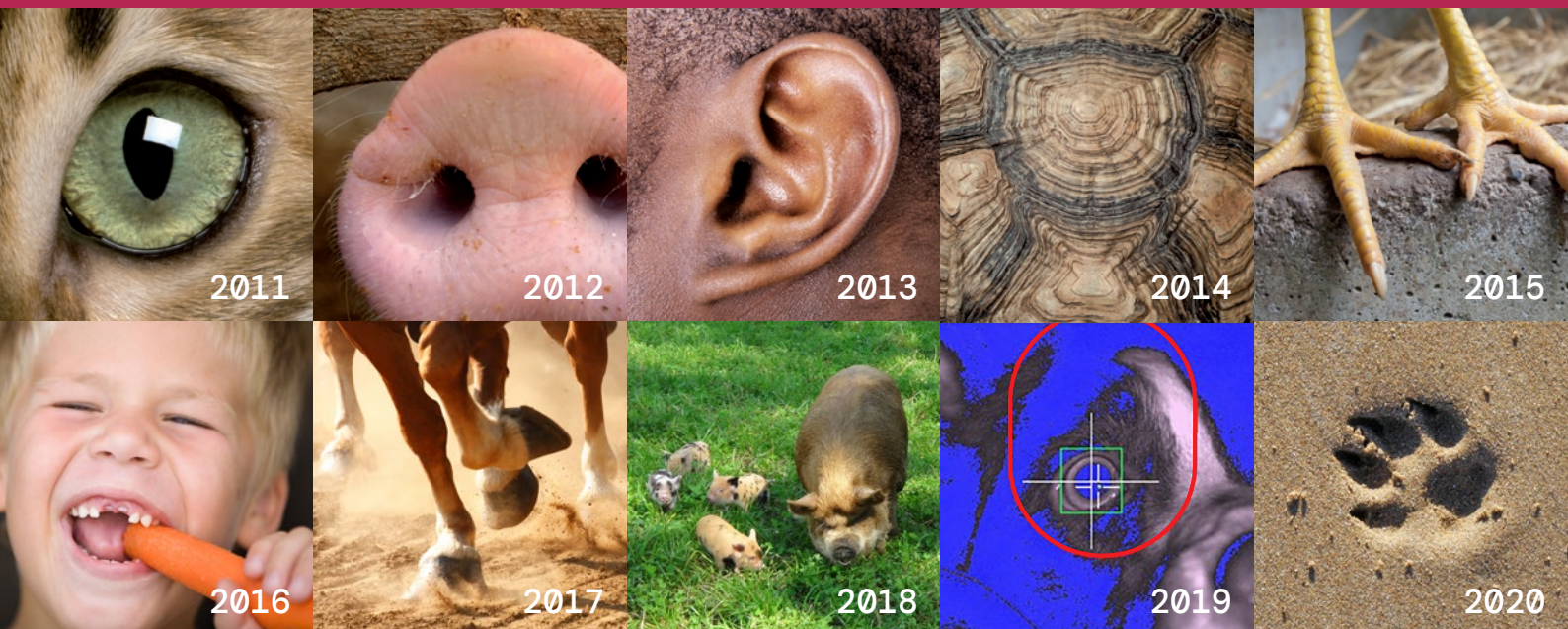


Annual Report 2021



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Statements



Martin Polaschek

Federal Minister for Education, Science and Research

The Messerli Research Institute is a real success story. After ten years, the research institute is distinguished by awards and successes in cutting-edge research, interdisciplinary cooperation projects and a high international visibility. Through the Institute, scientifically sound findings on the human-animal relationship are achieved, which sustainably benefit animal welfare, animal protection and society as a whole. I congratulate the entire team on this successful development and wish them continued success and joy in their valuable work!

© BKA/Andy Wenzel



Heinz Schweizer

Honorary President Messerli Foundation

Following the wishes of its founder, Herta Messerli, the Messerli Foundation aims to promote the welfare of animals through financial contributions. The Messerli Research Institute has achieved this very effectively. Since its founding ten years ago, it has developed into a unique and well-known centre of excellence in Europe for scientific research into the human-animal relationship, the achievements of which are summarised on page 8 of this report. Behind this is a great deal of enthusiasm, team spirit, dedication and perseverance. The Messerli Foundation is proud of what has been achieved and thanks all those who have contributed to its success. The Messerli Foundation is convinced that the strategy formulated by the three partner universities for the next ten years will open up new opportunities for researchers and students.

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Petra Winter

Rector of the University of Veterinary Medicine Vienna

Since its 10th anniversary, the Messerli Research Institute has achieved a great deal for the human-animal relationship in research, teaching and third mission. The core is and remains scientific interdisciplinarity with the aim of promoting animal welfare and creating added value for society. As before, the Vetmeduni will do everything in its power to work in the spirit of the founder and has been full of pride and joy for more than a decade to give the Messerli Research Institute a home at the university campus in Wien Floridsdorf.

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Heinz W. Engl

Rektor der Universität Wien

The Messerli Research Institute now has ten years of successful work behind it. The research groups at the Institute itself and at the participating institutions have grown together in terms of content during this time, and this has also contributed to closer scientific networking between the participating universities. Now the task is to lead the Institute and the aforementioned cooperations into the next 10 years. The call for applications for a full professorship in "Neuroscientific foundations of the human-animal relationship" has unfortunately not yielded any results. In general, the University of Vienna emphasises the advertisement of "tenure track professorships", with which a broader field of applicants can be addressed. We hope that the Messerli Research Institute will also advertise such a position.

© Mirna Rossi

The cooperation at the Messerli Research Institute will be supervised by my successor as Rector, Prof. Sebastian Schütze, and the future Vice Rector Prof. Manuela Baccarini from October 2022.



Michaela Fritz

Vice Rector for Research and Innovation of the Medical University of Vienna

The year 2021 was marked by the 10th anniversary and the review of a remarkable research achievement. One Health and ethics of the human-animal relationship are just two keywords that illustrate that the scientific and societal challenges the Institute is working on will continue to be of enormous relevance in the future. Thanks to the good cooperation between the universities and partners, the interdisciplinary approach can be consistently pursued.

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Editorial

Ludwig Huber

Head of Messerli Research Institute

The year 2021 marked the 10th anniversary of our institute (see p. 46). In autumn 2011, we began our journey with the motto “Venture and Hope”. Ten years later, we continue to venture forth and to hope that the knowledge we have collected will contribute to the well-being of both animals and humans. We attempt to achieve this by making our research available to wider society, just as our founder Herta Messerli wished.

I think it can be said without false modesty that young, inquisitive and committed scientists from our three units and the associated centres have made noteworthy contributions to the understanding of human-animal interactions. These successes were only possible with a team of dedicated and capable helpers.

An increasingly complex administration was managed mostly unnoticed by our competent assistants. In the laboratories, managers and assistants worked hard to support the scientific researchers and students. Since the very beginning all technical support for the institute, particularly in IT (at a time when almost nothing works without computers), has been the responsibility of a single employee. In addition, the technical equipment for the various cognition labs was created by a skillful workshop manager with multiple master craftsman's degrees. Finally, our animal keepers worked tirelessly in all weather for the benefit of our animals, thus ensuring an environment that is appropriate to the species and conducive to the animals' well-being.

All this – together with the scientific work, which normally stands in the foreground has made it possible to present a 10-year balance sheet that we can be proud of:

2011-2021

- more than 40 projects adding up to 10.5 million euros in competitive third-party funding
- prestigious research awards, including an ERC Starting Grant and an FWF START Price
- participation in four FWF doctoral programmes
- 7 Habilitations und 2 upgrades to \$99-Professors
- 40 PhD or doctoral degrees
- 183 Master or Diploma degrees
- more than 200 cooperation partners worldwide
- more than 530 research articles in international journals
- more than 600 international conference papers
- 5 books
- more than 2,800 reports in public media worldwide since 2016 alone

It is our hope that this success story can continue, albeit with changing personnel, but with the same joy and enthusiasm and the continued support of the Messerli Foundation and the administration of the three universities involved.

Ad multos annos!



The Messerli Research Institute at a glance

The Messerli Research Institute was founded in 2010 with the support of the Messerli Foundation (Sörenberg, Switzerland) and under the auspices of the University of Veterinary Medicine Vienna (Vetmeduni), in cooperation with the Medical University of Vienna (Meduni) and the University of Vienna (Univie). In autumn 2011, the professors of the first three units (Comparative Cognition, Comparative Medicine, Ethics and Human-Animal Studies) were appointed. In March 2012, the Institute celebrated its opening ceremony. Since then, the work of the Messerli Research Institute has been guided by four cornerstones:

Research

The Messerli Research Institute is dedicated to researching the human-animal relationship and its foundations in the fields of animal cognition and behaviour, comparative medicine, and ethics and human-animal studies.

Teaching

The results of our research form an integral part of the academic teaching in our Master's programme, and should also contribute to providing guidance for the responsible treatment of animals.

Interdisciplinarity

A broad interdisciplinary approach (biology, human medicine, veterinary medicine, philosophy, psychology, law) and a strong international orientation characterise the Institute.

Knowledge transfer

A cornerstone of the Messerli Research Institute is to make science-based findings known to the public. In this way, the Institute also takes on the social mission of using science to supporting the public in their responsibility towards animals.



© Michael Bernkopf/Vetmeduni

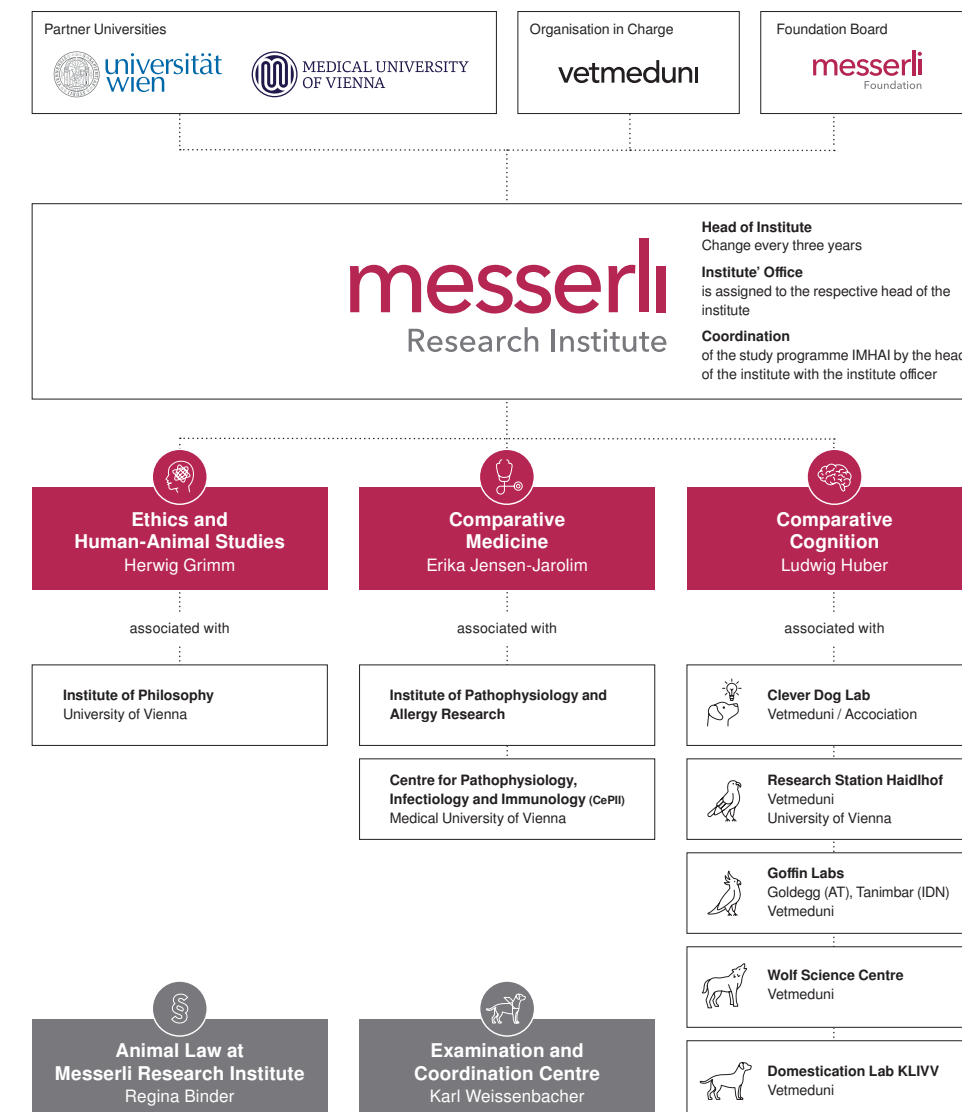
The organisational chart

The Messerli Research Institute consists of three units, each led by a full professor. All three of these professorships are double appointments, two linking the University of Veterinary Medicine with the Medical University of Vienna, and one professorship linking the University of Veterinary Medicine with the University of Vienna.

On 1 July 2019, for organisational reasons, the Messerli Research Institute was merged with two other independent institutes in the newly-founded Department of Interdisciplinary Life Sciences at the University of Veterinary Medicine. At the same time, the Messerli spokesperson function – analogous to the other two institutes – was converted into a management function. In accordance with the rules

of procedure of the Messerli Research Institute, the leadership rotates between the three Messerli professors every three years.

Important partners within the Messerli Research Institute are the coordination centre “Animal Welfare Certified Dog Trainers” and the research centre “Animal Law”, as well as the Institute for Animal Welfare Sciences. The Institute has cooperated with the latter from the start, within the framework of the Interdisciplinary Master's Programme on Human-Animal Interaction (IMHAI). In addition, the Messerli Research Institute is associated with other centres of cooperation with the two partner universities.



The team

Each of the three units of the Messerli Research Institute is assigned a chair, scientific assistant positions, an administrative position and – in the case of the two natural science departments – technical positions. An IT position and one administrative position are employed across departments for institute matters. At the Medical University of Vienna, there is an administrative office for Comparative Medicine and an IT position for Comparative Cognitive. In 2021, the Institute had 37.3 full-time equivalents, of which 20.9 were permanent employees and 16.4 were financed by third-party funds. Further scientists work at the associated centres, and are not included in this list.

10 Jahre

Messerli Forschungsinstitut

seit 2011



The Foundation Board

Photos: © Messerli Stiftung



Adrian von Segesser,
President of the Messerli
Foundation



Heinz Schweizer,
Honorary President of the
Messerli Foundation



Hans Hengartner



Dominique Ammann



Felix Howald



Ariane Schweizer Henniges

The members of the Board of Trustees of the Messerli Foundation have accompanied the Messerli Research Institute with great commitment and goodwill since its foundation. The prosperity of the Institute has become a matter of personal concern for them, for which we give our heartfelt thanks.

The Scientific Advisory Board

© Sandøe



Peter Sandøe
(University of Copenhagen, Denmark),
Chair of the Scientific Advisory Board

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Sabine Werner
(Swiss Federal Institute of Technology
Zurich, Switzerland)*.

© Call



Josep Call
(University of St. Andrews, Great Britain)

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Thomas Kündig
(University of Zurich, Switzerland)

The Scientific Advisory Board of the Messerli Research Institute is the external advisory body for ensuring the scientific quality, timeliness, and content-focus of research at the Institute. The strategic orientation of research, as well as the Institute's international position and connections, are at the forefront of their range of responsibilities.

* Prof. Sabine Werner is also a member of the scientific advisory board of the Messerli Foundation.

Research

At the Messerli Research Institute we develop and expand scientific knowledge on the coexistence of humans and animals. Current questions of the multifaceted human-animal relationship and its foundations are investigated here from biological, medical and ethical perspectives.

Research in context

The Messerli Research Institute works at the interface of three Viennese universities: the University of Veterinary Medicine Vienna, the Medical University of Vienna, and the University of Vienna. We integrate the expertise available at these universities into our work. At the same time, our research results also benefit the three universities in their own research and teaching.



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Interdisciplinary research

Interdisciplinarity and a high degree of specialisation give the Messerli Research Institute its distinctive profile. Each of the three units at the Messerli Research Institute works on its own specialised research topics, particularly within the framework of a number of competitively acquired projects. The units also cooperate on interdisciplinary research projects between the units, as well as externally. Current research topics from each unit are described in this annual report using selected examples.



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Comparative Cognition

The Comparative Cognition unit team seeks to increase empirical knowledge about cognitive, emotional, and social abilities of domestic and wild animals in non-invasive laboratory and field studies. These efforts are of both theoretical and practical relevance. Research in behavioral and cognitive biology advances our understanding of animals as thinking and feeling creatures.



© Bernadette Huber

The year 2021 was marked by particular successes in the field of cognition and emotion in Kune Kune pigs, Goffin's cockatoos, kea parrots, dogs, and wolves. With publication of the book "Das rationale Tier" (2021, Suhrkamp), Ludwig Huber enabled the broader public to gain an overview of the last ten years of this search for cognitive-biological traces.

Employees



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Research Highlights

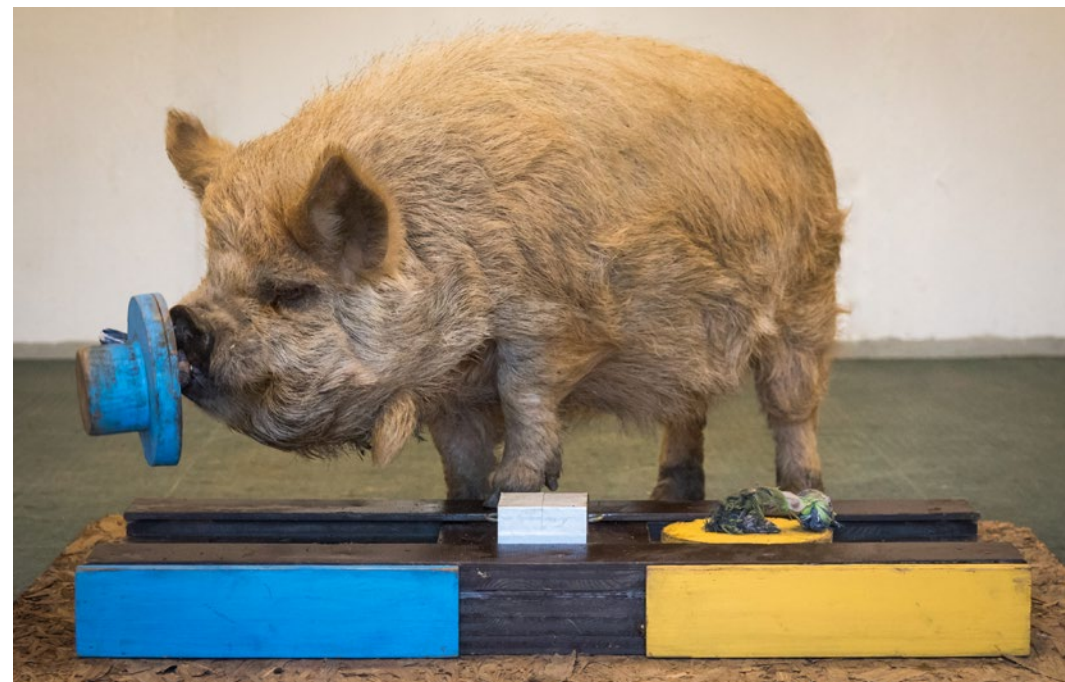
Pigs can learn as adults

In recent years, interest in the cognitive abilities of pigs has increased considerably. Although it is generally known that living conditions influence cognitive development, animals kept in confinement without adequate sensory impressions are still predominantly used for behavioural and cognitive studies. In particular, the abilities of adult animals are neglected. In the Clever Pig Lab of the unit of Comparative Cognition, a herd of free-ranging Kune Kune pigs was established over several years, and examined for their cognitive abilities in various tests. Among other things, it was found that piglets can learn how to manipulate objects to obtain food from their mothers or aunts. In order to better investigate this learning ability and its exact basis, Ariane Veit was awarded a DOC scholarship by the Austrian Academy of Sciences (ÖAW) in 2019. Within this PhD project, she has now shown that adult pigs aged six and more years also learn by observation. Interestingly, it makes no difference whether they observe

conspecifics or human demonstrators, or even the object moving on its own with no demonstrator in a so-called “ghost control”. In addition, it has been found that pigs are more likely to learn from friends than from unfriendly group members, and their willingness to learn is also based on their personality.



© Ariane Veit/Vetmeduni



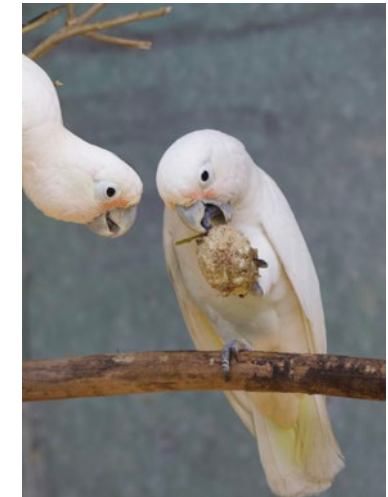
© Ariane Veit/Vetmeduni

The pig Zita pulls a stubble out of the feed box to get the coveted food.

Smart cockatoos in Indonesia and Austria!

Under the direction of Alice Auersperg, Comparative Cognition researchers are investigating the intelligence of Goffin's cockatoos. The innovative tool use of these clever birds has been the focus of research efforts for ten years now, both in the lab at a research station in Lower Austria and, for the last five years, in the wild in Indonesia. The field work has shown for the first time that wild cockatoos can also make and use tools. Not only that, the researchers were able to prove with the help of 3D models that the wild birds produce a set of three different types of “cutlery” to get at the seeds of the tropical Wawai fruit. Such a “technological” masterpiece was previously known only from primates. Goffins were even found to be able to distinguish objects by weight three times as fast as chimpanzees, possibly an important adaptation for species capable of flight. These are just two examples of a total of ten studies that were successfully published in 2021, in renowned journals such as Current Biology. In addition, Alice Auersperg received five

scientific awards and began a new, six-year chapter in Goffin research with her START project. We expect many more spectacular discoveries in both Austria and Indonesia.



© Mark O'Hara/Vetmeduni



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The current Goffin Lab team, and above a cockatoo using tools in Indonesia.

Comparative Medicine

The research topics of Comparative Medicine relate to both human and veterinary issues, always focusing on improving the health of human and animal patients. We are interested in the systematic problems of our time, which derive from environmental pollution, climate change, and dependence on industrial food chains. These problems affect both humans and the animal world.



© Thomas Suchanek/Vetmeduni/Vetmeduni

Following the One Health principle, the unit focuses on diseases involving the immune system. This results in innovative management strategies for allergies based on the staff members research what makes an allergen an allergen at the molecular level. In the second pandemic year, the unit also shed light on the role of coronaviruses for humans and animals.

Employees



Research Highlights

The Comparative Medicine team has been working for years on molecular allergens, all of which are plant or animal proteins. From studies of the 3-dimensional protein structures, it became clear that these protein bodies can also interact with other factors. In particular, the so-called lipocalins have a central pocket for lipophilic (fat-loving) ligands. The same apparently applies to one of the most important allergens, the so-called Bet v 1 of birch pollen (*Betula verrucosa*). Birch pollen triggers seasonal rhinitis and skin eczema in both humans and animals. In her work published in the top journal *Allergy*, Karin Hufnagl was able to prove that retinoic acid, i.e., vitamin A, can be bound with high binding strength in Bet v 1. Surprisingly, this completely changes the immunological and allergenic potential of this protein: only when Bet v 1 was empty did it trigger allergies; if the Bet v 1 was loaded with vitamin A, conversely, it even triggered immune tolerance.

In plants, proteins such as Bet v 1 play a role in natural immune defence. These plant "stress proteins" are increasingly produced in cases of microbial infection, high ozone levels, UV radiation, high CO₂ concentrations in the ambient air, high salt concentrations in the soil, and dehydration. Increased levels of plant allergens, caused by these environmental stressors, doom allergy sufferers to severe hay fever. Pollen allergy is therefore a typical One Health issue.

Environmental pollution and devastating climate change are leading to completely new health burdens for humans and animals. Isabella Pali and her team focused on One Health problems in systematic research published in the top journal *Allergy*.

Periods of heat are an increasingly serious risk for cardiovascular disease; heavy rain and flooding lead to mold contamination with toxic and allergic effects; enormous thunderstorm events cause the air to fill with electrically charged particles (including pollen), which are swirled around by convection and, once inhaled, lead to "Thunderstorm Asthma"; pollution causes stress to plants with clear links to allergies; invasive species bring both new allergens and new infectious agents with zoonotic potential. Of course, the team also looked at the global spread of coronavirus and its transmission among different species and vectors. The message is - "similar pandemics cannot be ruled out in the near future due to climate change, consumption of exotic food, the growing world population, relative decrease in space for production, less space for wildlife, and also the change in lifestyles of animals living close to and with humans".



© Thomas Suchanek/Vetmeduni/Vetmeduni

Karin Hufnagl



© Thomas Suchanek/Vetmeduni/Vetmeduni

Isabella Pali



Ethics and Human-Animal Studies

The unit of Ethics and Human-Animal Studies deals with basic and applied questions on the responsible treatment of animals. Topics dealt with include, for example, morally relevant questions in the context of veterinary medicine, farm animal husbandry, research, and pet keeping; the moral (im)permissibility of the instrumentalisation of animals is discussed and analysed, as is the ethical relevance of the cognitive relationship between humans and animals.



© Thomas Suchanek/Vetmeduni

The unit's research explores the limits of established philosophical theories and strives to develop new concepts and theories in order to provide clarity and orientation in these questions. 2021 was marked in particular by the launch of the FWF project "The Limits of Imagination".

Employees



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Research Projects Highlights

New FWF project: The limits of imagination

In 2021, the new project "The Limits of Imagination" started in the ethics unit. Rhona J. Flynn, Carlo Salzani and Martin Huth (project head) form the team of the FWF-funded research project, which aims to analyse the meaning and limits of imagination. When dealing with humans and animals, not only ethical principles but also imagination and empathy play a significant role. Therefore, reflecting on the question of where we reach the limits of understanding and empathy is crucial. To what extent can we empathise with a jellyfish, a bat or other people? And what does it mean for our actions when we reach boundaries? The following research questions are at the centres of the project: (1) What can imagination achieve? To what extent is it determined by social and cultural structures? And can imagination be learned? (2) Can empathy as the ability to put oneself in the place of others be learned? (3) Are we always bound to the specifically human perspective? And what does this perspective mean for dealing with animals? Do we always find only the "human" in animals? And what about those humans who do not correspond to this image due to impairment, illness or other "abnormality"? Here we encounter socio-political questions of a possible dehumanisation of humans. The new project will analyse these essential questions and find initial answers.



© Eva Schwarzlänger/Vetmeduni

The team Carlo Salzani, Martin Huth and Rhona J. Flynn.

IGN Research Award 2021 to Samuel Camenzind

For his dissertation "Instrumentalisation. On a basic category of the ethics of the human-animal relationship", Samuel Camenzind was awarded the 2021 Research Price of the International Society for Farm Animal Husbandry (IGN). The IGN Research Award is the only one of its kind in the German-speaking world and is aimed at young scientists who have published outstanding and application-oriented work on the promotion of species-appropriate farm animal husbandry.

Camenzind's dissertation is the first philosophical thesis written at the University of Veterinary Medicine Vienna. At the beginning, the book sheds light on the fundamental metaethical question under which conditions the "instrumentalisation" of animals, humans and things is considered a moral category and what this means for the ethics of the human-animal relationship. Subsequently, Samuel Camenzind develops an assessment toolkit that can be used to distinguish between morally permissible and morally impermissible forms of instrumentalisation. In addition, Camenzind illustrates the ethical and legal protection of the dignity of animals.



Mentis Book Publication.



Examination and Coordination Centre

Assistance and therapy dogs

The test centre at the Messerli Research Institute for the implementation of § 39a of the Federal Disability Act is unique on an international level. The leading work in the European standardisation organisation CEN to create a uniform standard in the field of assistance dogs, has successfully continued. The working group “lifelong well-being of assistance dogs” successfully continued its work in the reporting year and is currently finalising the draft standard. In the national institute Austrian Standards, Karl Weissenbacher, head of the test centre, was confirmed as Chairman of Committee 196, Technical aids for people with disabilities. Due to the COVID 19 situation, he was unfortunately unable to accept numerous invitations to speak at national and international congresses such as the EGDF Congress and the ESAAT Conference.

In the scientific field, a diploma thesis on “Influence of guide harnesses of dogs on ground reaction forces” and a master’s thesis “Taking a break – salivary cortisol, heart rate variability and behaviour in guide dogs after working” were continued, and another diploma thesis on “The human-animal relationship between persons with post-traumatic stress disorder (PTSD) and their assistance dogs” was started.

A term paper in the university course Applied Cynology with the topic “Dog-assisted reading promotion in school – what influence does a dog used in school for reading promotion have and to what extent is the reading performance of children influenced by it?” was completed.

In 2021, despite a three-month examination moratorium, 858 therapy assistance dog teams were tested in 120 examination sessions. For assistance dogs, 68 team examinations and 27 quality examinations took place. This corresponds to an increase of 15% compared to 2019 (last full examination year) and an increase of 55% compared to 2020.

The Examination and Coordination Centre is an integral information centre for the public and the media (print, online, radio and TV). Animal protection officials, as well provincial governments and ministries, also use the Coordination Centre for information on dog welfare and keeping. This is supported by the fact that Karl Weissenbacher was co-opted into the permanent working group of the Animal Protection Council.



Karl Weissenbacher at the certificate ceremony for assistance dog handlers at the Vetmeduni.

Coordination Centre Animal Welfare Qualified Dog Trainers

A total of 133 trainers took the examination in 2021, 38 of whom did not pass the examination. The number of active dog trainers qualified in animal welfare is now 432. A total of more than 13,000 hours of further training were recognised, thus improving the quality and level of knowledge of trainers in Austria.

University Course Applied Cynology

The sixth university course began in October 2018 and ended at the end of the winter semester 2021. Unfortunately, only 6 of the 22 participants graduated on time with the presentation of their term papers.

The start of the seventh course has been postponed indefinitely due to the pandemic.



Presentation of certificate by Rector Winter and Section Head Manfred Pallinger (Ministry of Social Affairs) with Ms Daniela Macho with assistance dog „Coco“.

© Ernst Hammerschmid/Vetmeduni



Animal rights at the Messerli Research Institute

Animal law is an issue in teaching and research at the Messerli Research Institute, particularly focusing on general animal welfare legislation and animal testing legislation. This field is headed by Regina Binder, who also heads the Information and Documentation Office for Animal Welfare and Veterinary Law at the University of Veterinary Medicine, Vienna. The unit of Ethics and Human-Animal Studies and the unit of Comparative Medicine have several areas of interdisciplinary collaboration with this field.

This collaboration comprises mainly teaching in the Master's programme IMHA and the scientific discussion of questions arising from current publications and projects. The normative foundation of the various forms of human-animal interaction and their relationship to empirical findings in natural science are central in this cooperation.



© Karin Bayer/Vetmeduni



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Teaching

Interdisciplinary Master in Human-Animal Interactions (IMHAI)

In October 2021, the IMHAI study programme was launched in its new version, which is even more focused on scientific research and academic careers. The current cohort consists of ten students, which is the 11th cohort since the start of the programme in 2012. Students have come to the Vetmeduni from 25 different countries, from a variety of university backgrounds, to learn about and further develop the study of human-animal relationships, both theoretically and practically.

The students began the first semester despite the various covid-related restrictions, which aims to teach the basics of human-animal relations from the perspective of humans, animals, ethics, social science and practise. The focus is on topics that are closely linked to the Institute, its goals and its research. The lecturers from the three Messerli units are supported

by lecturers from the Institute of Animal Welfare Science and Husbandry and the Domestication Working Group at the Konrad Lorenz Institute of Ethology. This internationally-oriented Master's programme, which is taught in English and is unique in the world in its interdisciplinary composition, is designed to give students the ability to contribute to the shaping and improvement of the human-animal relationship by means of innovative ideas on a scientific basis and in an ethically reflective manner. In the new curriculum, the focus is on the research side, which is why the theoretical introduction ends after the first semester. Starting in the second semester, the students are familiarised with the diverse methods of the disciplines involved in theory and practise, in order to carry out their own small research projects, under guidance, equipped with these methodological tools.

In 2021, the following graduates completed their IMHAI studies at the Messerli Research Institute:

- **Kristina Anderle**, "Jealous dogs? Dogs' reactions to observing their caregiver interact with someone else." (Supervision: Zsófia Virányi, Sabrina Karl)
- **Phin Laridae Anibal**, "The role of experience on cross-modal integration and territory defense in the poison dart frog *Allobates femoralis*." (Supervision: Ludwig Huber, Eva Ringler)
- **Katie Grillaert**, "Behavioural and epigenetic variations in differentially socialised dogs and a relational approach to aggression in pet dogs." (Supervision: Zsófia Virányi, Giulia Cimorelli)
- **Denise Kubala**, "Is the dog's tendency to overimitate dependent on the relationship to the human demonstrator?" (Supervision: Ludwig Huber, Giulia Cimorelli)
- **Adele Tuozi**, "Sequential Learning in Kea (*Nestor notabilis*)." (Supervision: Raoul Schwing)



The students of the 1st cohort of the new IMHAI programme together with the IMHAI coordinator L. Huber.



Additional teaching

Members of the Comparative Cognition unit taught at both the University of Veterinary Medicine and the University of Vienna. They also supervised theses by students from these universities, as well as universities outside of Austria. Alexandra Stiegler (University of Vienna), Birgit Wakonig (University of Vienna), Dario Staric (University of Zagreb, Croatia), Alejandra Cespedes (Universite Bourgogne Franche-Comte) and Leo Hanon (Universite Bourgogne Franche Comte) completed their theses. In total, 12 PhD, 20 Master, five Diploma and two Bachelor students were supervised at the unit in 2021. Of these, one PhD, five Master's, three Diploma and two Bachelor's theses were successfully completed.

The Comparative Medicine unit courses at the Medical University and at the University of Veterinary Medicine are listed in the Scientific Evaluation Report: e.g., basic immunology lectures, as well as in the doctoral programmes, main lectures Block 13 of medical studies.

Among others, three of the four current BSc students, one of five Master students (incl. two IMHAI), two MD students, as well as two of the five current PhDs (Christina Pranger, Verena Köhler), successfully completed their work in 2021.

Members of the Comparative Medicine unit also participated in the mentoring programme for veterinary students.

The members of the unit of Ethics and Human-Animal Studies taught topics in practical and theoretical philosophy and veterinary ethics at the University of Veterinary Medicine and the University of Vienna. They also taught at a number of other institutions in 2021, including: Johns Hopkins Bloomberg School of Public Health, FU Berlin (Institute for Animal Welfare and Behaviour), University of Zurich, Faculty of Veterinary Medicine Skopje, University of York, University of Education Styria/Lower Austria/Burgenland, IST Klosterneuburg, FH Wiener Neustadt Campus Wieselburg, University of Agricultural and Environmental Education.

In 2021, a total of eight PhD/doctoral theses (four at the University of Vienna, four at the University of Veterinary Medicine) and 17 master's/diploma theses (ten at the University of Vienna, seven at the University of Veterinary Medicine) were supervised at the unit of Ethics and Human-Animal Studies. Eight Master's/Diploma theses were completed (six at the University of Vienna, two at the University of Veterinary Medicine).



© Ludwig Huber/Vetmeduni

The students of the new IMHAI programme at a lecture by Ms Megan Lambert.

PhD and doctoral students

PhD students in Comparative Cognitive

In the FWF-funded doctoral programme "Cognition and Communication 2" (deputy spokesperson: Ludwig Huber), projects on vocal learning of kea (Mélissa Sebilleau), and on sequential tool use of Goffin cockatoos (Theresa Rößler) continued, and a project on comparative brain research of dogs and humans (Sabrina Karl), co-funded by the Messerli Foundation, was completed. The PhD programme was successfully extended in 2021 and projects began on overimitation in dogs (Louise Mackie) and on the combinatorial understanding of Goffin cockatoos (Jeroen Zewald). In addition, there were PhD projects on social learning in pigs (Ariane Veit), on face perception in dogs (Soon Young-Park), on the neurobiology of social cognition in dogs (Lucrezia Lonardo), on movement imitation in kea parrots (Elisabeth Suwandschieff) and on comparing tool innovation in Goffin's cockatoos and children (Antonio Osuna-Mascaro, Poppy Lambert, Jennifer Colbourne).



© Clever Dog Lab/Vetmeduni

PhD student Louise Mackie.



© Roobert Bayer/Vetmeduni

PhD student Melissa Sébilleau.



© Thomas Suchanek/Vetmeduni

PhD student Elisabeth Suwandschieff.

Involvement in committees

PhD students in Comparative Medicine

The PhD programme is funded by the Danube Allergy Research Cluster, Lower Austria. Aila Fakhimahmadi is doing her PhD research on *Alternaria* mold allergens, which are becoming increasingly important in the context of climate change. New to the project is PhD student Markus Berger, who is working on clinical tests on *Alternaria* allergy. From the “predecessor class” of the doctoral college programme Molecular, Cellular and Clinical Allergology (MCCA), Verena Köhler and Christina Pranger successfully completed their PhD work on antibody engineering in 2021. PhD student Sherienne Afify Mohamed Moussa published on the topic of the farm effect. Fahime Heidari was a visiting student.

PhD students in the unit of Ethics and Human-Animal Studies

In 2021, eight scientists were supervised in various PhD programmes in the ethics unit. In the PhD programme of the University of Veterinary Medicine: Birte Wrage (moral capacity of animals), Kerstin Weich (laboratory animal ethics), Mariessa Long (quality of life of horses) and in the PhD programme of the University of Copenhagen in collaboration with the University of Veterinary Medicine Svenja Springer (profession own morality in veterinary medicine). In the PhD programme at the University of Vienna: Jessica Bicking (Forms of Normativity), Sarah Espinosa (Ethics of Scarce Resources), Konstantin Deininger (Normativity of Unequal Human-Animal Relations) and Erich Linder (Aspectual Vision and Moral Change).



© Erika Jensen-Jarolim



© Thomas Suchanek/Vetmeduni

Mariessa Long at a meeting on „Responsibility for old and chronically ill horses“.

Highlights 2021

As head of the institute, Ludwig Huber was in charge of communication with the Institute’s Scientific Advisory Board and the Messerli Foundation – especially at the Advisory Board meeting and the 10th anniversary celebration. As IMHAI coordinator, the preparation and launch of the new IMHAI study programme was a challenge. He was also a member of the scientific advisory board of the Wissenschaftskolleg zu Berlin (WIKO) and the Zoo Schönbrunn, as well as a member of the supervisory board of the Jane-Goodall-Institute Austria. At the University of Veterinary Medicine, he was a member of the scientific advisory boards of the Animals as Therapy curriculum and the university course in Cynology, as well as the coordination committee of the VetFarm. Together with Zsófia Virányi, he is a member of the commission of the Examination and Coordination Centre for Assistance, Therapy Companion Dogs and Animal Welfare Qualified Dog Trainers, and head of the Clever Dog Lab association. Zsófia Virányi is also the Secretary General and Financial Officer of the Wolf Science Centre Association. Raoul Schwing is a founding and board member of the ÖGT Section for Exotics.

Erika Jensen-Jarolim became President of the Austrian Society of Allergology and Immunology (ÖGAI) in 2021 (600 members), and heads the newly founded Working Group for AllergoOncology in the EAACI (European Academy of Allergy and Clinical Immunology, 374 members since 2021); at the Medical University of Vienna, she is active in the Senate Complaints Commission for student issues. Franziska Roth-Walter is an Executive Board Member of the Austrian Microbiome Initiative AMICI and Secretary General of the EAACI WG for Immunonutrition (533 members) founded in 2021. Isabella Pali-Schöll is Chair of the EAACI WG Comparative & Veterinary Allergology (761 members), and Chair of the 2021 WG One Health (185 members). All are active on boards of EAACI Task Forces as well. Lisa-Maria Glenk is a board member of the Austrian Society for Biofeedback and Psychophysiology, as well as in the Quality Network of School Assistance Dogs.

In 2021, members of the unit of Ethics and Human-Animal Studies were involved in various committees at the local, national and international level. A selection of these includes the following: Animal Welfare Advisory Board Berlin, Habilitation Commission of the University of Veterinary Medicine Vienna, Innovation Vet Circle, International Society for Farm Animal Husbandry, European College of Animal Welfare and Behavioural Medicine, Animal Welfare Science, Ethics and Law, Federal Ethics Committee for Nonhuman Biotechnology, Scientific Advisory Board of “Tierschutz macht Schule”, Minding Animals Germany/International, European Society for Agricultural and Food Ethics, Normativity, Scientific Advisory Board of the Institute TTN (at LMU Munich).



© Thomas Suchanek/Vetmeduni

Franziska Roth-Walter is Executive Board Member of the Austrian Microbiome Initiative AMICI and Secretary General in the 2021 EAACI WG on Immunonutrition.

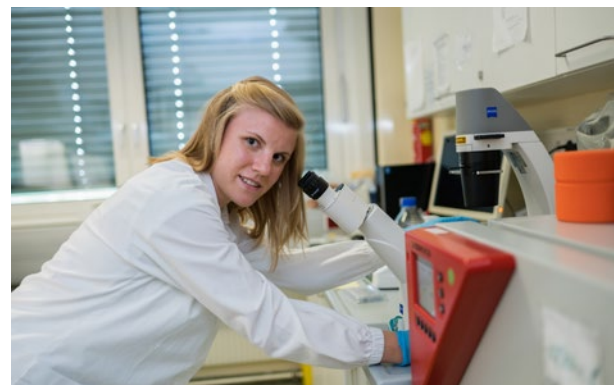
Awards

Alice Auersperg received several honourable distinctions in 2021:

- the Promotion Award for Science of the Provincial Government Niederösterreich
- the Promotion Award for Science of the City of Vienna
- the Rupert Riedl Price for Evolutionary Epistemology of the Club of Vienna
- the Cardinal Innitzer Promotion Award of the Archdiocese of Vienna
- the Scientist of the Year Award in the category third-party funding of the University of Veterinary Medicine Vienna
- and admission to the Young Academy of the Austrian Academy of Sciences.

Nina Polakova (Team Pali-Schöll) won the European Society of Veterinary Dermatology (ESVD)-Minor-Grant for Young Researchers for her project: Detection of canine allergen specific IgE: Comparing the molecular- based macro array (ALEX chip) to conventional ELISA testing.

Hanna Mayerhofer won a competitive EFIS grant to attend the European Congress of Immunology (ECI) for her abstract (title: The allergy-protective farm effect revisited: Beta-lactoglobulin induces a Th1-response via lipocalin-interacting-membrane-receptor).



© Thomas Suchanek/Vetmeduni

Hanna Mayerhofer during research in the Lab.



© Lukas Auersperg

Alice Auersperg (second from right) receives the Cardinal Innitzer Sponsorship Award in the presence of Cardinal Schönborn.

Verena Köhler received the Best Short Talk Award of the ÖGMBT (Austrian Association of Molecular Life Sciences and Biotechnology).

Rodolfo Bianchini and **Karin Hufnagl** won abstract prizes in the 2021 Hybrid Congress of the EAACI.

Erika Jensen-Jarolim became the most-cited scientist at the Vetmeduni.

Karin Hufnagl was awarded the Venia Docendi.

Samuel Camenzind's doctoral thesis "Instrumentalisation. On a basic category of the Ethics and Human-Animal Studies" was awarded the research price of the International Society for Farm Animal Husbandry (IGN) in 2021.

The Vetucation® Award 2021 of the University of Veterinary Medicine Vienna (category: Existing Projects) went to Samuel Camenzind.



© Verena Köhler

Verena Köhler is pleased about the ÖGMBT award.



© Samuel Camenzind/Vetmeduni

Samuel Camenzind with the Vetucation® Award 2021.

We congratulate **Susana Monsó** on her appointment as Assistant Professor in the Department of Logic, History and Philosophy of Science at the Universidad Nacional de Educación a Distancia (Madrid) – and at the same time we thank Susana for her great work in the unit of Ethics and Human-Animal Studies at the Messerli Research Institute.

Cooperation & international involvement

The most important cooperation partners in 2021:

Associated centres

Institute for Pathophysiology and Allergy Research (ipa) at the Centre for Pathophysiology, Infectiology and Immunology (CePii) of the Medical University of Vienna

Among the inter-university cooperative relationships, the link to the Medical University of Vienna is particularly important for Comparative Medicine. A large number of research initiatives and scientific achievements stem from the research area of immunology/allergology/infectiology. Research groups focused on these areas are located at the Centre for Pathophysiology, Infectiology and Immunology within four institutes, including the IPA - Institute for Pathophysiology and Allergy Research. Erika Jensen-Jarolim was the head of this institute between 2006 and 2011, when she decided to step down from this commitment in favour of the opportunity to work in the Messerli Research Institute. However, she still heads Department 1 there and holds a laboratory section. The connections to the IPA are manifold and, particularly important, form a bridge to the Comparative Medicine team.



Prices are also awarded at the CePii retreat, far right Nicoletta Marquard from the ComplMed team.



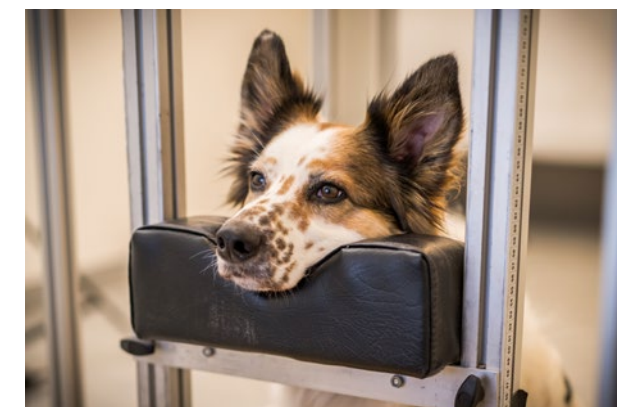
Martin Huth teaches ethics and applied ethics at the University of Vienna.

Institute for Philosophy at the University of Vienna

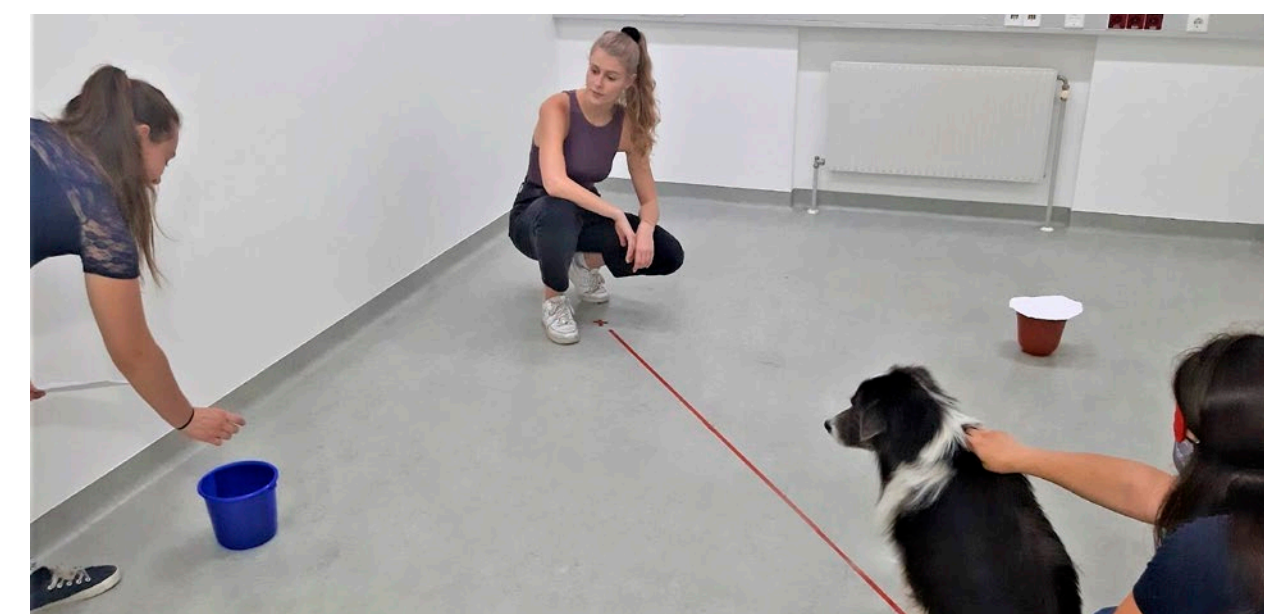
The Institute of Philosophy at the University of Vienna is large by international standards and can draw on the diverse competences of its members. It sees this as an obligation to offer teaching that conveys the breadth of the discipline and at the same time meets high standards of subject specialisation. Through Herwig Grimm's honorary professorship, the teaching and supervisory activities and the cooperation within the framework of the FWF project "Forms of Normativity" (doc.funds) and the "Vienna Doctoral School of Philosophy" as well as the teaching activities of Martin Huth and Samuel Camenzind, there is intensive exchange and regular cooperation with the Institute of Philosophy at the University of Vienna.

Clever Dog Lab

In 2021, research at the Clever Dog Lab continued to take place under difficult conditions due to the pandemic. Despite interruptions, many projects were successfully completed. Highlights include the publication of the first "false belief" study in dogs in the Proceedings of the Royal Society B journal. The study shows that dogs follow the state of knowledge of humans, even if this state of knowledge is wrong and no longer corresponds to reality. Further studies showed which regions of the dog's brain are active (using magnetic resonance imaging) when they observe interactions between their caregiver and another dog, what expectations dogs have about the principle of cause and effect (using eye tracking), and how relinquishment to a shelter affects the dogs' relationships with their subsequent owners and their acceptance of strangers.



A dog with its head on the chin rest during an eye-tracking study.



A dog observes the hiding of a treat in the „False Belief“ study.

Haidlhof Research Station

In 2021, the first study in the FWF project on motor imitation in kea parrots by PhD candidate Elisabeth Suwandschieff was completed. The two-action task, a replication of one of the few imitation studies with parrots, was successfully adapted from the budgerigar in the original study to the much larger kea parrot. The collaboration of Amelia Wein and Rupert Palme led to the first analysis of stress hormones in kea faeces. Future research with the kea has been secured with the award of two FWF grants (Stand-Alone Project and Elise-Richter Programme) to Megan Lambert, who will use them to study curiosity and weight perception. In the Clever Pig Lab, PhD candidate Ariane Veit has completed her studies, and her work ethic and clever designs give the soon-to-close lab a fitting send-off.

Wolf Science Centre

In recognition of its globally unique nature as a research facility and its ability to host a wide range of scientific investigations, the Wolf Science Centre became a Core Facility of the University of Veterinary Medicine in 2021. Collaboration with the Core Facility is open to all within and outside the University of Veterinary Medicine to support not only behavioural and cognitive research, but also studies from other disciplines. This broadening of the scientific spectrum can be seen in our publication in which we compared the skin microbiota of dogs and wolves, and showed that contact with the animals can greatly increase microbial diversity on human skin as well. In another paper, we investigated how individual relationships influence the extent to which dogs and wolves can benefit from the presence of their pack members in stressful situations. We found no major differences between our dog and wolf packs.

Goffin Labs in Goldegg (Austria) and Tanimbar (Indonesia)

The Goffin Lab Goldegg (Niederösterreich), under the direction of Alice Auersperg, is home to a group of 19 Goffin cockatoos in a spacious outdoor aviary with 185m² and a heated indoor space (45m²) with an adjacent test room (9m²). In this laboratory, which is optimally designed to meet the needs of the birds, the Goffin subjects can demonstrate their intelligence. Here, under controlled conditions and by means of sophisticated experimental set-ups, the cognitive potential of this species is explored.

The natural behaviour of cockatoos, uninfluenced by humans, is studied at the Goffin Lab Tanimbar. In this research station in Indonesia the behaviour and ecology of this special bird species can be studied in its natural habitat, led by Mark O'Hara and Berenika Mioduszevska and established in cooperation with the Indonesian Agency for Research and Innovation (BRIN).

Companion Animal Behaviour working group

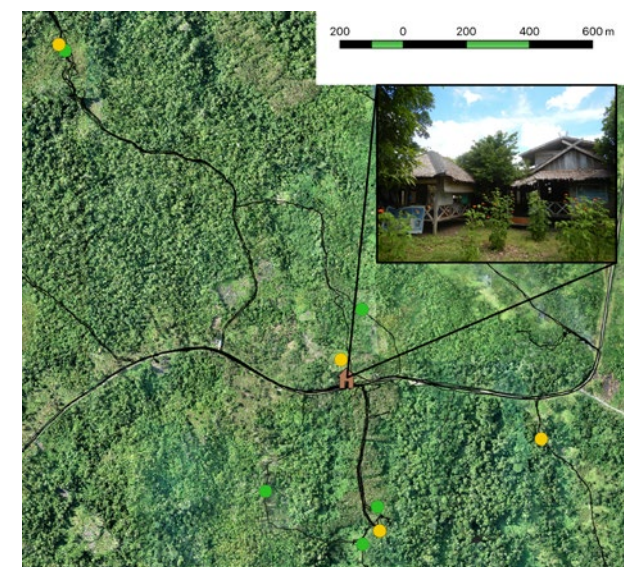
Despite various challenges, 2021 was a very successful year for the working group on Companion Animal Behaviour. Nadja Affenzeller, in collaboration with Barbara Bockstahler, was awarded an FWF project to study how ageing and cognitive dysfunction affect posture in dogs. Christine Arhant, together with Nadja, published one important paper on medical training of cats and dogs, and another on how wearing a muzzle can affect the well-being and behaviour of dogs. The latter won the Improving Pet Welfare Award from the Journal of Veterinary Behavior. Unfortunately, however, we had to say goodbye to Christine Arhant, one of the five core members of the working group, as she left the Vetmeduni at the end of 2021. The contribution of the working group has also increased in the education of IMHA students: the seminar on companion animal behaviour took place in both semesters, but also several new lectures and interactive seminars on topics researched by the working group have been integrated into the new IMHA curriculum.



Megan Lambert investigates keas' curiosity with sophisticated tests.



Aerial view of the Goffin Lab Goldegg, on the right an overview of the immediate research area of the Goffin Lab Tanimbar with image of the field station, feeding platforms (marked in yellow) and observation towers (marked in green).



© Mark O'Hara/Vetmeduni

Cooperation with our partner universities

University of Veterinary Medicine Vienna

- Institute for Laboratory Animal Science
- Institute for Medical Biochemistry
- Institute for Population Genetics
- Institute for Animal Welfare Science and Husbandry
- Institute for Food Safety, Food Technology and Public Health in Veterinary Medicine
- Clinical Department of Anaesthesiology and Perioperative Intensive Care Medicine
- Clinical Department for Diagnostic Imaging
- Konrad Lorenz Institute for Comparative Behavioural Research
- Animal Care School
- University Hospital for Small Animals, Dermatology, Oncology
- University Clinic for Horses
- University Clinic for Ruminants,
- University Clinic for Pigs
- VetCore

University of Vienna

- Cognitive Science Platform
- Department of Behavioral and Cognitive Biology
- Faculty of Psychology, especially Social, Cognitive and Affective Neuroscience Unit
- Institute for Philosophy
- Vienna Cognitive Science Hub

Medical University of Vienna

- Immunology Research Cluster
- Austrian Pollen Warning Service
- University Clinic for Dermatology
- University Clinic for ENT
- University Clinic for Child and Adolescent Psychiatry
- University Clinic for Psychiatry and Psychotherapy
- University Clinic of Radiology and Nuclear Medicine
- Centre for Medical Physics and Biomedical Engineering
- Centre for Pathophysiology, Infectiology and Immunology

Other national research partners

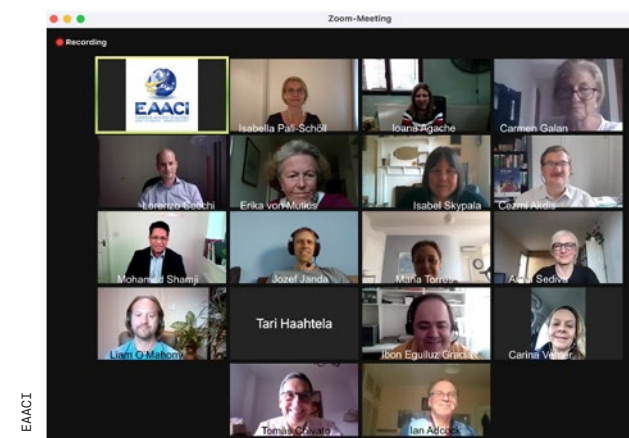
- Austrian Institute of Technology Tulln
- Gut Aiderbichl
- Karl Landsteiner University Krems
- Catholic Private University Linz
- Network of Professional Assistance, Vienna
- Austrian Academy of Sciences
- Vienna University of Technology
- Schönbrunn Zoo
- Animals as therapy – science and training centre
- University of Natural Resources and Life Sciences Vienna
- Zoo Wels

International research partners

The unit of Comparative Cognition has many research partners in Europe: Germany (Berlin, Frankfurt, Göttingen and Leipzig), Belgium (Ghent), France (Rennes, Strasbourg), Great Britain (Birmingham, Bristol, Edinburgh, Exeter, Lincoln, Oxford, St Andrews and Stirling), Italy (Milan, Padua, Parma, Rome and Rovereto), the Netherlands (Leiden, Utrecht), Norway (Trondheim), Sweden (Lund) and Hungary (Budapest). In addition, the unit cooperates with partners in Indonesia (Cibinong, West Java, Bogor), Japan (Tokyo), Canada (Toronto), New Zealand (Auckland, Christchurch), Singapore and the USA (Atlanta, Berkeley, Duke, Los Angeles, Minnesota, Nebraska, and Stanford). Of particular importance to the unit is the cooperation agreement with the Indonesian Academy of Sciences (Institute of Biology) for joint Goffin's cockatoo research on Yamdena Island in the Tanimbar Archipelago.

For Comparative Medicine, the most important research partners are those in the European Academy of Allergology and Immunology /EAACI, where members sit in key positions in numerous committees and have diverse international collaborations. We would like to highlight the cooperation with Sophia N. Karagannis at King's College London.

The unit of Ethics and Human-Animal Studies cooperates with scientists at university institutions in Austria and abroad. With a view to international research partners in 2021, the following selected institutions should be mentioned: University of Copenhagen, University of Glasgow, University of Bern, Department of Ecological Anthropology (Institute of Ethnology, Czech Academy of Sciences), Laboratory of Social Anthropology (CNRS-Collège de France-EHESS), Norwegian University of Science and Technology.



Preparation for the EAACI winter school of the Board of the Section of Immunology.

Cooperation at the level of networks and societies

Scientists in the unit of Comparative Cognition are represented in international societies (Europe: Ethological Society, The Association for the Study of Animal Behaviour, Canine Science Forum, European Association of Zoos and Aquaria; USA: American Psychological Association, Comparative Cognition Society, Psychonomic Society; New Zealand: Kea Conservation Trust) as well as in transnational networks (Animal Welfare Research Network, ManyPrimates, ManyDogs, ManyBirds, Atlas of Comparative Cognition).

For Comparative Medicine, the implementation in allergy networks is particularly important, especially on the topic of One Health. We are proud to be part of the Danube Allergy Research Cluster, which supplanted decades of collaborations in special research centres and doctoral colleges in allergology.

The unit of Ethics and Human-Animal Studies maintains collaborations in the field of ethics of human-animal relations, notably with the European Society for Food and Agricultural Ethics, European Network of 3R centres, Network Veterinary Humanities, Gut Aiderbichl, the International Society for Farm Animal Husbandry, the Evolution of Normativity Network, the Animals and Society Institute, Cultural and Literal Animal Studies and Minding Animals Germany/International.



Aila Fakhimhadi, Comparative Medicine, PhD student in the Danube Allergy Research Cluster.

© Thomas Suchanek/Vetmeduni

Visiting researchers at the Messerli Research Institute

The unit of Comparative Cognition hosted two visiting researchers in 2021: Yuri Kawaguchi (University of Kyoto, Japan) and Miriam Ross (Fulbright; University of Yale, USA).



Yuri Kawaguchi (Grant from the Japan Society for the Promotion of Science) and Miriam Ross (Fulbright Scholarship, University of Yale, USA)

The following guest researchers worked at the unit of Ethics and Human-Animal Studies in 2021: Shereen Chang, Konstantin Deininger, Johanna Karg, Erich Linder, Carlo Salzani and Elena Thurner.



Shereen Chang conducted studies with Goffin cockatoos as part of the FWF project „Animals and the Concept of Death“ (PI Susana Monsó).



Elena Thurner and Konstantin Deininger.



Johanna Karg



Erich Linder

Society & Public Relations

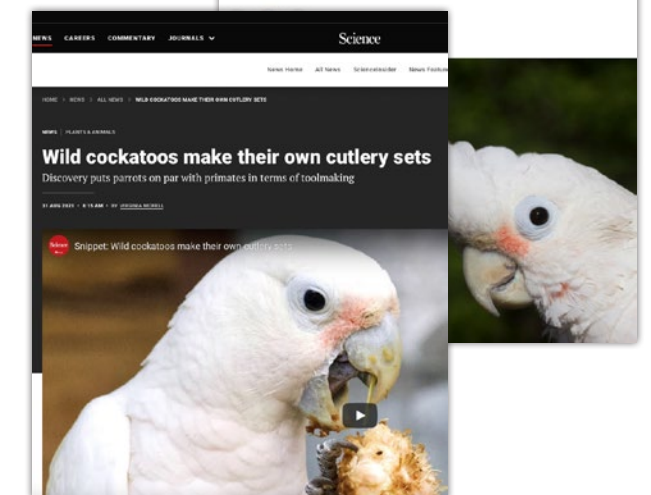
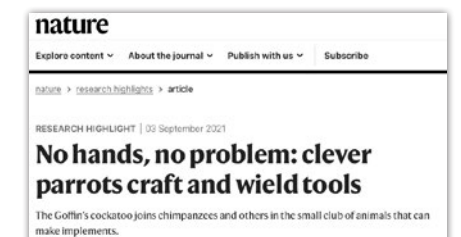
The Institute contributes to the promotion of scientifically sound and ethically justifiable treatment of animals in our society. In accordance with the Institute's mission statement, the Messerli Research Institute therefore considers it an important task to contribute knowledge obtained from its research to the public debate.

Highlights in the media

The year 2021 was marked by spectacular discoveries in comparative cognition research, and the media interest was correspondingly high. One highlight was the discovery of tool production in Goffin's cockatoos in the wild, which was reported in the renowned journals Nature, Science, Current Biology, New Scientist and in many magazines and TV stations. There was also a great deal of interest in research into the neuronal processes of the human-dog relationship and the first evidence of "mind reading" in dogs ("Fooled dogs can't be fooled"). Reports on the ability of keas to cooperate due to the restraint of the dominant animals, as well as on the intelligence of Kune Kune pigs and the resulting consequences for their husbandry, were also examples of media attention.

Due to the allergological and immunological expertise of Comparative Medicine, there were numerous interviews on allergies and coronavirus, as well as questions on corona vaccination, for example the Kurier Talk and Podcast "Vaccines", several interviews on the Austrian broadcast Ö1, Die Ganze Woche, and Ärztekron. In line with this, we spoke about the transmission of coronaviruses (newspaper "Der Standard"). We also held press conferences on the following topics: the farm effect on allergies, the start of the pollen season, a campaign by the newspaper "Kronenzeitung" on allergies, as well as two press releases for the Austrian Society for Allergology and Immunology.

In 2021, media reports on the publications and research of the unit of Ethics and Human-Animal Studies appeared in wide-ranging national and international media. The following are selections of these. Herwig Grimm was a guest on the podcast "explain the world to me" on the topic of "animal experimentation". Judith Benz-Schwarzburg's research on emotions and consciousness in animals, zoos and nature conservation as well as animals in contemporary art, was presented in several radio interviews by WDR, BR and Ö1. Christian Dürnberger was interviewed as an expert on the television programme "Österreich-Bild" (ORF2) on the topic of "animal welfare". Samuel Camenzind gave an interview to the newspaper "Les Temps" on ethical issues of xenotransplantation.



Events

In 2020, the visits of the Institute's Scientific Advisory Board and the Foundation Council were cancelled due to the corona-related restrictions, and replaced by online conferences. Because of this we decided in summer 2021, in consultation with the university administration, to invite the Foundation and Advisory Boards back to Vienna. This decision was based not only on the desire to meet after a long break, but also on the need to mark the 10th anniversary of the Messerli Research Institute in a worthy manner.

The meeting took place on 28 and 29 October 2021 in the ceremonial hall of the University of Veterinary Medicine Vienna. It included the Scientific Advisory Board, the Foundation Council, representatives of the responsible university (University of Veterinary Medicine) and the two partner universities (the University of Vienna and the Medical University of Vienna), as well as the three Messerli professors. The meeting started with the head of the institute reporting on the most important events of the institute in 2020, after which the three Messerli professors presented the activities and goals of their respective units. Next, the future of the institute in the second decade of its existence was discussed in different sub-groups. These discussions particularly focused on necessary mid-term strategic decisions. All of this took place in compliance with the corresponding safety regulations (mask, hygiene, distance).

The meeting concluded with a festive celebration of the institute's 10th anniversary in the university's ceremonial hall, in strict compliance with the University of Veterinary Medicine's corona hygiene and protection measures. In addition to the already present foundation and advisory board members, special guests of honour such as the former rector Sonja Hammerschmid, representatives of the ministries, Professor emeritus Josef Troxler, and the former Swiss ambassador were in attendance. After greetings from current rector Petra Winter and the two section heads Elmar Pichl and Ulrich Herzog, the guest of honour Alexis Schwarzenbach from Zurich provided richly illustrated and pointed insights into the life of Herta Messerli-Gentzke. The Honorary President of the Board of Trustees of the Messerli Foundation, Heinz Schweizer, complemented the historical review with remarks on the initial ideas of founding the

Messerli Research Institute. The end of the event was then marked by the ten years in which the institute has grown and flourished. The current head of the institute, Ludwig Huber, spiced up the presentation of developments and events with highlights of special achievements and successes, as well as with pictures of the people involved, whom he thanked sincerely at the conclusion. The festive setting in the decorated ceremonial hall, the wonderful musical accompaniment, the wisely chosen and affectionately designed commemorative gifts, as well as the delicious food and drinks contributed to the success of this ceremony.

Isabella Pali from Comparative Medicine hosted the International Day of Biodiversity, Living Lab online, 22 May 2021, and the International Day of One Health, Livestream/Webinar, 3 November 2021, both EAACI events.

Erika Jensen-Jarolim again organised the Allergy Update Refresher, Forum for Continuing Medical Education (FOMF), in Vienna on 8 and 9 November 2021, and as President the Annual Meeting of the Austrian Society for Allergy and Immunology on Planetary Health and Immunity, in hybrid format, in Vienna on 25 November 2021.

Under the title "Bringing empirical knowledge into bioethical debate - Potentials and limitations of answering philosophical questions in an empirical way", the ethics unit (Svenja Springer and Herwig Grimm) organised an international, two-day online workshop in cooperation with the University of Copenhagen.

Together with the TTN Institute and the Evangelische Akademie Tutzing, the two-day conference "Animal experimentation: Often banned, sometimes allowed, rarely required?" was organised in Tutzing (Germany) in September 2021.



Rector Petra Winter welcomes the guests at the 10th anniversary celebration.

© Thomas Suchanek/Vetmeduni



Hybrid award ceremony: Erika Jensen-Jarolim (far left) presents the 2021 ÖGAI Scientific Awards at the Society of Physicians.

© Verena Köhler

Infrastructure

Renovation and redesign of the Goffin Lab Goldegg

Various renovations were carried out on the Goffin Lab aviary by technician Markus Fitzka to maintain the support structure. He also installed a new sliding door and a new pellet stove in the indoor aviary. Preparations were made for the installation of a 3-D tracking system, as well as an extensive camera system, with which the behaviour of the cockatoos in experiments can be recorded simultaneously from several perspectives.



Mark O'Hara, Peter Füreder and Markus Fitzka install a new camera system in the test room of the Goffin Lab Goldegg

Extensions in the Goffin Lab Tanimbar

Meanwhile, new feeding platforms have been constructed at the Goffin Lab Tanimbar, allowing individuals to be tested directly in the field. Equipped with motion-sensor cameras, these platforms are made of resistant tubes up to six metres high and promise long durability in Tanimbar's tropical climate.



Mark O'Hara and a local helper erect a resilient feeding platform at the Goffin Lab Tanimbar (Indonesia).

10 years Messerli Research Institute

Ceremony on 29.10.2021



Rector Petra Winter, Ulrich Herzog, Maximilian Richter, Sabine Werner and Ludwig Huber.



The President of the Messerli Foundation Adrian von Segesser, the former Rector Sonja Hammerschmid and the Honorary President of the Messerli Foundation Heinz Schweizer.



Vice Rector Otto Doblhoff-Dier and guest speaker Alexis Schwarzenbach.



The musical framework by the string quartette of the Vetmeduni.



Much applause.



Greetings from Maximilian Richter, Deputy Head of the Higher Education Section at the Federal Ministry of Education, Science and Research.



Greetings by Ulrich Herzog, Head of Section III in the Federal Ministry of Social Affairs, Health, Care and Consumer Protection.



Alexis Schwarzenbach draws a biographical sketch of Herta Messerli-Gentzke.



The Honorary President of the Messerli Foundation, Heinz Schweizer, talks about the idea and history of the Messerli Research Institute.



The head of the institute, Ludwig Huber, thanks all Messerli employees for their achievements in the 10 years of the institute's existence.



A small thank you to the "helping hands": Jennifer Bentlage, Regina Meixner, Karoline Eadie, Karin Bayer and Eva Schwarzingner.



Food corona-compliant in glasses, prepared by Kaliber Kitchen.



As a guest gift, a planting cube with the motto „Let a seed grow into a plant“.

10 years Messerli Research Institute

Since the founding of the Messerli Research Institute (MRI), the history of the institute has been marked by many outstanding events and new research approaches. This selection shows the diverse portfolio of the MRI and its researchers.

Photo: Ernst Hammerschmid/
Vetmeduni



2011
Appointment of the three Messerli Professors

Photo: Ernst Hammerschmid/
Vetmeduni



10.11.2011
Herta Messerli: Award of the Decoration of Honour in Gold for Services to the Republic of Austria

Photo: Ernst Hammerschmid/
Vetmeduni



29.03.2012
Ceremonial opening of the Messerli building in the presence of the Messerli Foundation. Minister of Science Karlheinz Töchterle and the rectors Sonja Hammerschmidt, Heinz W. Engl and Wolfgang Schütz.

Photo: Roobert Bayer/WSC/
Vetmeduni



2012
ERC Starting Grant for Friederike Range on the mechanisms of cooperation between canine species (dog and wolf)

Photo: Ernst Hammerschmid/
Vetmeduni



03.09.2012
Opening of the Clever Dog Lab with Science Minister Karlheinz Töchterle and the then University Commissioner Alexander Van der Bellen.

01.10.2012
Start of the Interdisciplinary Master in Human-Animal Interactions (IMHAI)

2012
Start of the research focus on veterinary ethics with the project "Ethics for Vets", funded by the Federal Ministry of Health

Photo: Isabelle Grubert



2014
Start of the project on socio-cognitive abilities of free-ranging pigs, their effects on stress management as well as practical and ethical implications

Photo: Universität Wien



2015
Stefanie Riemer: Award of the doctorate sub auspiciis praesidentis rei publicae by the then Federal President Heinz Fischer

Photo: Ernst Hammerschmid/
Vetmeduni



01.10.2014
Visit of Jane Goodall as well as Vice Chancellor Reinhold Mitterlehner and Governor of Lower Austria Erwin Pröll at Haidlhof

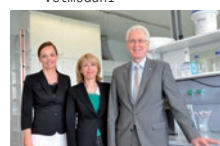
2014

2013
Start of the project "Development of a criteria catalogue for the evaluation of animal experimentation applications", funded by the Ministry of Science



03.–05.07.2013
European Science Foundation Conference "Comparative Cognition".

Photo: Heike Hochhauser/
Vetmeduni



07.05.2013
Opening of the Comparative Medicine laboratory

Photo: Ernst Hammerschmid/
Vetmeduni



01.01.2015
Extension of the mandate by the Federal Ministry of Health: Examination and Coordination Centre for assistance dogs, therapy assistance dogs and animal welfare qualified dog trainers

Photo: Thomas Suchanek/
Vetmeduni



2015
Extension of the FWF special research area F4606 "Towards Prevention of Allergy"

Photo: Medical University Vienna



2016
Josef Singer: Awarded the Wolfgang Denk Price

Photo: Thomas Suchanek/
Vetmeduni



2016
Verlängerung des FWF-Doktoratskollegs „Molecular, Cellular and Clinical Allergology“

Photo: Ludwig Huber/
Vetmeduni



2017
Construction of the Goffin Field Station on Tanimbar Island (Indonesia)

Photo: Willy Haslinger



2017
Anjali Barber: Honoured for dissertation with "Award of Excellence" by the Ministry of Science

Photo: University of Vienna



2017
Award of the FWF doctoral programme "Cognition and Communication"

Photo: Messerli Research Institute/Vetmeduni



13.–16.06.2018
EurSafe conference "Professionals in food chains: ethics, roles and responsibilities"

2018
Launch of the FWF project "Morality in animals: What it means and why it matters"

Photo: Yuliya Garbozanova



2019
Launch of the interdisciplinary, inter-university WWTF project on the evolution of the social brain (dog vs. human fMRI)

Photo: Stephanie Scholz/
Vetmeduni



23.09.2019
Congress "Animal Minds & Animal Ethics: Across Species, Across Disciplines"

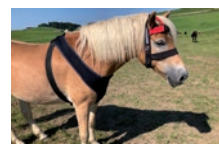
Photo: Isabelle Grubert



2021
Start of three FWF projects on motor imitation, technical intelligence and curiosity of keas

2021
Award of the FWF project of Martin Huth and Carlo Salzano "The Limits of Imagination: Animals, Empathy and Anthropomorphism"

Photo: Mariessa Long/
Vetmeduni



2020
Start of the interdisciplinary research platform "Ethics in Equine Medicine" together with the University Clinic for Horses and the project "Therapy Decision: Criteria and Models of Decision Making"

Photo: FWF/Luiza Puia



2020
Alice Auersperg: START Award for Emerging Top Researchers of the FWF with the 6-years project "Innovative Tool Use in a Parrot" presented by the Minister of Science Heinz Faßman

Photo: Max Ringler



2019
Eva Ringler: Christopher Barnard Award of the Association for the Study of Animal Behaviour (ASAB)

01.10.2021
Start of the Interdisciplinary Master in Human-Animal Interactions (IMHAI) 2.0



2021
Isabella Pali-Schöll: Implementation of the topic One Health in the European Academy of Allergology and Clinical Immunology (EAACI)

2020
Start of the "Danube Allergy Research Cluster", funded by the Lower Austrian Government with participation of the MRI

Social events



Summer workshop and Olympics of the CompMed team at the Old Danube.



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The team members around Alice Auersperg do not only work with Goffin cockatoos. Animal trainer Heidelinde Wanas leads through a workshop with a focus on "target training with pigs" for a change.



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The Goffin Labs team ends the day with a barbecue party.

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