to form endospores which are resistant to heat and acid. This means that, in spite of the best hygiene standards, it is virtually impossible to prevent contamination with this microorganism in many areas of the food industry. Given its capability of producing toxins, *B. cereus* thus constitutes a major food technology and food hygiene problem. Exposure through intake of contaminated food will in most cases cause acute vomiting, but may also result in severe and sometimes fatal conditions. The cereulide toxin variants recently discovered by us, the so-called isocereulides, which show up to a tenfold toxicity, are likewise cited as causes in incidents of food poisoning. The purpose of the present project is to study the frequency of isocereulides in food as well as the effect and reinforced toxic effect throughout all variants. On the one hand this will furnish a database for defining evidence-based limit values, which are currently unavailable, and on the other hand the aim is not only to gain a better understanding of how the toxin enters into and spreads within food, but also to leverage specific toxin-blocking potentials of individual food ingredients to develop prevention strategies. Such blocking strategies could contribute to food safety and food security in the future.

Funding agency: Federal Ministry for Economic Affairs and Energy, Germany

Photo: © Private

Richard Zink

Network Forest

The technical aspects of habitat analysis, natural space planning and management are hardly ever taken note of by the general public and often get short shrift when it comes to imparting knowledge of forest-related topics. The aim of the Network Forest project is therefore to familiarise young people with the broad range of innovative technical aspects of natural space management through active participation in eight age-appropriate educational activities. Key aims are to enable participants to derive information about nature from diverse data sources and put such data to scientific use, such as in habitat evaluation, and to engage in business planning and regional development activities. The project aims at inspiring participants to actively embrace innovation and technology in remote sensing, geo information systems, creation and evaluation of image data as well as habitat analysis, enabling them to step into the shoes of researchers and engineers through familiarising themselves with the scientific methods they use. The sharing of information and knowledge between pupils, teachers and parents on the one hand, and research and business partners on the other hand, contributes to making young people consider career and education opportunities in related fields. Consortium and schools are to form a viable network of partners able to continue promoting diversity in how knowledge about innovation and technology is communicated in the future as well. Establishing a research box for school use and launching follow-up projects in the region ensures that coming generations of pupils will also have an opportunity to develop an interest in the topic even after the end of this project.

Funding agency:
Austrian Research Promotion Agency (FFG)

Photo: © Private

Christian Walzer

Population-based transnational monitoring, management and stakeholder involvement for the Eurasian lynx

The EU-funded INTERREG Central Europe 3Lynx Project promotes the cross-border management and monitoring of the lynx population native to the Bohemian-Bavarian-Austrian (BBA), (East) Alpine and Dinaric mountains. Nine partners from four European countries – Czech Republic, Germany, Italy and Slovenia – provide support to experts from the Conservation Medicine Unit of the Research Institute of Wildlife Ecology. The aim is standardised and uniform data collection as well as data exchange through an international database. Furthermore, targeted public relations and training programmes are intended to stimulate more involvement on the part of the regional nature conservation authorities, hunters, foresters and land owners in monitoring activities and to foster constructive dialogue in a context dominated by conflict surrounding the species. Within the scope of measures already being implemented together with plans to protect the Eurasian lynx in Central Europe, it is hoped that a broad Europe-wide basis can be established and maintained for the long term to increase acceptance and support for the large predator. Scientific and empirical findings and experience gathered so far are to lay the ground for attaining the following goals by 2021: (i) improvement and interlinking of international collaboration and of individual stakeholder groups in the project countries; (ii) development and subsequent implementation of a joint protection strategy in the respective regions; and (iii) establishment of comprehensive lynx monitoring in Central Europe based on uniform standards. Moreover, illegal killing, which presents a major threat to the lynx populations in Central Europe, is to be reduced and eventually prevented. This requires strengthening and ensuring long-term protection above all by government institutions and agencies.

Funding agency: European Union (EU)

Portrait: © Caroline Begle/CIPRA International | Lynx: © Petra Kaczensky

New Competence Centre for Food Safety: Petra Winter (Rector of Vetmeduni Vienna), Josef Glößl (Vice Rector for Research and International Relations, BOKU) and Johann Kastner (Head of Research & Development, University of Applied Sciences Upper Austria) at the opening ceremony in Tulln.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Competence Centre FFoQSI opened in Tulln

16 Mar saw the opening of the first COMET Competence Centre for Feed and Food Quality, Safety & Innovation (FFoQSI) in Austria – at the University Research Centre Tulln (UFT). Here, Vetmeduni Vienna and its partners, the Vienna University of Natural Resources and Life Sciences (BOKU) and the University of Applied Sciences Upper Austria (FH OÖ), conduct research along the entire plant and animal-derived food chain.

Research Projects at a Glance

In 2017, funding was granted for many project proposals submitted by Vetmed-uni Vienna researchers. These are the new projects:

Funding agency	Title	Project manager
Alpaca Association e.V. Deutschland	Study on resistances at antiparasitic drugs in German alpacas	Thomas Wittek
Austrian Development Agency	The genus Achillea: morpho-anatomical, phytochemical and molecular plant features - a case study for conservation of natural resources	Corinna Schmiderer
Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien, Österreich	Future of honey bees 2 – Basic research for project for honey bee health and bee protection	Benjamin Lamp
Canine Health Foundation USA	Targeting bacterial adhesion via blocking the scavenger receptor type B1 in vitro to improve non-invasive pyometra therapy outcome	Cordula Gabriel
Christian Doppler Forschungsgesellschaft (CDG)	CD Laboratory for an optimized prediction of vaccination success in pigs	Wilhelm Gerner
Deutsches BMWi	Cereulid und Isocereulide: Toxizität, Verbreitungswege und Hemmungsstrategien	Monika Ehling-Schulz
Europäische Gemeinschaft (EU)	“Population based (transnational) monitoring, management and stakeholder involvement for the Eurasian Lynx affecting 3 Lynx Populations in the Central Europe Area”	Christian Walzer
FFG	Antimicrobial effect of ozone-enriched vegetable oil	Peter Paulsen
FFG	Establishment of canine intestinal organoids as alternative model for the assessment of biologics and drugs	Iwan Burgener
FFG	Improvement of the mechanical characteristics of riding surface	Christian Peham
FFG	Network Forrest	Richard Zink
FFG	Tracking Health and Welfare of Dairy Cows, from Austria to the USA	Michael Iwersen
FWF	Animals’ understanding of their partner’s role in cooperative economic games	Friederike Range
FWF	Between Aphrodite Temple and late archaic house III	Gerhard Forstenpointner
FWF	Biosynthesis of helminth N-glycoproteins in insect cells	Shi Yan
FWF	Cognition and Communication 2	Ludwig Huber
FWF	In vivo induced genes of Tetracapsuloides bryosalmonae	Gokhlesh Kumar
FWF	Molecular and Cellular Control of Tissue Homeostasis in Health and Disease	Birgit Strobl
FWF	Selective BET Inhibition in Kidney Fibrosis	Julia Wilflingseder
FWF	Tight junctions in chicken gut and Campylobacter infection	Wageha Awad
FWF	Viennese Mosquitoes-Citizen Science as tool for mosquito control in metropolitan Vienna	Hans-Peter Führer
Hochschuljubiläumsstiftung	Hypoxia induced prostglandin Synthesis in microtumor-models of human and canine osteosarcoma	Cordula Gabriel
Hochschuljubiläumsstiftung	Reduction of occupational strains for students of veterinary medicine	Theresia Licka / Julia Grünwald
Hochschuljubiläumsstiftung	Reproduction of Saker falcons (Falco cherrug) in denpendence on nest site type and weather	Theresa Walter
Hochschuljubiläumsstiftung	Urban ecology of mammal-biting mosquitoes and their role in West Nile virus transmission	Jeremy Camp
Land (ohne Wien)	Lynx Project Upper Austria	Felix Knauer
Provinz Bozen, Südtirol	Microsatelite Analysis of Mountain Hare scats	Steven Smith
United States Department of Agriculture, Washington, D.C.	A novel two-step gas system to allow for humane on-farm euthanasia	Jean-Loup Rault
Verein Grünes Kreuz	Influence of season and population density on colonization of boars with zoonotic pathogens.	Friederike Hilbert
Wien (Land / Gemeinde)	Mosquito-Monitoring in Vienna 2017	Hans-Peter Führer
Wirtschaftskammer Wien	Influence of Food on the virulence of L. monocytogenes	Luminita Ciolacu
ÖAW	Imitation in Kea (Nestor notabilis)	Amelia Wein
ÖAW	Investigating the proximate mechanisms underlying reciprocity in non-human animal species using domestic dogs as a model	James Anthony McGetrick

LEGEND

BMWi Federal Ministry for Economic Affairs and Energy, Germany
FFG Austrian Research Promotion Agency
FWF Austrian Science Fund
ÖAW Austrian Academy of Sciences

N.B.: This table presents an excerpt from those research projects that were granted funding in 2017. Some projects are subject to confidentiality provisions so no information on these projects may be published.

Scientific Events

15 – 16 Feb 2017

3rd Symposium of the Graduate School for Pig and Poultry Medicine (PaP)

In Feb 2017, the Graduate School for Pig and Poultry Medicine (PaP) held its annual symposium that brought together students, supervisors, faculty members and the Scientific Advisory Board of the university. The symposium was open to members of the university and to members of the public alike, offering students a platform for presenting their achievements as well as for constructive debate.

22 Mar 2017

Novruz Meeting of Eurasia-Pacific Uninet

In Mar 2017, the International Eurasia-Pacific Uninet held an event on the Vetmeduni Vienna campus to inform attendees about the university's activities in Central Asia.

24 Mar 2017

Comparative Oncology Meeting

The theme of the Comparative Oncology Meeting was Mast Cell Neoplasms in Dogs and Men: From Gene Regulation to Target Treatment Concepts.

4 May 2017

8th Meeting of the Platform of Austrian Veterinarians for Animal Welfare (ÖTT) on Animal Welfare: Goals – Responsibility – Reality

The 8th meeting of the platform of Austrian veterinarians for animal welfare (ÖTT) on Animal Welfare: Goals – Responsibility – Reality, addressed ethical questions relating to animal welfare for different species.

29 June – 1 July 2017

20th Congress of the European Veterinary Society for Small Animal Reproduction (EVSSAR)

The topics presented by international and local experts at this year's EVSSAR Congress covered fertility and infertility management as well as contraception for cats and dogs, but also recent biotechnological findings, including from stem cell research.

28 July 2017

World University Vet Series: Camelid Congress Vienna 2017

The international meeting of the World University Vet Series: Camelid Congress Vienna 2017 for breeders was hosted by the Austrian Society for Camelid Health (ÖGKG) in collaboration with Vetmeduni Vienna (Clinical Unit of Ruminant Medicine and Institute of Pharmacology and Toxicology) specifically for breeders of New World camelids.

International Camelid Congress at Vetmeduni Vienna.

Photo: © Stephanie Scholz/Vetmduni Vienna

The 2nd CEPI Conference was held on the Vetmeduni Vienna campus in Dec 2017.

Photo: © Stephanie Scholz/Vetmduni Vienna

23 Aug 2017

Kickoff-Meeting. Vetmeduni Vienna. A New Partner of the Ludwig Boltzmann Cluster Oncology

In Aug 2017, Vetmeduni Vienna became a new partner of the Ludwig Boltzmann Cluster Oncology (LBC ONC). The themes discussed at the kick-off meeting, held on the campus of Vetmeduni Vienna, included oncological aspects relevant for the collaboration between the LBC ONC partners.

21 – 26 Aug 2017

1st CEPI Summer School Poultry Health & Nutrition

Within the framework of the CEPI (Centre of Excellence for Poultry Innovation) cooperation project, Vetmeduni Vienna invited junior researchers and experts in poultry health and nutrition to the 1st CEPI Summer School. Lectures, group discussions, practical exercises and field trips to farming operations and institutions provided opportunities for participants to familiarise themselves with the state of the art in poultry health, nutrition and diagnostics.

11 – 15 Sep 2017

Helminths Summer School

Vetmeduni Vienna hosted the Helminths Summer School from 11 to 15 Sep 2017. The programme was organised and implemented by Vetmeduni Vienna's Institute of Parasitology and the 3rd Department of Zoology of the Natural History Museum Vienna. For five days, workshops on parasitic worms gave students the chance to learn more about topics such as taxonomic groups, scientific collections, and parasitological examinations.

14 – 16 Sep 2017

6th FOODSEG Symposium

The main aim of the 6th FOODSEG Symposium was to offer a platform for discussion on future cooperation and joint projects along the entire feed and food chain in a bid to safeguard food safety and quality. The two-day event comprised lectures by senior researchers and decision-makers from the agriculture, feed, food and consumer sectors.

1 Dec 2017

2nd Centre of Excellence for Poultry Innovation (CEPI) Conference

Within the scope of the CEPI (Centre of Excellence for Poultry Innovation) cooperation project, the University of Veterinary Medicine, Vienna and the Georgikon Faculty at the University of Pannonia hosted the 2nd CEPI Conference on Avian Influenza and Histomoniasis.

6 Dec 2017

7th Animal Gut Health Symposium

The 7th Symposium on Animal Gut Health hosted by the Institute of Animal Nutrition and Functional Plant Compounds capped off the year 2017. Microbiome: The Hidden Player with Great Potentials for Improving Health and Performance was the theme on which researchers shared views on the Vetmeduni Vienna campus.

Participants of Helminths Summer School.

Photo: © NHM Wien

Awards for Researchers

Internal Scientific Awards

Award	Person	Organisational Entity
Inventor of the Year (Hard IP)	Florien Jenner Tillmann Rümenapf, Benjamin Lamp and Lukas Schwarz (co-inventors)	Equine University Clinic Institute of Virology / University Clinic for Swine
Scientific citations Staff of non-clinical institutes over 35 years of age	Norbert Nowotny	Institute of Virology
Scientific citations Staff of non-clinical institutes under 35 years of age	Carina Zittra	Institute of Parasitology
Scientific citations Staff of clinics over 35 years of age	Andrea Ladinig	University Clinic for Swine
Scientific citations Staff of clinics	Lukas Schwarz	University Clinic for Swine
Highest proportion of third-party funding Staff of non-clinical institutes over 35 years of age	Wilhelm Gerner	Institute of Immunology
Highest proportion of third-party funding Staff of non-clinical Institutes under 35 years of age	Shi Yan	Institute of Parasitology
Highest proportion of third-party funding Staff of clinics	Wageha Awad	University Clinic for Poultry and Fish Medicine
Major project funding	Mathias Müller Veronika Sexl	Institute of Animal Breeding and Genetics Institute of Pharmacology and Toxicology

External scientific awards

Award	Person	Organisational Entity
Andrew Higgins Prize (The Veterinary Journal)	Veronika Richter	Diploma degree programme in veterinary medicine
Armin Tschermak von Seysenegg Prize of the Society of Friends of the University of Veterinary Medicine, Vienna	Dagmar Schoder	Institute of Milk Hygiene
ARTEMIS Award for Science	Walter Arnold	Research Institute of Wildlife Ecology
Award of Excellence of the Federal Ministry of Science, Research and Economy (BMWFW)	Anjuli Barber	Messerli Research Institute Comparative Cognition Unit
FASEB Hematologic Malignancies Conference: Poster Award	Iris Uras Veronika Sexl	Institute of Pharmacology and Toxicology
Research Award of the International Society of Livestock Husbandry	Franziska Hajek	Diploma degree programme in veterinary medicine
Grand Decoration of Honour for Services to the Republic of Austria	Josef Köfer	Formerly Institute of Veterinary Public Health
Companion Animal Prize of the Society of Friends of the University of Veterinary Medicine, Vienna	Natascha Schwarz	Doctoral programme in veterinary medicine
IAI and MCCA PhD Programmes Symposium at MUW: Best oral student's presentation	Daniela Prinz	Institute of Pharmacology and Toxicology
Ippen Young Scientist Award	Johanna Painer	Department of Integrative Biology and Evolution
Lower Austrian Nature Conservation Award	Herbert Hoi (and team)	Konrad Lorenz Institute of Ethology
Livestock Prize of the Society of Friends of the University of Veterinary Medicine, Vienna	Elsayed Mickdam	Doctoral programme in veterinary medicine
ÖGAI (Austrian Society for Allergology and Immunology) Meeting: Session Prizes	Andrea Pölzl Natalia Simonović	PhD programme
University of Pannonia: Honorary doctorate	Michael Hess	University Clinic for Poultry and Fish Medicine
Awards of the Austrian Buiatrics Society	Katharina Lichtmannsperger Veronika Richter Alexander Stauder Franziska Hajek	Diploma degree programme in veterinary medicine
City of Vienna Award	Veronika Sexl	Institute of Pharmacology and Toxicology
Schaumann Prize of the H. Wilhelm Schaumann Foundation: Best doctoral thesis	Stefanie Wetzels	Institute of Animal Nutrition and Functional Plant Compounds
Schaumann Prize of the H. Wilhelm Schaumann Foundation: Best academic performance	Anne Fengel	Institute of Animal Nutrition and Functional Plant Compounds
Universidad Nacional de Educación a Distancia (UNED): Premio Extraordinario de Doctorado	Susana Monsó Gil	Messerli Research Institute Ethics and Human-Animal Studies Unit
Ursula and Fritz Melchers Prize	Dagmar Gotthardt	PhD programme
Austrian Economic Chambers Award	Luminita Ciolacu	Institute of Milk Hygiene
Achievement Award of the Federal Ministry of Science, Research and Economy (BMWFW)	Moritz Staltner	Master's programme in biomedicine and biotechnology

Science for All

Through scientific journals and conferences, researchers at Vetmeduni Vienna share their insights and research findings with colleagues all over the world. However, new discoveries and insights are just as interesting for a lay audience and have a lasting impact on society. Vetmeduni Vienna's PR efforts ensure that anyone who is interested can get a glimpse of the university's research activities.

Photo: © Aleksandra Klepic/Vetmeduni Vienna

Garden Day – from Anise to Lemon Balm

Basil, rosemary or more exotic plants such as spike lavender and mojito mint – there was a lot to learn and discover at Vetmeduni Vienna's Garden Day in May 2017. In addition to browsing plants for sale and taking a tour of the Botanical Garden, visitors were able to examine blossoms and leaves under a microscope and have all their questions on animals and plants answered.

Open Campus Day 2017

Some 3,500 visitors made their way to the Vetmeduni Vienna campus on 10 June 2017 to see for themselves what goes on in teaching and research and in the university clinics. 90 stations offered opportunities for interested visitors to give research, experimentation and discovery a try.

Live-Ticker on Facebook

Photo: © Thomas Suchanek/Vetmeduni Vienna

Science Café

In a speed-dating set-up, researchers from Vetmeduni Vienna answered questions asked by visitors. Christiana Winding-Zavadil, for instance, explained how rubber mice and soft toy rats help students hone their skills by practicing on these dummies instead of on live animals.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

The Clever Dog Lab

The Clever Dog Lab cognition researchers presented the tests they use and explained by which facial features a dog recognises its owner, whether dogs can differentiate between human emotions or realise that they are being discriminated against by comparison with other dogs.

Photo: © Thomas Suchanek/Vetmeduni Vienna

Soft Toy Clinic

The Soft Toy Clinic provided children and young people with playful insights into what the job of a vet involves. Visitors were able to practice blow tube shooting, putting on plaster casts and making sutures.

Photo: © Susanna Berger/Vetmeduni Vienna

Test run for future students

Would-be-students got a chance to test their skills as veterinarians at an interactive test station modelled on the Objective Structured Practical Examination (OSPE), which is the first practical exam students have to take in their study programmes.

Photo: © Ernst Hammerschmid/Vetmeduni Vienna

Microscope Island

Immune system, anatomy, food – why not take a closer look through the microscope? At the Microscope Island, visitors were given an opportunity to look at even the smallest details.

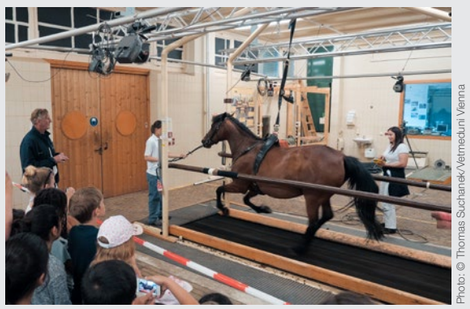


Photo: © Thomas Suchanek/Vetmeduni Vienna

Horses on the treadmill

The Equine University Clinic offered live demonstrations of horses in action – at the dentist's, at the farrier's or on the treadmill. Representations of skeleton structure and internal organs painted on horses gave visitors an 'inside' view, in addition to a chance at trying their hands at laparoscopy on models.

KinderuniVetmed 2017

Research – Child's Play: in July 2017, Vetmeduni Vienna once again opened its campus, lecture halls and labs to participants of the Vienna Children's University programme. Since 2012, the Vetmed Children's University has been part of the programme, giving kids aged seven to twelve an opportunity to get up close and personal with veterinary research. More than 1,200 children attended the lectures held on our Floridsdorf campus.

Photo: © Kinderbüro Wien/Barbara Mair

science camp 2017

Vetmeduni Vienna's science camp offers young people between the ages of 16 and 19 an opportunity to get to know life on campus and to explore topics such as livestock or public health in veterinary medicine together with researchers and veterinarians. Lectures, exercises and field trips gave a total of 22 science camp participants insights into research and clinical work on cattle, pigs and poultry and an opportunity to learn about interesting aspects of feed and foodstuffs.

Photo: © Johannes Baumgartner/Vetmeduni Vienna

The 2017 science camp participants on a field trip to Vetmeduni Vienna's agricultural operations.

Vetmeduni Vienna at the 2017 Lower Austrian Research Festival

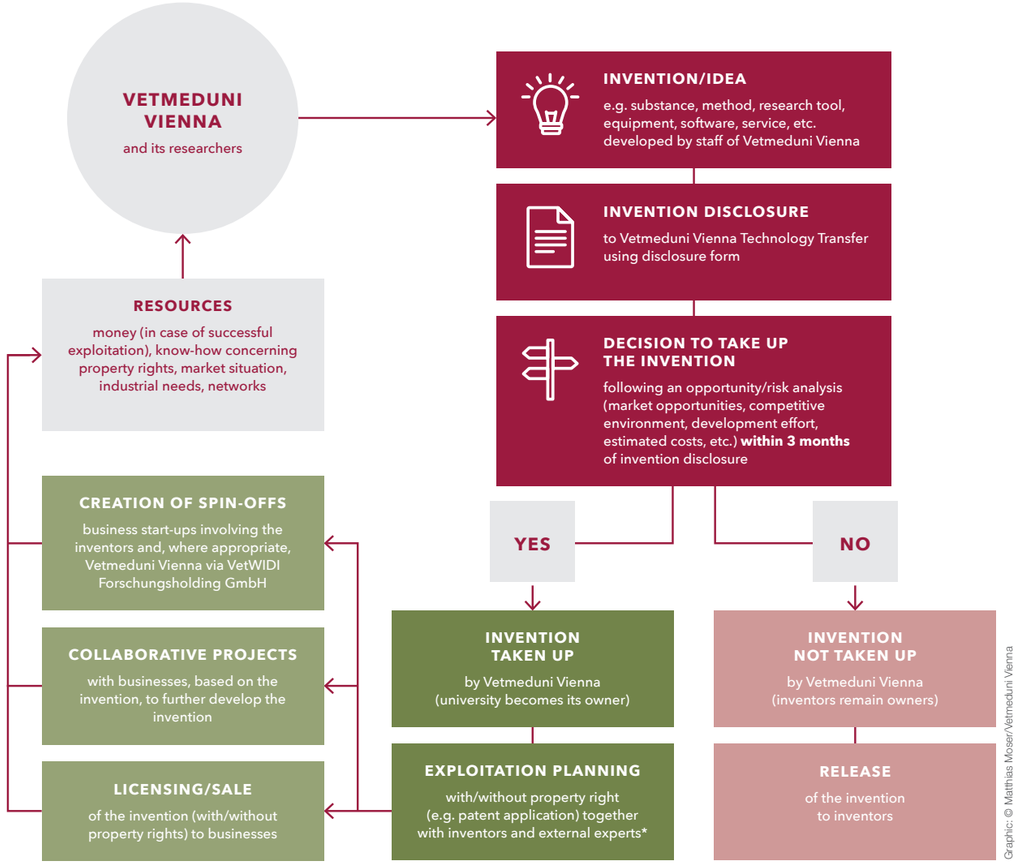
Palais Niederösterreich was the venue of the Lower Austrian Research Festival on 15 Sep 2017. Together with its project partner FFoQSI (Austrian Competence Centre for Feed and Food Quality Safety and Innovation), Vetmeduni Vienna presented its research along the food and feed value chain. A Sugar Rally gave prospective researchers – young and old – an opportunity to test their taste buds, trying to identify the sweetest among three kinds of apple juice with different sugar content levels. Lower Austrian Governor Johanna Mikl-Leitner was among those giving it a try at the Vetmeduni stand.

Photo: © Stephanie Scholz/Vetmeduni Vienna

Tracking down sugar: visitors taking a closer look at sugar crystals under the microscope.

VetInnovation Day 2017

Research ideas often involve knowledge that is worth protecting and give rise to technical progress that can be put to practical uses. At the first VetInnovation Day held in Nov 2017, researchers and students learned about what steps can or need to be taken as well as how and when to protect or implement an invention. The event presented an opportunity for new and established researchers alike to find out how important the development and transfer of technologies is for a university, what kind of support is available, what avenues can be explored – including under patent law – and what ways there are to launch a successful start-up, but also that it is sometimes better to call a halt or to find an industrial partner to take care of the operational side of things.



Graphic: © Matthias Moser/Vetmeduni Vienna

* inter alia start-up centres (A+B centres) like INiTS and accentAWS, LISA – Life Science Austria, lawyers, patent lawyers, exploitation specialists, industry experts

Science Communication and Public Relations

Science communication opens a window into research and enhances understanding throughout society for the working methods and perspectives of researchers. Vetmeduni Vienna attaches great importance to pro-active science communication, offering journalists and the general public comprehensive information on its broad range of research and teaching areas. Communication tools include press releases, press conferences as well as editing of scientific content for online media and social media channels.

Public Relations 2017

66 press releases
1–2 per week, 166 news items in total
(awards, staff, etc.)

About **90 media inquiries**
per year

Website
www.vetmeduni.ac.at
About **2.5 million unique page views**
per year

Campus

100 guided tours with some **1,400 participants**

More than **7,800 Facebook fans**
www.facebook.com/vetmeduni.vienna

Over **3,500 subscribers**
to the VETMED university magazine
(3 issues per year)

More than **300 Twitter followers**
@VetmeduniVienna,
www.twitter.com/vetmedunivienna

About **60 brochures**

About **70 YouTube videos**
www.youtube.com/user/vetmedvienna

VETMED – The Magazine

The university's official magazine presents information on everything that goes on at the university, covering research, teaching, university clinics, administration and management. The magazine, which is published three times a year with a print run of 5,500 copies, is read by staff, students, veterinarians and other Vetmeduni stakeholders in the fields of academia, research, politics, business, health and media. The magazine is mailed to over 3,500 subscribers in Austria and abroad, including the members of the Society of Friends of the University of Veterinary Medicine, Vienna.

Vetmeduni Vienna on Social Media

Vetmeduni Vienna's social media channels provide information on studying, research and teaching, offering not only new insights into day-to-day life at Vetmeduni Vienna, but also an interactive way for the university to engage with its community.

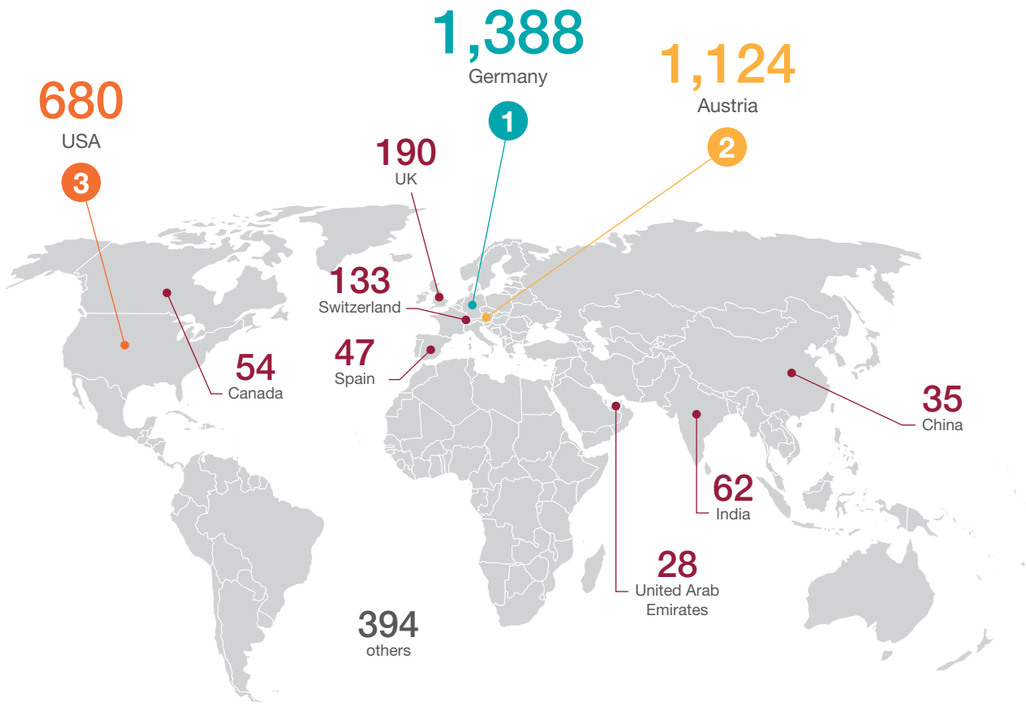
- **Facebook**
  This platform provides information and updates to over 7,800 fans about studying, teaching and research activities and day-to-day life on the Vetmeduni Vienna campus.
- **Twitter**
  This channel offers scientific opinion leaders, as well as journalists and students the latest news on research and teaching.
- **YouTube**
  Video interviews and short films about a broad variety of topics covered by Vetmeduni Vienna.

Media Resonance

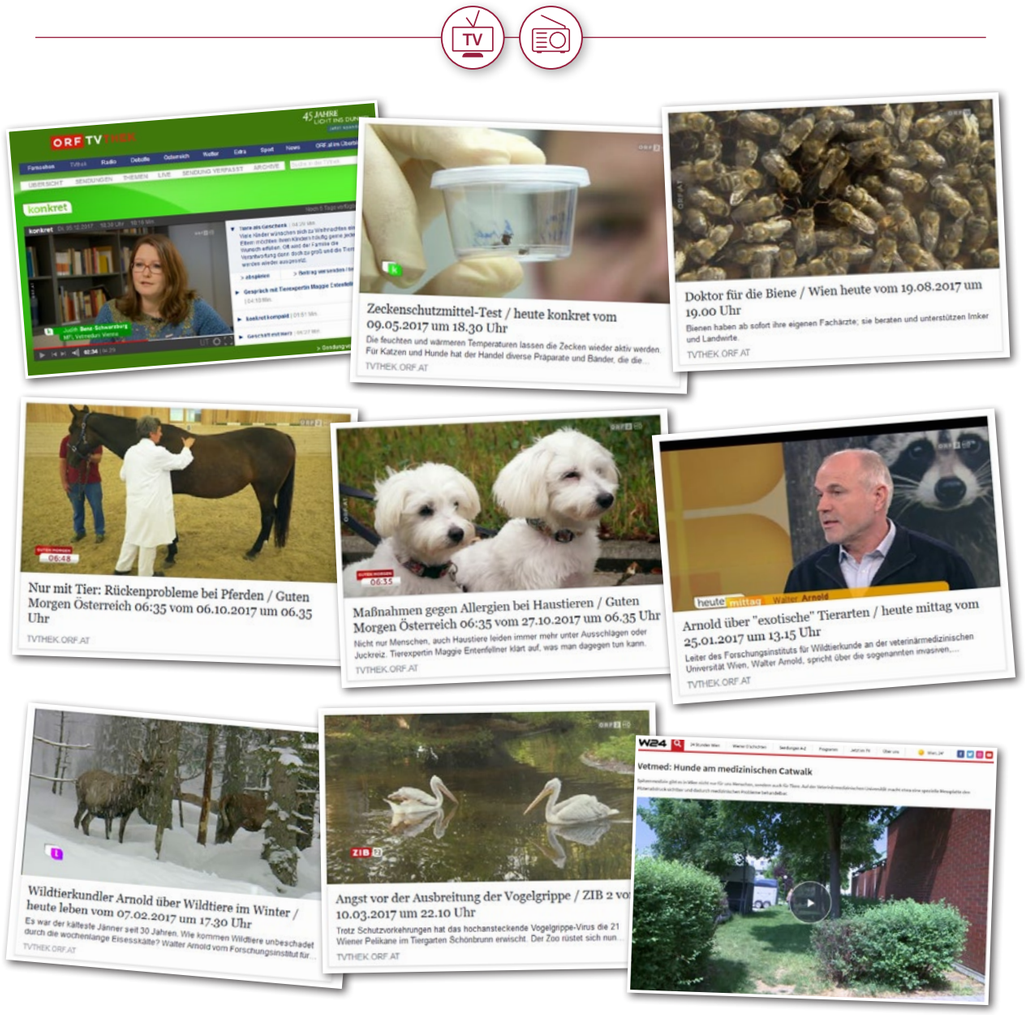
In 2017, the Corporate Communications Department sent out a total of 66 press releases to media in Austria and abroad and replied to some 90 media inquiries on research findings, recent trends in teaching and clinical expertise.

Austrian dailies such as ‘Der Standard’, ‘Die Presse’, ‘Kurier’ or ‘Kronen Zeitung’ and magazines such as ‘News’, ‘Trend’ and ‘Profil’ carried articles on the research activities of Austria’s only veterinary university. Inquiries from film and online media came from numerous productions by the Austrian Broadcasting Corporation (ORF), including, for example, the news show ‘Zeit im Bild’ (ZIB), the science show ‘Newton’ or ‘Guten Morgen Österreich’, ‘Heute Mittag’ or ‘Konkret Leben’. Experts from Vetmeduni Vienna made themselves available for interviews with the private TV stations Servus TV, ATV, ö24, as well as numerous radio stations (Ö1, Njoy, etc.). International interest in the activities of Vetmeduni Vienna also continued unabated. International media reported on various research projects and findings, among them the British ‘Daily Mail’, the BBC, ‘National Geographic’ or ‘The New York Times’.

2017 international Media Presence



Newspapers, TV and radio stations throughout the world reported on research findings of Vetmeduni Vienna in 2017.



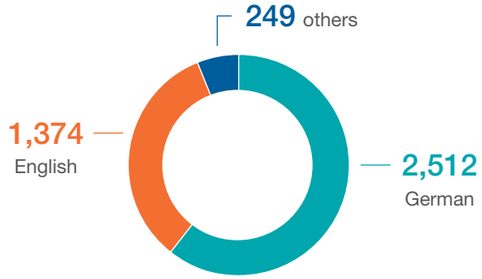
Clippings worldwide

2016	3,796
2017	4,135

Clippings national

1,287	Online
486	Print

Languages



University Clinics

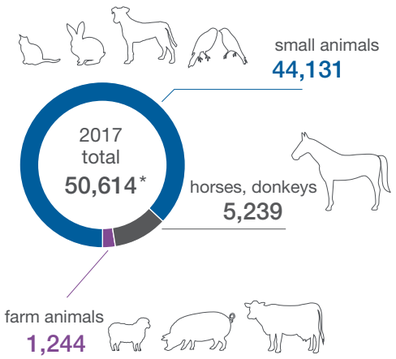
University Clinics

Focus on Animal Welfare

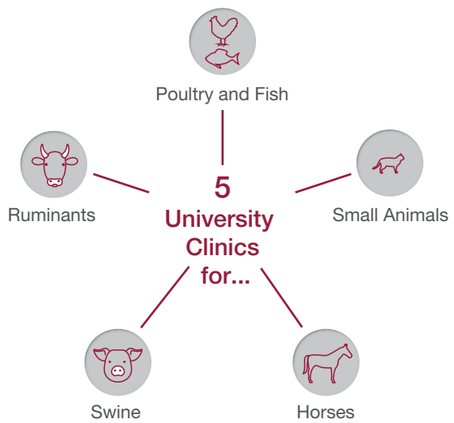
The five University Clinics of Vetmeduni Vienna are available 24/7 for animals in need of treatment. Clinically challenging cases yield new scientific insights, which are in turn applied in diagnosis and treatment, thus benefiting our animal patients.

At the five species-specific university clinics, Vetmeduni Vienna specialists treated some 50,000 patients in 2017. The clinics serve as teaching hospitals for students, provide post-graduate education and training, and accept referrals from practicing veterinarians. Animal owners may also seek veterinary help there directly. In 2017, some 20,000 animal patients were admitted as inpatients, while about 30,000 were treated as outpatients.

Patient visits 2017



University Clinics



The University Clinic for Poultry and Fish managed at total of 27,138 patients and samples in 2017.

* Figures include poultry (patients and samples), but exclude visits for the purpose of herd health management (livestock)

Small Animals Clinic NEW

A key step in the further development of the animal hospital and in strengthening its position as a centre of excellence is the new Small Animals Clinic. Consequently, 2017 saw a strong focus on planning and preparatory work for the new build. The new clinic will not only provide end-to-end education for students with an emphasis on patients and cases, but also ensure efficient and interdisciplinary patient treatment.

All the facilities and outpatient centres, which until now were spread all over the campus, will be combined under one roof. A single point of entry will ensure that patients receive proper care in one place. Combining the various disciplines will help reduce coordination efforts, a move from which animal owners, patients as well as students undergoing clinical training stand to benefit. Once the results of a feasibility study had become available, the decision was taken together with the property owner, the Austrian federal real-estate development company (Bundesimmobiliengesellschaft, BIG), to start a new construction on the site of the current Internal Medicine Outpatient Centre for Small Animals. The preliminary design is based on the necessary functional work flows as well as on the needs and requirements of patients and animal owners, staff and students. The spatial layout ensures a strict separation of infectious patients and supports eligibility for the Cat Friendly Clinic certificate. With the entrance positioned on the north-western side of the building, distances are kept short, guaranteeing swift transfers to the clinical units of obstetrics, gynaecology and andrology, diagnostic imaging and physiotherapy when needed. The single point of entry acts as a hub between the various disciplines and facilities involved in small animal medicine, easing the flow in an effective and efficient manner.

The clinic will offer the following facilities and services on different floors:

- **Underground floor:** Central services and technical building services
- **Ground floor:** Infectious patients separation unit
  - Single point of entry
  - Emergencies 24/7
  - Intensive care unit
  - Outpatient centre
- **First floor:** Wards (isolation ward separated from normal inpatient area)
- **Second floor:** Operating theatres plus sterilisation centre for the whole building

Graphic: © ZOOM VP.AT

Leveraging Synergies between Clinical Work, Research and Teaching

Apart from clinical work and research, veterinarians and their assistants also shoulder major teaching responsibilities at the university clinics by providing guidance to students during the practical part of their studies. Graduates who plan to specialise in a certain field, such as large animal surgery, anaesthesiology or ophthalmology, need to undergo additional in-depth education and training. This is where the university's residency programmes come in. Residency programmes are veterinary education programmes with an international character that offer in-depth specialisation in a clinical speciality field.

Photo: © Stephanie Scholz/Vetmeduni Vienna

The European Colleges for Veterinary Specialisation lay down uniform educational standards for residency programmes in Europe and also administer a central certifying examination. Those who pass the examination at the end of a 3 to 4-year educational programme may call themselves ECVS Diplomates. In 2017, 22 residents were attending on-campus residency programmes approved for their quality by the Residency Advisory Board. Vetmeduni Vienna is currently offering residency programmes accredited by the respective colleges in a total of 15 different speciality fields. All in all, 78 veterinarians at Vetmeduni Vienna have completed such residency programmes.

Residency Programmes

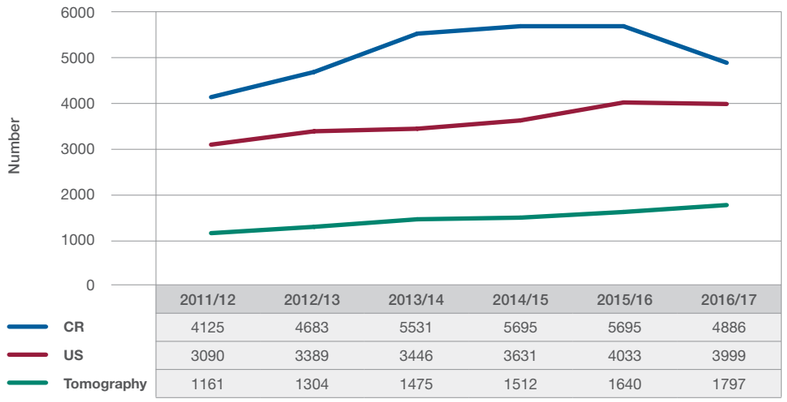
The Vetmeduni Vienna offers courses of study in 15 areas of specialisation.

- ANIMAL REPRODUCTION **ECAR** (European College of Animal Reproduction)
- DIAGNOSTIC IMAGING **ECVDI** (European College of Veterinary Diagnostic Imaging)
- VETERINARY ANAESTHESIA AND ANALGESIA **ECVAA** (European College of Veterinary Anaesthesia and Analgesia)
- POULTRY VETERINARY SCIENCE **ECPVS** (European College of Poultry Veterinary Science)
- EQUINE INTERNAL MEDICINE **ECEIM** (European College of Equine Internal Medicine)
- CLINICAL PATHOLOGY **ECVCP** (European College of Clinical Pathology)
- PORCINE HEALTH MANAGEMENT **ECPHM** (European College of Porcine Health Management)
- VETERINARY INTERNAL MEDICINE, COMPANION ANIMALS **ECVIM-CA** (European College of Veterinary Internal Medicine, Companion Animals)
- VETERINARY PARASITOLOGY **EVPC** (European Veterinary Parasitology College)
- BOVINE HEALTH MANAGEMENT **ECBHM** (European College of Bovine Health Management)
- VETERINARY SURGERY, LARGE ANIMALS – EQUINE **ECVS** (European College of Veterinary Surgery, Large Animals – Equine)
- VETERINARY PATHOLOGY **ECVP** (European College of Veterinary Pathology)
- VETERINARY INTERNAL MEDICINE, COMPANION ANIMALS, ONCOLOGY **ECVIM-CA, Oncology** (European College of Veterinary Internal Medicine, Companion Animals, Oncology)
- VETERINARY SURGERY, SMALL ANIMALS **ECVS** (European College of Veterinary Surgery, Small Animals)
- VETERINARY OPHTHALMOLOGY **ECVO** (European College of Veterinary Ophthalmology)

Diagnostic Imaging

Diagnostic imaging is a key element of treatment at Vetmeduni Vienna's university clinics. Diagnostic imaging is a summary term used for various examination methods that rely on machines to produce (two- or three-dimensional) image data of an animal patient's organs and structures, mainly for diagnosing changes induced by disease. Ultrasound, computed radiography (CR) and tomographic cross-sectional imaging are among the most important diagnostic tools. The following is an overview of the services provided by the Clinical Unit of Diagnostic Imaging.

Diagnostic imaging services



	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
CR	4125	4683	5531	5695	5695	4886
US	3090	3389	3446	3631	4033	3999
Tomography	1161	1304	1475	1512	1640	1797

The chart shows that CR examinations were declining while ultrasound and cross-sectional imaging examinations were on the rise during the period under observation.

Emergency Exercise: Vetmeduni Vienna and the City of Vienna practiced an emergency response

In Oct 2017, the City of Vienna Hygiene Centre and municipal department 60 (Veterinary Services and Animal Protection) carried out a joint emergency drill on the Vetmeduni Vienna campus. The underlying scenario was an outbreak of African swine fever in the University Clinic for Swine's facilities. Decontamination was the main focus of the exercise. The successful completion of the exercise shows that the City of Vienna and Vetmeduni Vienna are well prepared should there be an outbreak of an animal disease.

Photo: © Christian Houdek

Knowledge Transfer to Animal Owners and Veterinarians

Vetmeduni Vienna fosters dialogue between specialists and veterinarians. Symposia and lecture series are held regularly to discuss both questions arising in practice and the latest research results. In addition to cultivating this professional exchange between veterinarians, 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 well-being of their animals. This is why the experts at Vetmeduni Vienna regularly organise special symposia to provide information about particular species to an interested lay audience. Fostering dialogue between university clinics and practicing veterinarians is also high on the agenda of Vetmeduni Vienna, with informational events, seminars and conferences being held regularly for this purpose.

18 Feb 2017

Kyntegra Dog Trainer Congress

In February, the Messerli Research Institute's Coordinating Authority for Animal Welfare-Qualified Dog Trainers, Assistance Dogs and Therapy Companion Dogs hosted the Kyntegra Dog Trainers Congress. The programme was addressed to all dog trainers qualified in animal welfare, therapy companion dog handlers, assistance dog owners and Vetmeduni Vienna students.

15 Mar 2017

7th Kremesberger Conference on Herd Health Management in Ruminants

Under the heading of Veterinarians & Farmers – Joining Forces for Animal Welfare, new aspects of research and innovation were discussed at the 7th Kremesberger Conference on herd health management in ruminants. The conference was also streamed live on the internet.

25 Mar 2017

New World Camelid Conference for Animal Keepers

Vetmeduni Vienna's Clinic for Ruminants invited interested animal keepers to attend a symposium on New World camelids. Topics covered included breeding, shearing techniques and diseases. In Sep 2017, an additional New World Camelid Conference was organised for veterinarians.

28 – 29 Apr 2017

1st ÖTGD Farmed Game Conference

This CPD event organised by ÖTGD, the Austrian Animal Health Service, in Apr 2017 was targeted at veterinarians who are members of the ÖTGD Farmed Game Working Group.

15 May 2017

Informational Conference for Dog Breeders

The Insemination and Embryotransfer Platform hosted another informational conference for dog breeders in May 2017.

Photo: © Michael Bernkopf/Vetmeduni Vienna

Photo: © Michael Bernkopf/Vetmeduni Vienna

1 June 2017

ÖGT Evening Seminar on First Aid for Dogs

The Small Animals Chapter of ÖGT, the Austrian Veterinarian Society, hosted an evening seminar on first aid for dogs, with a special focus on accidents typically occurring in the summer season.

1 – 2 July 2017

1st Vienna Pain Day

The 1st Vienna Pain Day, which was hosted in July 2017, addressed researchers, residents, animal care staff, veterinarians and other interested parties. The main topics covered were Pain Assessment in Companion Animals, Peripheral Nerve Blocks in Small Animals, and Pain Assessment Horse.

28 Sep 2017

24th Free Range Association Conference / 31st International Society of Livestock Husbandry Conference

Society & Animal Welfare – Taboos and New Approaches was the theme of the joint 24th Free Range Association Conference / 31st International Society of Livestock Husbandry Conference in Sep 2017. The event was targeted at practitioners, at people working in an advisory capacity, in agricultural schools and colleges, in public administration, in agricultural chambers, ministries and universities (in a veterinary and agricultural context).

14 Oct 2017

7th Equine Symposium

A large number of participants with an interest in horses attended the symposium held in Oct 2017 to learn more about the most important infectious diseases contracted by horses. The main theme of the event was 'My horse has a fever and/or nasal discharge. What could this be a sign of and what should I do?'

27 Oct 2017

3rd Reptile Symposium

At the third Reptile Symposium in Oct 2017, owners of turtles, snakes and lizards were given valuable information on frequent emergencies and first aid measures.

28 Oct 2017

VÖK Behaviour Seminar: Behavioural Medicine for Cats and Dogs

Discussing Behavioural Medicine was the topic covered by the seminar hosted in Oct 2017 by VÖK, the Austrian Association of Small Animal Veterinarians.

9 Nov 2017

Lecture Series: Safe Interactions between Children and Dogs

Under the overarching theme of Safe Interactions between Children and Dogs, a series of lectures in Nov 2017 addressed issues such as legal aspects of child/dog interactions or acting responsibly to prevent dangerous situations – the role of parents and dog owners. The lectures hosted by the Institute of Animal Husbandry and Animal Welfare were geared specifically to dog owners.

17 and 18 Nov 2017

Surgery of the Bovine Digit – a Workshop for Practitioners

The workshop organised in Nov 2017 for practitioners specialising in livestock treatment targeted veterinarians interested in obtaining more in-depth knowledge and in honing their surgical skills. Hands-on exercises provided an opportunity to practice surgery on the bovine digit under the guidance and supervision of experienced surgeons.

Photo: © Christine Aurich/Vetmeduni Vienna

County stablemaster house.

10th Anniversary of Graf Lehndorff Institute for Equine Science at Brandenburg Stud Farm in Neustadt, Germany (Dosse)

2017 saw the tenth anniversary of the signing of the cooperation agreement between Vetmeduni Vienna and the Brandenburg Stud Farm Foundation, which led to the establishment of the Graf Lehndorff Institute at Neustadt (Dosse), Germany. Research at the Graf Lehndorff Institute focuses on reproductive medicine and horse breeding, as well as protection of animals, equine husbandry and equestrianism. The Institute, which moved into its present premises at the newly built centre for equine reproduction and training in 2009, is headed by Christine Aurich from Vetmeduni Vienna's Insemination and Embryotransfer Platform.

Organisation

Organisation

Working at Vetmeduni Vienna

More than 1,400 staff are employed at Vetmeduni Vienna in teaching, clinical work, research and administration. In all of these working environments, staff members have an opportunity to contribute their particular expertise in day-to-day operations.

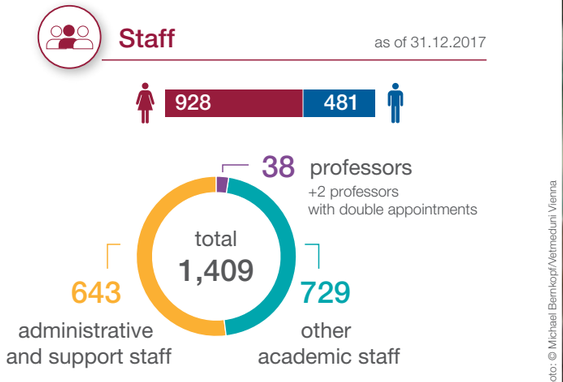
New Professorships at Vetmeduni Vienna

Three new professors took up their posts at Vetmeduni Vienna in 2017. Jessika-M. Cavalleri, Andrea Ladinig and Jean-Loup Rault each put their stamp on their speciality areas, namely Equine Internal Medicine, the University Clinic for Swine, and the Institute of Animal Husbandry and Animal Welfare respectively.

Jessika-M. Cavalleri

New Professor and Head of the Clinical Unit of Equine Internal Medicine

Jessika-M. Cavalleri has been heading the Clinical Unit for Equine Internal Medicine since Sep 2017. The internationally reputed specialist studied veterinary medicine at Freie Universität Berlin, switching to the Vetsuisse Faculty in Zurich to work on her doctoral thesis. Following an internship at the Equine Clinic there, Cavalleri also started her residency, the post-graduate programme for becoming a Diplomate of the European College of Equine Internal Medicine (ECEIM), in Switzerland. It was at the Veterinary University in Hannover, however, that the German-born researcher completed her international specialist education, first as a clinical researcher at the Department for Internal Medicine at the Clinic for Horses until 2010 and then taking on lecturing assignments. In 2016 Cavalleri completed her habilitation in her speciality at the Veterinary University of Hannover. Her research focus includes the effects of viral diseases on horses' organisms and the development of therapies for melanoma. In studying clinical effects of viral pathogens, her main interest is the equine Hepacivirus.



Cavalleri studies the clinical effects of viral pathogens, such as the equine Hepacivirus.

Photo: © Michael Bernkopf/Vetmeduni Vienna

Photo: © Michael Bernkopf/Vetmeduni Vienna

During a long-term research fellowship in Canada, Ladinig focused above all on studying the Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) in an international setting.

Andrea Ladinig

New Professor at the University Clinic for Swine

Andrea Ladinig, who was appointed the new head of the University Clinic for Swine in Aug 2017, is a true 'campus insider'. Carinthian-born Ladinig studied veterinary medicine here on campus, completing not only her doctorate, but also the residency programme in porcine medicine at Vetmeduni Vienna. A three-year research fellowship at the University of Saskatchewan, Canada, which she was offered in parallel to her residency, gave her an opportunity to conduct in-depth research in her speciality area, genomic analysis of infectious and non-infectious diseases in pigs. This allowed her to focus mainly on the Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) in an international setting. As a specialist in diseases like PRRSV she has since been involved in numerous cooperative ventures, such as the EU PIG Consortium. Having been a long-term clinic staff member, Ladinig is perfectly integrated in interdisciplinary research groups and has good connections among practicing veterinarians and farmers all over Austria.

Jean-Loup Rault

New Professor at the Institute of Animal Husbandry and Animal Welfare

In Oct 2017 French-born Jean-Loup Rault, an international specialist in ethology and in the protection of various animal species, took over the professorship and the function as head of the Institute of Animal Husbandry and Animal Welfare. Rault started his career with a degree in agricultural, environmental and food sciences. His second degree, in animal sciences, enabled the researcher to bridge the gap between livestock production and behavioural research. For the US Department of Agriculture, he developed strategies and decision trees for diverse aspects of animal husbandry, ranging from breeding to meat production. In Australia, where Rault completed the equivalent of what would be referred to as habilitation in Austria in record time, he worked mainly with pigs and poultry, but also with niche species such as koalas. Recently, however, his research interests have turned towards euthanasia and the slaughter of livestock as well as the neurophysiological changes in pigs during social interactions. For this reason, a key research focus for him will be to study the effect of oxytocin, a hormone which, in humans, causes a relaxed and easy-going mood above all when in positive or friendly company.

In Oct, French-born Jean-Loup Rault became the new professor and head of the Institute of Animal Husbandry and Animal Welfare.

Photo: © Michael Bernkopf/Vetmeduni Vienna

Career/Studies and Family at Vetmeduni Vienna

In implementing a broad variety of measures to foster work-life balance, Vetmeduni Vienna attaches special importance to providing offers for all groups of staff (working in administration, research and at the clinics) as well as students. For example, Vetmeduni Vienna offers childcare facilities on campus to make it easier for staff with children to balance their responsibilities. Customised childcare options in line with actual demand help parents manage their day-to-day commitments and find time for continued professional development as well. In addition to our on-campus kindergarten, Vetmeduni Vienna once again offered professional day care for our staff's children during the 2017 summer holidays. Overall, 30 places were available for children each week. Over a period of nine weeks, qualified child carers organised an extensive programme of activities for some 80 children between the ages of three and twelve, among them also children of refugees. As well as outings to the Vienna Haus des Meeres Aquarium, the Natural History Museum or the Austrian Broadcasting Corporation, the programme also included on-campus attractions, such as a guided tour of the University Clinic for Swine. Vetmeduni Vienna was the first Austrian university to undergo the 'berufundfamilie', (work & family) audit and also participated as a pilot university in the development of the 'hochschuleundfamilie' (university & family) audit scheme. In addition, Vetmeduni Vienna is a partner in the 'Unternehmen für Familien' (companies for families) network.

Photo: © Thomas Suchanek/Vetmeduni Vienna

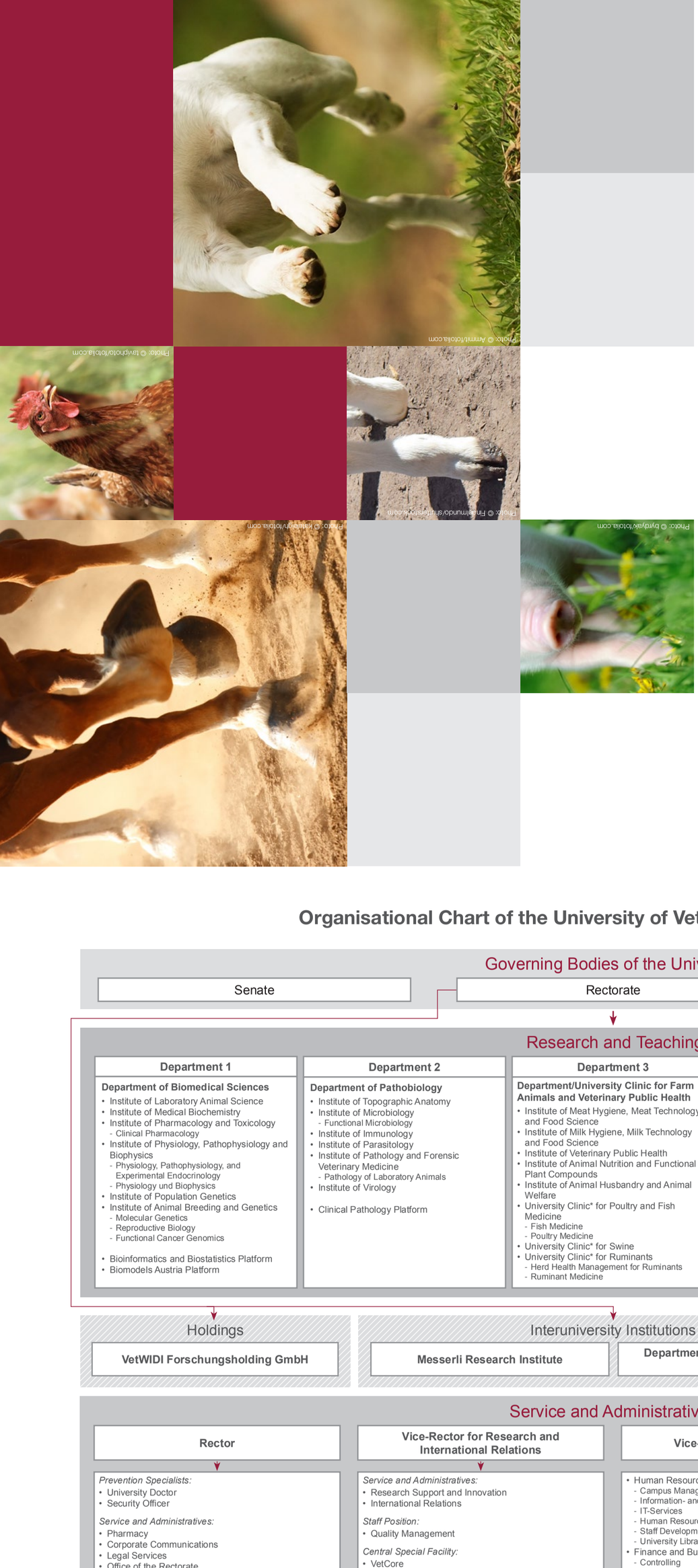
Photo: © Stephanie Scholz/Vetmeduni Vienna

Vetmeduni Vienna – Vienna's Women and Family Friendliest Public Enterprise in 2017

Every two years, the state competitions for the 'women and family friendliest enterprise' are held. In September 2017, the winners in the different categories of the federal state of Vienna were announced. For the first time Vetmeduni Vienna was among Vienna's best enterprises. The only veterinary university in Austria was thus the first Viennese institution of higher education to be ranked top by an impartial expert jury in the 'public enterprises' category.

Internal Communication on the VetEasy Platform

With the communication platform VetEasy, all staff members of Vetmeduni Vienna have access to a central intranet system. This information system interlinks the 1,400 employees across locations and units. VetEasy is an intranet solution for providing comprehensive information on the one hand, and a platform of collaboration on the other hand, which greatly facilitates project cooperation processes while also reducing the university's need for paper. Major projects such as the Development Plan, which involves numerous units, are coordinated through VetEasy. VetEasy makes it easier for several authors and project managers working on the same document to efficiently fine-tune their contributions. Once finalised, the documents, such as those produced by the Animal Welfare and Ethics Committee, are directly available on the platform. In addition, collegial bodies such as the Senate of Vetmeduni Vienna handle their meetings via the intranet. Incoming application documents are made available by VetEasy in a paperless mode for the selection process. Its functionality is continually being enhanced and upgraded. Training courses on intranet use and options for collaboration are held by the VetEasy working group, thus ensuring optimal use of all features of the platform.



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Organisational Chart of the University of Veterinary Medicine, Vienna

Governing Bodies of the University

Senate | Rectorate | University Council

Research and Teaching

Department 1

Department of Biomedical Sciences
- Institute of Laboratory Animal Science
- Institute of Medical Biochemistry
- Institute of Pharmacology and Toxicology
  - Clinical Pharmacology
- Institute of Physiology, Pathophysiology and Biophysics
  - Physiology, Pathophysiology, and Experimental Endocrinology
  - Physiology und Biophysics
- Institute of Population Genetics
- Institute of Animal Breeding and Genetics
  - Molecular Genetics
  - Reproductive Biology
  - Functional Cancer Genomics
- Bioinformatics and Biostatistics Platform
- Biomodels Austria Platform

Department 2

Department of Pathobiology
- Institute of Topographic Anatomy
- Institute of Microbiology
  - Functional Microbiology
- Institute of Immunology
- Institute of Parasitology
- Institute of Pathology and Forensic Veterinary Medicine
  - Pathology of Laboratory Animals
- Institute of Virology
- Clinical Pathology Platform

Department 3

Department/University Clinic for Farm Animals and Veterinary Public Health
- Institute of Meat Hygiene, Meat Technology and Food Science
- Institute of Milk Hygiene, Milk Technology and Food Science
- Institute of Veterinary Public Health
- Institute of Animal Nutrition and Functional Plant Compounds
- Institute of Animal Husbandry and Animal Welfare
- University Clinic* for Poultry and Fish Medicine
  - Fish Medicine
  - Poultry Medicine
- University Clinic* for Swine
- University Clinic* for Ruminants
  - Herd Health Management for Ruminants
  - Ruminant Medicine

Department 4

Department/University Clinic for Companion Animals and Horses
- University Clinic* for Small Animals
  - Anaesthesiology and perioperative Intensive-Care Medicine
  - Diagnostic Imaging
  - Obstetrics, Gynaecology and Andrology
  - Internal Medicine Small Animals
  - Small Animal Surgery
- Equine University Clinic*
  - Equine Internal Medicine
  - Equine Surgery
- Insemination and Embryotransfer Platform
- Radiooncology and Nuclear Medicine Platform

Department 5

Department of Integrative Biology and Evolution
- Research Institute of Wildlife Ecology
  - Conservation Medicine
- Konrad Lorenz Institute of Ethology
  - Ornithology

Holdings

VetWIDI Forschungsholding GmbH

Interuniversity Institutions

Messerli Research Institute

Department for Agrobiotechnology (IFA Tulln)

Interinstitutional Establishments

Graf Lehndorff Institute for Equine Science

Service and Administratives

Rector

Prevention Specialists:
- University Doctor
- Security Officer

Service and Administratives:
- Pharmacy
- Corporate Communications
- Legal Services
- Office of the Rectorate

Staff Positions:
- Reporting and Development Planning
- Internal Revision

Vice-Rector for Research and International Relations

Service and Administratives:
- Research Support and Innovation
- International Relations

Staff Position:
- Quality Management

Central Special Facility:
- VetCore

Vice-Rector for Resources

- Human Resources and Infrastructure Management
  - Campus Management
  - Information- and Knowledge Management
  - IT-Services
  - Human Resources
  - Staff Development
  - University Library
- Finance and Business Operations
  - Controlling
  - Financial Services

Staff Positions:
- Fundraising
- Strategic Process Controlling
- Strategic Resource and Risk Management

Central Special Facility:
- Teaching and Research Farm

Vice-Rector for Study Affairs

Service and Administratives:
- E-Learning & New Media
- Student Services
- Centre for Study Affairs

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

as of 12/2017

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