messerli
Research Institute

Annual Report 2025

messerli Foundation

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MEDICAL UNIVERSITY OF VIENNA

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Statements

Rudolf Aebersold

Chair of the Messerli Foundation's Advisory Board for the Messerli Research Institute

For the Messerli Research Institute, 2025 was marked by the implementation of the new strategy signed in 2024 by the three universities in Vienna and the Messerli Foundation as the guiding framework for the next ten years. Important milestones last year include the retirement of Erika Jensen-Jarolim, one of the Institute's three co-founders; the transition in the Rectorate from Petra Winkler and Otto Doblhoff to Matthias Gauly and Martina Marchetti-Deschmann; the appointment of three new professors, Magdalena Boch at the University of Vienna as well as Jasmine Loveland and Svenja Springer at Vetmeduni; and the reconstitution of the Scientific Advisory Board. On behalf of the Board of the Messerli Foundation, I wish to acknowledge Erika Jensen-Jarolim's outstanding contributions to the Institute, express my gratitude for the excellent collaboration with the outgoing Rectorate, and extend a warm welcome to the new professors. We look forward to shaping the future together with the new Rectorate, the new Scientific Advisory Board and all members of the Institute.

Photo: Rudolf Aebersold

Eva-Maria Holzleitner

Federal Minister for Women, Science and Research

The Messerli Research Institute plays an important role in promoting the respectful interaction between humans and animals. Its research not only brings together the natural sciences and the humanities but also builds a bridge between science and society. Especially today, as our interactions with animals raise many ethical, environmental and health-related questions, we need guidance that is grounded in sound scientific research. I would like to thank all those involved for their important work and their commitment to progress that benefits us all.

Photo: BKA/Andy Wenzel

Michel Georges

Chair of the Scientific Advisory Board

The Messerli Research Institute's Scientific Advisory Board was newly constituted in 2025 and continues to provide scientific guidance in its new composition. The Board remains committed to serving as a partner to the Institute, supporting its interdisciplinary research and providing impetus for its future development. The Institute has established itself as an internationally recognised hub for the study of human–animal relationships, and the Scientific Advisory Board will continue to play a role in strengthening this successful work and opening up new perspectives for research and societal impact.

Photo: Geoffrey Meuli - Photography & Images

Matthias Gauly

Rector of the University of Veterinary Medicine, Vienna

It is truly impressive how the Messerli Research Institute has developed since its foundation, achieving a level of visibility that extends far beyond the country's borders and becoming an indispensable institution at our University. At the same time, its scientists demonstrate how basic research, applied research and third mission activities can all find equal space and importance. The Institute continuously generates knowledge that engages researchers around the world while also benefiting animal owners and animals themselves – the latter very much in keeping with the vision of the Institute's benefactor, Herta Messerli. On behalf of the Rectorate and the entire University of Veterinary Medicine, I extend my sincere thanks to the staff of the Messerli Research Institute for their tremendous commitment and wish them continued success in the years ahead. Our University will continue to play its part in ensuring the success of this important mission.

Photo: Michael Bernkopf/Vetmeduni

Michaela Fritz

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

In 2025, the Messerli Research Institute once again impressively demonstrated just how successful interdisciplinary research into human–animal interactions can be. With important contributions in research, teaching and public outreach, the Institute continues to strengthen its scientific profile. The close collaboration between the three partner universities, together with the ongoing support of the Messerli Foundation, provides a key basis for this success. We are particularly pleased about the plans to fill the tenure-track professorship in *Translational Immunology* at the Medical University of Vienna, from which we expect scientific excellence and even stronger links between the participating disciplines and institutions.

Photo: MedUni Wien/feelimage

Manuela Baccarini

Vice-Rector for Research and International Affairs at the University of Vienna

As Vice-Rector for Research and International Affairs at the University of Vienna, the partnership with the Messerli Research Institute is a matter of particular importance to me. Thanks to the support of the Messerli Foundation, we were able to expand our interuniversity collaboration in 2025, creating new professorships, preparing the interdisciplinary postdoctoral programme, and expanding our outreach and inreach activities. With the Messerli Professorship in *Social Cognition* (starting in 2026), we are also strengthening the link between cognitive science, psychology and philosophy. Together, we aim to promote open, data-driven research, excellence in teaching as well as knowledge transfer – from animal welfare to One Health. In times of tight budgets, we continue to be guided by the principles of scientific quality, integrity and societal impact.

Photo: derknopfdruecker.com

Editorial

Creating knowledge in times of crisis

The production of knowledge through science and research is coming under increasing pressure these days. This strain is now being felt at universities as well – institutions traditionally associated with freedom in research and teaching. Although the situation in Europe is not currently comparable to that in the United States, where academic institutions are subject to significant political influence, research and teaching are always embedded in political, economic and societal developments. As university research and teaching are largely publicly funded, they carry a particular responsibility towards society: the freedom of science as a defining hallmark of quality is inseparably linked to the obligation to use resources responsibly and to generate knowledge that is both scientifically robust and socially relevant.

At the same time, it is impossible to ignore that, under conditions of tightening budgets and rising costs, the question of the societal relevance and applicability of scientific knowledge is gaining in importance. Against this backdrop, Austria's universities in 2025 supported the federal government's efforts to address budgetary constraints. Concurrently, we are seeing a decline in people's trust in science and its findings across many areas. The very project of the Enlightenment itself appears to be under pressure, as the philosopher Michael Hampe recently put it so succinctly. Science is facing a cold and at times increasingly harsh headwind.

With the support of the Messerli Foundation, the Messerli Research Institute in 2025 was again able to demonstrate how universities can respond constructively to these challenges. The Institute again succeeded in advancing both basic research as well as problem- and application-oriented research in the field of human–animal interactions through productive collaborations, generating new insights and practical solutions. This is reflected not only in numerous publications in academic journals and in successfully acquired research projects (see p. 26), but also in the strong demand for our expertise beyond the university setting, in our close collaboration with practitioners, and in our active role in shaping and safeguarding standards in human–animal interactions. One example is the Examination and Coordination Centre for Animal Welfare Qualified Dog Trainers, which celebrated its tenth anniversary in the reporting year (see p. 40–41).

Human–animal interactions are particularly well suited to highlighting the value of basic research for problem- and application-oriented questions – and vice versa. Questions of moral responsibility towards animals in private households, veterinary practices, agricultural settings, laboratories or zoos can only be adequately addressed on the basis of sound foundational knowledge from different disciplines. At the same time, engaging with concrete problems helps to better understand the conditions under which they arise and to grasp them theoretically.

This understanding also shapes the interdisciplinary focus of the Messerli Research Institute, which transcends institutional boundaries and brings together three partner universities. This interuniversity collaboration was further strengthened in 2025 through the establishment of additional professorships at all three locations. We are pleased that the professorship in *Veterinary Ethics* at Vetmeduni has been filled by Svenja Springer, and that Magdalena Boch will take up her professorship in *Social Cognition* at the University of Vienna in 2026. At the Medical University of Vienna, the professorship in *Translational Immunology* has been advertised and is to be filled shortly. Following the departure of Erika Jensen-Jarolim and her team in 2025, this position represents a key role for the continued collaboration between the partner universities (see 2024 Annual Report). Meanwhile, Vetmeduni has started the selection procedures for the professorships in *Genetic and Epigenetic Foundations of Human–Animal Interactions* and *Cognitive Ethology*. We are convinced that these new Messerli professorships will serve to strengthen the Institute's profile and visibility in the long term.

Complementing these structural developments, the collaboration between the partner universities will be deepened through an interdisciplinary postdoctoral programme, preparation of which was advanced intensively in 2025 ahead of its launch in 2026. In addition, we are turning our attention to the Institute's strategic development: plans are in place to establish an outreach platform to strengthen our communication and collaboration with non-university institutions. This outreach also requires a structured inreach, ensuring that questions and challenges arising from human–animal interactions in practice are systematically fed into scientific work and addressed there in a targeted manner.

Photo: Herwig Grimm/Vetmeduni

None of these initiatives and developments would be possible without the generous support of the Messerli Foundation. We would therefore like to express our sincere gratitude at this point. Once again, this demonstrates that national borders are no obstacle and that long-term, trust-based collaboration can be shaped successfully and sustainably. We also extend our thanks to the new Scientific Advisory Board, which began its work in 2025 and accompanied the developments at the Messerli Research Institute (see p. 14). Our thanks likewise go to the new Rectorate, which since April 2025 has guided affairs at Vetmeduni – and thus also at the Institute – in a highly collegial and integrative manner. Finally, we thank all those who have contributed to the achievements documented in this report: our academic and administrative staff.

We are optimistic about the future. With the continued support of the Messerli Foundation, we will further develop our interdisciplinary, interuniversity and transdisciplinary research and teaching – with the aim of better understanding human–animal interactions and, wherever possible, improving them in the long term.

We hope you enjoy reading this report.

Herwig Grimm and Zsófia Virányi

Head and Deputy Head of the Messerli Research Institute

2025 in Figures

20
national
research partner institutions

59
international
research partner institutions

Photo: Michael Bernkopf/Vetmeduni

94
presentations
(both academic and popular science),
including 72 invited talks

61
university courses
involving the MRI

22
ongoing projects

6
approved projects,
5 launched in 2025

25.3
full-time equivalents (FTEs)
academic staff

13.3
full-time equivalents (FTEs)
general staff

22
visiting researchers

ACADEMIC STAFF

16.6 FTE financed from third-party funds
8.7 FTE financed from the core budget

GENERAL STAFF

6.4 FTE financed from third-party funds
6.9 FTE financed from the core budget

19
master's degrees

6
degrees in veterinary medicine

5
PhD degrees awarded

18
PhD students

Photo: AdobeStock

53
peer-reviewed papers

Photo: AdobeStock

Photo: Klaus Ranger/FWF

€ 1.8 million
in third-party funding

854
documented media reports

The Messerli Research Institute at a Glance

The Messerli Research Institute (MRI) was established in 2010 with the support of the Messerli Foundation (Sörenberg, Switzerland) and under the auspices of the University of Veterinary Medicine, Vienna, in cooperation with the Medical University of Vienna and the University of Vienna. Following the appointment of professors in *Comparative Cognition*, *Comparative Medicine* and *Ethics and Human–Animal Studies* in 2011, the MRI was officially inaugurated in March 2012. Building on the Institute's successful work, an expansion was approved in 2024 with the support of the Messerli Foundation. In this context, additional professorships in *Companion Animal Management*, *Social Cognition* and *Veterinary Ethics* were filled in 2024 and 2025. In 2025, a total of six professors and their teams were active at the Institute. Overall, work at the Institute is based on four core pillars:

Research

The Messerli Research Institute is dedicated to investigating the foundations of human–animal interactions and to supporting their improvement. In 2025, key areas of focus included the professorships in *Comparative Cognition*, *Comparative Medicine*, *Ethics and Human–Animal Studies*, *Cognitive Biology with a Special Focus on Tool Use*, *Companion Animal Management* and *Veterinary Ethics*.

Interdisciplinarity

The Institute's work is characterised by a broad interdisciplinary approach – encompassing biology, medicine, veterinary medicine, literary studies, practical philosophy, empirical social sciences and psychology – combined with a strong international focus.

Teaching

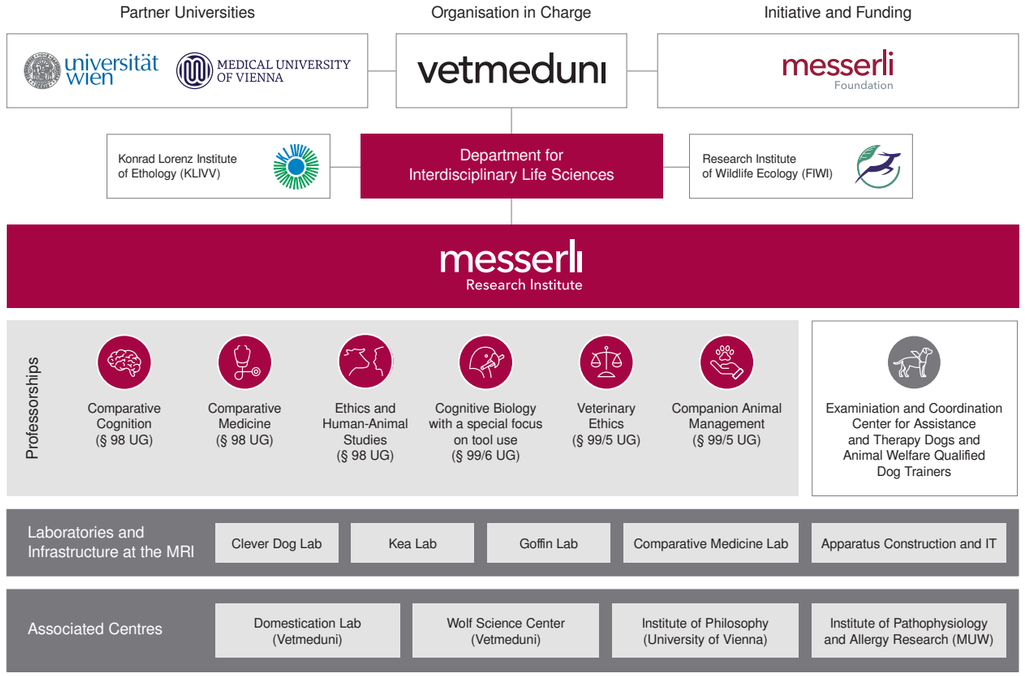
The findings of our research form an integral part of the academic teaching. Through our interdisciplinary master's programme and courses offered at the three partner universities as well as other educational institutions, we contribute to advancing knowledge about and fostering a sense of responsibility towards animals.

Knowledge transfer

The Messerli Research Institute communicates science-based findings to a broad public in an accessible manner while also identifying relevant research topics based on societal debates.
In this way, the Institute embraces its mission of supporting people in fulfilling their obligations towards animals on a scientific basis.

Photo: Michael Bernkopf/Vetmeduni

Organisational Chart



In the year under report, six professors and their teams were working at the Messerli Research Institute:

- § 98 UG Comparative Cognition (Ludwig Huber)
- § 98 UG Comparative Medicine (until April 2025) (Erika Jensen-Jarolim)
- § 98 UG Ethics and Human–Animal Studies (Herwig Grimm)
- § 99/6 UG Cognitive Biology with a Special Focus on Tool Use (Alice Auersperg)
- § 99/5 UG Companion Animal Management (Stefanie Riemer)
- § 99/5 UG Veterinary Ethics (Svenja Springer)

The first three of these professorships connect Vetmeduni with the Medical University of Vienna and the University of Vienna through double appointments or staff secondment agreements. The three additional professorships are based at Vetmeduni.

Alongside the Konrad Lorenz Institute of Ethology (KLIVV) and the Research Institute of Wildlife Ecology (FIWI), the Messerli Research Institute (MRI) is one of three centres within the Department of Interdisciplinary Life Sciences at Vetmeduni. Also part of the Institute are the Examination Centre for Assistance and Therapy Dogs as well as the Coordination Centre for Animal Welfare Qualified Dog Trainers. The Institute is represented externally and organised internally by the centre's head.

Important long-standing partners include the Centre for Animal Nutrition and Welfare and the Domestication Lab as part of the Interdisciplinary Master's Programme in Human–Animal Interactions (IMHAI). The Messerli Research Institute is also connected with its partner universities through facilities such as the Haidlhof Research Station and its associated centres and organisational entities.

The Team

Photo: Thomas Suchanek/Vetmeduni

The team of the Messerli Research Institute, the Scientific Advisory Board, and the Messerli Foundation Board.

In 2025, there were 38.6 full-time equivalents (FTEs) working at the Institute. Of these, 15.6 were permanent positions and 23 were funded through third-party sources. Academic staff accounted for 25.3 FTEs, supported by general staff comprising 13.3 FTEs. The general staff includes, among other things, administration, animal care and training, apparatus construction, laboratory management and IT, with organisational assistants assigned to the Department of Interdisciplinary Life Sciences.

The FTE figures listed above also include staff at the Examination Centre for Assistance and Therapy Dogs and at the Coordination Centre for Animal Welfare Qualified Dog Trainers.

Work on the restructuring and expansion of the Institute continued in 2025. The latter is focused in particular on the establishment of new professorships, an interdisciplinary postdoctoral programme and an outreach platform. At the end of 2024, the first new professorship in *Companion Animal Management* was filled with Stefanie Riemer. Erika Jensen-Jarolim (*Comparative Medicine*) and her team left the Institute in April 2025. The successful collaboration with the Medical University of Vienna will continue through the professorship in *Translational Immunology*. At the University of Vienna, Magdalena Boch, appointed to the Messerli Professorship in *Social Cognition*, will take up her position in 2026. At the University of Veterinary Medicine, Vienna, the professorship in *Veterinary Ethics* was filled with Svenja Springer. These appointments significantly broadened the MRI team's thematic scope during the reporting year.

The Foundation Board

Adrian von Segesser, President of the Messerli Foundation

Heinz Schweizer, Honorary President of the Messerli Foundation

Rudolf Aebersold, Chair of the Messerli Foundation's Advisory Board for the Messerli Research Institute

Felix Howald

Ariane Schweizer Henniges

Hansruedi Scherer

Photos: Messerli Foundation

The members of the Messerli Foundation Board have supported the MRI with great commitment and goodwill since its establishment. In 2025, Rudolf Aebersold assumed the role of Chair of the Messerli Foundation's Advisory Board for the Messerli Research Institute from Heinz Schweizer (see 2024 Annual Report). We would like to thank the entire Foundation Board, and Rudolf Aebersold in particular, for the positive and constructive working relationship.

The Scientific Advisory Board

Michel A. J. Georges (GIGA – University of Liège | Unit of Animal Genomics), Chair of the Scientific Advisory Board

Photo: Sandøe

Sabine Werner (Swiss Federal Institute of Technology in Zurich (ETH Zurich) | Department of Biology)

Photo: ETH Zürich

Franck Meijboom (Utrecht University | Department of Philosophy and Religious Studies)

Photo: Ed_van_Rijswijk

Tyler Stevenson (University of Glasgow | School of Biodiversity, One Health & Veterinary Medicine)

Photo: private

Dietmar Zehn (Technical University of Munich | TUM School of Life Sciences and TUM School of Medicine and Health)

Photo: D.Zehn

The Scientific Advisory Board of the Messerli Research Institute is an external advisory body responsible for ensuring the scientific quality, relevance and thematic focus of the Institute's research. Key tasks of the Advisory Board include providing guidance on the strategic direction of research and supporting the Institute's international positioning. The entire Board was reconstituted in 2025, and we would like to extend our sincere thanks to both the outgoing and the newly appointed members for their commitment and dedication. The first meeting with the new Scientific Advisory Board took place in April 2025, marking a successful start to the collaboration between the Board's members and the Institute's staff.

Interview with Prof. Michel A. J. Georges

Michel A. J. Georges (GIGA – University of Liège | Unit of Animal Genomics), is the new Chair of the Scientific Advisory Board of the Messerli Research Institute

Professor Georges, when you received the request to chair the Scientific Advisory Board at the Messerli Research Institute, what were your initial thoughts?

I had just finished my eight-year term as director of the GIGA Institute at the University of Liège, which I had helped to establish in the early 2000s. I felt that the experience I had gained in this role, including the mistakes I had made, might be useful to share with others. The Messerli Research Institute, although interdisciplinary like GIGA, is part of a veterinary university. Being a veterinarian myself, attached to the Faculty of Veterinary Medicine in Liège, was an additional incentive to accept the invitation.

How would you describe the self-image and core tasks of the Scientific Advisory Board?

Periodic evaluations by panels of external experts have been part of my entire career as a scientist. I have found them to be very beneficial, provided they are interpreted appropriately. As a principal investigator, it is important to reflect regularly on your research programme: to recognise what is going well, but also what should be improved or even discontinued, and to articulate this clearly in a document. It is also an opportunity to question whether you are fulfilling your role as a mentor and team leader as effectively and altruistically as you should. For postdocs, PhD candidates and MSc students, such evaluations offer a chance to take a step back, to communicate your research and its place in the bigger picture, to learn about your colleagues' projects, and to be introduced to aspects of laboratory management. For technicians and administrative staff, it is stimulating to see what your hard work contributes to building, and to have the opportunity to express your views on your working conditions. Much of this would be lost without periodic reviews. The role of the members of the Board is to make these occasions as rich and rewarding as possible for all participants, including by offering a candid external perspective and actively engaging in constructive dialogue.

The Messerli Research Institute is particularly committed to interdisciplinarity. What role does this approach play in your own career as a researcher?

I am one of the founders of the GIGA Institute in Liège. The "I" in GIGA stands for "interdisciplinaire". Today, nearly all health sciences at the University of Liège are conducted within this institute, which brings together 600 scientists from six faculties: medicine, veterinary medicine, science, engineering, agronomy and psychology. In my experience, the greatest synergy arises from the interaction between colleagues with the most diverse backgrounds. For me personally, this has been the interaction with engineers and mathematicians. The life sciences are becoming increasingly data-driven, focusing on behaviours emerging from complex systems. Strong mathematical expertise is therefore more important than ever. At GIGA, interdisciplinarity does not yet extend sufficiently to the social sciences and humanities, which is something that should be remedied, particularly with regard to ethics. This is precisely where the Messerli Research Institute excels, rooted as it is in its original mission. This is one of its distinctive strengths.

Universities are committed to research, teaching and the so-called third mission. Where do you see the particular challenges and opportunities for an institute like Messerli?

A key challenge is to pursue top-level research capable of attracting the brightest minds and support from the most competitive funding bodies – such as the European Research Council, to name just one – while at the same time preserving what defines the work and mission of veterinary schools in general and the Messerli Research Institute in particular. In many of our industrialised countries, the importance of animal agriculture is declining, yet the relationship between humans and animals is more important than ever. Animal populations, both domestic and wild, are a treasure trove of biological phenomena and evolutionary and historical narratives that can now be studied more effectively today than had ever been possible in the past. They offer excellent opportunities to develop distinctive research, teaching and third-mission projects.

Our research at the MRI focuses on human–animal interactions. What role do animals play in your personal life?

I chose to study veterinary medicine because my childhood and adolescence were filled with animals of all kinds. In retrospect, I can hardly believe how tolerant my parents were, effectively turning our home into a permanent zoo. Horses, in particular, have become an important part of my family life. We now have two dogs – Vanille and Chocolat – with whom, as a professor emeritus, I spend a lot of time. Despite their names, they are both black.

What are your hopes and wishes for the future of the Messerli Research Institute?

That it remains the vibrant place it is today, attracting scientists from all over the world who are passionate about deepening our understanding of the bond between humans and their fellow animals.

In a word

Please complete the following sentences:

Good teaching requires … *passion.*

When I think of Vienna, I think of … *the Spanish Riding School, the* Venus of Willendorf *and Gustav Klimt's* The Kiss.

What motivates me is … *understanding.*

Success, to me, is … *shared happiness.*

A good human–animal relationship needs … *respect.*

Research

Goals

The Messerli Research Institute is dedicated to developing and expanding scientifically grounded foundations and insights for human–animal co-existence. Current questions relating to the diverse relationships between humans and animals are investigated here in an interdisciplinary manner from both empirical and normative perspectives. The highly successful acquisition of competitively awarded project funding makes a substantial contribution to this research (see p. 26).

Photo: Kazin Bayez/Vetmeduni

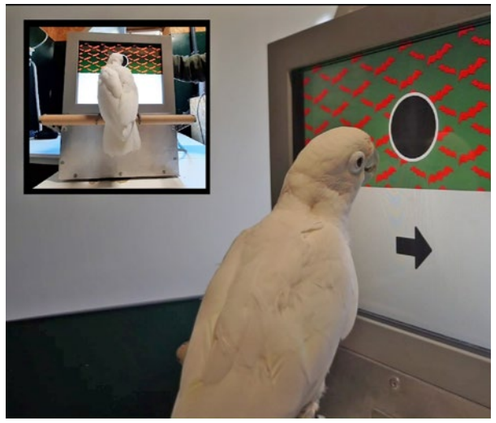


Photo: Antonio J. Osuna Mascaró

Interdisciplinary research

The Messerli Research Institute owes its distinctive profile to the integration of the natural sciences with the humanities. Researchers from different disciplines work on both specialised research topics in the field of human–animal interactions and on interdisciplinary research projects within the Institute as well as externally. Selected examples of projects conducted within the Institute, at Vetmeduni, across the Vienna universities and with international partners are presented on pages 22 to 25 of this annual report.

Photo: Judith Benz-Schwarzburg

Cross-university and (inter-) national collaboration

The MRI is situated at the interface of three Vienna-based universities – the University of Veterinary Medicine, Vienna; the Medical University of Vienna; and the University of Vienna – and integrates the existing expertise of these institutions into its work. Conversely, the Institute's research findings benefit all three universities in both research and teaching. This successful collaboration will be further expanded in the coming years as part of the Messerli Research Institute's expansion plan. The Institute's network connects 17 national and more than 50 international partners.

Photo: Berenika Mioduszewska

Photo: Nicola Schlöglová

Photo: Dominik Kiss/Vetmeduni

Research in a societal context

Through its collaboration with public authorities, associations and other institutions in the field of human–animal interactions, the MRI fulfils its societal mandate to inform individuals and organisations on a scientific basis and to support them in their responsibility towards animals (see p. 42).

Photo: private

The Six Professorships in Focus

Comparative Cognition

“With knowledge comes doubt.” (Goethe)

The appointment of a professor for the scientific foundations of human–animal interactions was accompanied by the establishment of the Unit of Comparative Cognition. Its aim has been – and remains – to investigate the cognitive and emotional processes of companion animals, wild animals and farm animals. The Clever Dog Lab and the Haidlhof Research Station were established for this purpose. Basic as well as applied research in the field of human–animal interactions has been conducted at both sites. The insights gained have fed into the IMHAI master’s programme and a range of theses and have been put into practical use in the work with assistance dogs and species conservation.

Photo: Johannes Hloch

Ethics and Human–Animal Studies

“At the intersection of barn, laboratory, clinic and theory.”

The work of Herwig Grimm and his team starts from a philosophical and empirically informed engagement with specific issues of human–animal interactions and their foundations. At its core lies the study of normative aspects of the use of animals in laboratories, agriculture or veterinary medicine, and their theoretical grounding. The journey from practice to theory-driven ethics and back again opens up new theoretical perspectives and makes it possible not only to analyse moral conflicts, but also to address them in practical terms – and (at times) to resolve them.

Photo: Marco Finsterwald

Comparative Medicine

“From comparison to holistic understanding and One Health.”

Erika Jensen-Jarolim and her team investigate, on an immunological basis, molecular and pathophysiological contrasts between different species – with the aim of optimising diagnostics and therapies for both humans and animals. The focus of their research is on allergies and cancer. The team’s key expertise lies in examining systemic challenges (e.g. climate change, environmental stress) and in developing strategies for the prevention and management of these diseases, taking into account the One Health approach.

Photo: Thomas Suchanek/Vetmeduni

Cognitive Biology with a Special Focus on Tool Use

“Think like an animal!”

Alice Auersperg and her team explore how animals develop creative solutions to challenges in their environment and how they use and manufacture tools. Insights into the problem-solving abilities of closely and distantly related animals call into question the supposed uniqueness of humans as a species. At the same time, they open up new perspectives on the use of technology. Learning from animals – through the transfer of proven strategies from nature – also holds considerable potential for the further development of human-made technologies.

Photo: Roobert Bayer

Companion Animal Management

“Science meets practice.”

Stefanie Riemer and her team integrate interdisciplinary basic research with applied studies on companion animals. Their work spans a broad spectrum of topics, including canine emotions and communication, behavioural problems, low-stress veterinary care, and the quality of life of dogs with chronic illnesses. By translating these findings for both pet professionals and the general public, they aim to make a tangible impact on the well-being of our pets.

Photo: LinKawas

Veterinary Ethics

“Good veterinary decisions arise where professional expertise meets ethical reflection and personal responsibility.”

How can veterinary ethics help veterinarians cope with the demands of their practice while providing the best possible care for animal patients and their owners? Svenja Springer and her colleagues investigate ethical questions in veterinary medicine, with a focus on empirical research. Alongside identifying and reflecting on existing challenges, it is essential to develop practical solutions for the many areas of the profession and to maintain a balance between veterinary responsibility and the needs of all those involved.

Photo: Thomas Suchanek/Vetmeduni

The Institute's New Professors

Interview with Svenja Springer

You studied veterinary medicine and then went on to specialise in ethics. What inspired you to take that step?

During my studies, I realised that textbooks don't provide all the answers to the complex questions we encounter in practice. At the same time, I experienced the loss of two dogs in my personal life, which was a profound turning point for me as a pet owner. This combination of professional challenges and personal experiences led me to engage deeply with ethical questions. The Messerli Research Institute – more precisely Herwig Grimm – then encouraged me to take the step into ethics and supported me on my path into research.

Your professorship focuses on empirical ethics. What does this research approach involve?

It is very important to me to understand the perspectives of veterinarians as well as animal owners. Through representative surveys and interview studies, we broadly identify the ethical challenges in veterinary medicine and in human–animal interactions. Before we can make sound decisions in practice, we first need to grasp the underlying values, conflicts and dynamics in all their complexity. That is the strength of empirical ethics.

What is the focus of your current research?

I investigate a wide range of questions. In our most recent project, called "Abschied Leben" [English: "Living Farewell"], we gained new insights into three complex topics through interviews with small animal veterinarians. First, we examined the opportunities and challenges of palliative care for animals; second, we explored how veterinarians manage the balance between their professional and private lives; and third, we analysed the impact that the death of our pets has on how we deal with dying in contemporary society. My new project will address the fundamental question of what it actually means to act in an animal's so-called best interests.

Your professorship is one of the first worldwide in what is still a young and emerging field of research. What role does international cooperation play in your work?

An important one, as I very much enjoy working in large interdisciplinary teams. A key partner, for example, is the Centre for Companion Animal Welfare led by Peter Sandøe at the University of Copenhagen. This collaboration enables us to carry out international studies and to strengthen the field of veterinary ethics. Pooling our efforts is essential if we are to advance both teaching and research in this area. I am very grateful to be able to do this within the framework of my professorship.

The subject of ethics is firmly embedded in the veterinary curriculum in Vienna. How do you design your teaching so that future veterinarians are motivated to engage actively with ethical matters?

Let me give just one example: I ask students to conduct surveys and then compare their responses with those of veterinarians from our studies. This often reveals interesting differences, leading to moments of surprise, murmurs, laughter and doubt in the lecture hall. And then we discuss the question of why veterinary practitioners assess certain situations so differently. This is a perfect gateway to ethical reflection, among both the students and the others involved. More generally, I would like ethics not to remain a purely theoretical discipline for my students. In other words, when they enter the clinic environment, they should think not only about their patients' blood test results, for example, but also reflect on the values underlying complex clinical decisions.

Biographical note: Svenja Springer completed her degree in Veterinary Medicine at the University of Veterinary Medicine, Vienna, in 2014 and was awarded a Dr. med. vet. in 2018 for her thesis on "Moral Challenges of Euthanasia in Small Animal Practice". In 2017, she began a PhD programme at the University of Copenhagen, where she examined "The Internal Morality of Veterinary Medicine", successfully completing her studies in 2022. Since March 2025, she has been Assistant Professor of *Veterinary Ethics* at the Messerli Research Institute of the University of Veterinary Medicine, Vienna.

Photo: Thomas Suchanek/Vetmeduni

Interview with Stefanie Riemer

You are Assistant Professor of *Companion Animal Management*. Tell our readers what that means.

For me, this role means establishing an evidence-based foundation for how we should manage companion animals – in other words, how we can optimise environmental conditions and our interactions with them in order to ensure the best possible quality of life and to foster the human–animal relationship. This includes both basic research – for instance, how we can recognise stress and anxiety in the first place, and which factors are associated with the emergence of behavioural problems – and applied research – such as identifying effective measures to address noise sensitivity and fear of veterinary visits. In short, my aim is twofold: first, to understand the emotions of our animal companions, and second, to ensure that they experience as few negative and as many positive emotions as possible.

What first sparked your scientific interest in human–animal interactions?

I have been interested in animal behaviour since I was a child. During my diploma studies at the University of Vienna, I volunteered at the Clever Dog Lab and adopted my rescue dog, Nicky, from a shelter in Slovakia. As he had likely had very few interactions during his first year of life, I became particularly interested in how individual personality develops in dogs – which in fact became the subject of my doctoral thesis at the Clever Dog Lab.

What continues to surprise you about dogs?

I find dogs' social abilities fascinating. In a recent study, I was able to show that puppies as young as six to seven weeks already establish eye contact with humans when they need help or are confronted with an unfamiliar object. Let me share an anecdote in this regard: what amazes me most about my male dog Yari is how extraordinarily sensitive he is to my intentions – Ludwig Huber would probably call it behaviour reading – as well as to stress in my female dog. Veterinary visits are particularly interesting when it is her turn. As soon as she shows signs of stress on the examination table, he begins to whine from below; if she remains relaxed, he does too.

What key questions are currently shaping your research?

At present, one focus is on the computer-assisted analysis of emotional facial expressions in dogs using artificial intelligence. Another focus lies in the welfare of dogs with Chiari-like malformation, a neurological condition common in small breeds. Together with partners in the Netherlands, we are investigating how different degrees of severity affect personality and quality of life. In collaboration with Magdalena Boch, the future Messerli Assistant Professor of *Social Cognition*, we also aim to explore correlations between personality traits and brain structures. A further goal is a proof-of-concept study in which we seek to make signs of chronic pain in dogs objectively measurable through AI-based analysis of facial expressions.

The Messerli Research Institute places particular emphasis on interdisciplinarity. What does this mean to you, and how can your research benefit from interdisciplinary collaboration?

Interdisciplinarity is essential to my research. As my projects show, I work closely with computer scientists, veterinary specialists and psychologists. Without the expertise of these different disciplines, most of my studies over the past years would not have been possible. As members of a team spanning various fields, we depend on one another – and it is precisely this cross-disciplinary exchange that enriches our scientific work enormously.

What impact would you like your research to have on how society interacts with animals in the long term?

I would like to see a societal shift in which the emotions of animals – whether in companion animal care or in livestock farming – are consistently taken into account. To support this transfer from science into practice, I regularly contribute to podcasts and webinars. For example, I was invited to share insights in the Vetmeduni alumni podcast on low-stress veterinary visits and on recognising and preventing stress in family dogs. The feedback from dog trainers and veterinarians that my work – particularly in the areas of noise sensitivity and fear of veterinary visits – is highly relevant to animals' lives is the greatest validation for me.

Biographical note: Stefanie Riemer is a behavioural biologist who studied Animal Behaviour and Environmental Biology at Anglia Ruskin University in Cambridge and Ecology at the University of Vienna. She completed her doctorate at the Clever Dog Lab, complemented by a research stay at the University of Lincoln in England, where she also undertook further training in behavioural therapy. Following a postdoctoral position in Lincoln, she led her own research group on dog behaviour at the Vetsuisse Faculty of the University of Bern for six years. Since 2023, Stefanie Riemer has been teaching and conducting research at the University of Veterinary Medicine, Vienna, where she has held the position of Assistant Professor of *Companion Animal Management* since December 2024.

Photo: Thomas Suchanek/Vetmeduni

Interdisciplinary Activities and Projects at the MRI

Scientific collaboration with the Examination and Coordination Centre for Assistance and Therapy Dogs

Cognition (Ludwig Huber)
Veterinary Medicine (Karl Weissenbacher)

This collaboration focuses both on the welfare of dogs used as assistance and therapy animals and on enhancing the well-being of the people who benefit from them. In 2025, two publications emerged from this work: “A pilot study into the effects of PTSD-assistance dogs’ work on their salivary cortisol levels and their handlers’ quality of life” and “Comparing overimitation between assistance dogs and family dogs at home”.

Hard-to-rehome and non-rehomeable dogs in animal shelters

Disciplines within the Institute:
Ethics (Herwig Grimm, PI; Konstantin Eckl)
Behavioural Biology (Zsófia Virányi)
Cynology (Karin Bayer, Karl Weissenbacher)

Disciplines outside the Institute:
Law (Regina Binder, Alex Tritthart)
Behavioural Medicine (Nadja Affenzeller)
Animal Shelter Management (Bernadette Altrichter)

This project takes a problem-oriented approach to examining the options available within the current legal framework for dealing with hard-to-rehome and non-rehomeable dogs in shelters. Experts from law, behavioural medicine, veterinary medicine, behavioural biology, shelter practice, dog training and ethics collaborate in an interdisciplinary setting. The commissioning body is the non-profit limited liability company Good for Vienna, which operates the TierQuarTier animal shelter and is seeking solutions in this context. The project focuses in particular on behavioural issues that make it difficult or impossible to place animals with private owners.

Messerli Retreat in preparation for the Messerli Interdisciplinary Postdoctoral Programme

The first Messerli Retreat took place in St. Pölten from 15 to 16 September 2025. The Institute’s postdocs and professors joined forces with incoming Messerli Professor Magdalena Boch and integrated their expertise to identify innovative, problem-oriented research topics with the potential to positively impact human–animal interactions. Although the Medical University of Vienna had not yet filled its Messerli professorship, it was represented by Andreas Bergthaler, whose group will be associated with the future professorship in *Translational Immunology*. The identified topics range from agency and welfare in exotic companion animals, to conflicts between dogs and humans and their coexistence in urban environments, to the use of real versus virtual animals in public education. An international call for applications invites postdoctoral researchers from around the world to apply to work on these topics in interdisciplinary research projects at the Institute.

Photo: Herwig Grimm/Vetmeduni

Project meeting for the “Hard-to-rehome and non-rehomeable dogs in animal shelters” project at the 48er-Tandler.

Examples of Interdisciplinary Activities with External Partners

Convergent evolution of the social brain

With a major investment from the Federal Ministry of Science (fMRI scanner), seed funding from the two participating universities, and two large projects funded by the Vienna Science and Technology Fund (WWTF), the interdisciplinary and interuniversity Comparative Canine Neuroimaging Unit (CCNU) was established in Vienna under the leadership of Ludwig Huber (MRI, Vetmeduni) and Claus Lamm (Psychology, University of Vienna). The core objective of the CCNU is to use the groundbreaking method of functional magnetic resonance imaging (fMRI) in both dogs and humans to advance our understanding of the brain processes underlying emotion and social cognition.

Photo: Dominik Kiss/Vetmeduni

Dogs are gradually pre-trained step by step in a mock MRI scanner by dog trainers certified in animal welfare.

ManyDogs 2

The aim of ManyDogs is to bring together a global network of researchers from different disciplines to address the reproducibility crisis in the behavioural sciences. In this second project, led by Ludwig Huber, around two dozen laboratories across Europe and North and South America are investigating overimitation in dogs, a behaviour long thought to be unique to humans. The test developed at the Clever Dog Lab is being replicated in numerous additional laboratories to assess the robustness of the Vienna findings and to foster methodological consensus and standards for replication studies.

Ethics support at an animal sanctuary

In collaboration with anaesthetist Ulrike Auer (Vetmeduni), Svenja Springer and Julia Staud conducted interdisciplinary workshops for veterinarians and animal carers at the Gut Aiderbichl sanctuary for rescued animal. This initiative represents an excellent example of interdisciplinary engagement. The aim was to support professionals in their practice not only medically but also ethically, particularly in complex end-of-life decision-making. The interdisciplinary approach enabled participants to make decisions centred on animal welfare while also considering what is reasonable for care teams.

Contested moral framings of human–animal interactions

In collaboration with researchers Silvia Panizza and Niklas Forsberg from the Centre for Ethics at the University of Pardubice in the Czech Republic, Herwig Grimm, Judith Benz-Schwarzburg, Erich Linder and Konstantin Deininger explored how we conceptualise and address moral questions in human–animal relationships within the framework of the AKTION funding programme of the Czech National Agency for International Education and Research. Specifically, moral-philosophical and moral-psychological perspectives were brought together to analyse motivations as well as the ethical, existential and methodological conditions underlying how we address our responsibilities towards animals.

Photo: private

Contested framings of the human-animal relationship: workshop in Pardubice.

Parrot conservation in New Zealand

During her research stay at Victoria University of Wellington, funded by a Marietta Blau Grant, doctoral candidate Cornelia Habl initiated a collaboration with the Faculty of Architecture and Design Innovation and the Museum of New Zealand Te Papa Tongarewa to pilot a novel method to deter kākā parrots (*Nestor meridionalis*) from consuming poison pellets at bait stations intended for invasive predators. The experimental setup involved placing a 3D-printed model of a dead kākā in front of a bait station, playing distress calls to attract wild kākā to the scene, and monitoring the frequency of visits before and after the intervention. The Te Papa Museum generously provided access to its collection, where Zach Challies conducted photogrammetric scans of several kākā specimen. Lisa Preston used these scans to develop a model, which Nathan Wilson then produced via 3D printing. The promising results are expected to be published in 2026.

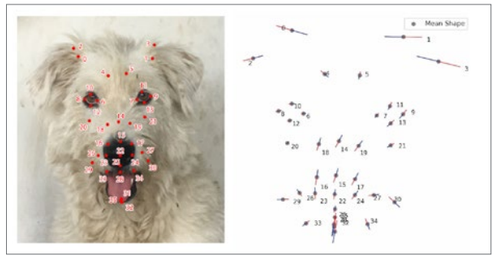
Shared perception of dog emotions across experience levels

In collaboration with psychologists Carmen Heritier and Robert Gaschler from the University of Hagen, Stefanie Riemer (MRI) investigated human perception of canine emotional states across different levels of dog-related experience. Using Qualitative Behaviour Assessment (QBA), 65 participants rated 133 video sequences of dogs undergoing veterinary examinations across ten emotional descriptors (e.g. “fearful” or “lively”). The analysis revealed no significant differences in rating patterns between experienced and inexperienced individuals. This suggests that the interpretation of dogs’ affective states may be strongly mediated by shared cross-species cognitive mechanisms or innate empathy rather than acquired expertise. The findings have practical implications for promoting animal welfare in veterinary medicine and for standardising emotional assessments in professional animal care settings.

Automated analysis of emotional expression in dogs using geometric morphometrics

In collaboration with computer scientist George Martvel from the University of Haifa, the Messerli Research Institute, led by Stefanie Riemer, deployed an automated landmark detection system for the first time to analyse dogs’ facial expressions “in the wild”. Using home videos recorded during fireworks and on a control evening without fireworks, the AI-supported analysis identified significant facial changes during the fireworks event. In particular, changes at the base of the ears (ears drawn back) proved to be the most robust indicator of fear and corresponded with manual ethogram-based coding. The findings show strong potential for early stress detection across various contexts (clinics, shelters, private households), although expert human interpretation remains essential.

A follow-up study compared the predictive power of AI-based facial analysis with manual, ethogram-based whole-body coding in distinguishing between a fireworks situation and control conditions. Human coding extending beyond facial analysis achieved higher accuracy, reaching up to 100%.



Based on the arrangement of “landmarks” on the dog’s face, it was possible to distinguish between the fireworks condition and the control condition with a prediction accuracy of 0.77.

ARED Conference

The conference “Rational Animals? Developmental, comparative, philosophical and methodological perspectives”, part of the interdisciplinary research project Agency, Rationality and Epistemic Defeat (ARED), took place in Stirling, Scotland, from 2 to 4 June 2025. Organised by research partners of Zsófia Virányi and Ludwig Huber at the University of Stirling, the conference aimed to foster dialogue between philosophical and empirical research on mind and rationality. The event brought together researchers from developmental and comparative psychology as well as philosophy and featured a distinguished line-up of speakers, including Christine Caldwell, Paul Harris, Amanda Seed, Eric Markus and Mike Dacey.

Parrotbots 2.

This project marks the final year of a collaboration with robotics researchers at TU Berlin, involving Alice Auersperg, Teresa Rössler, Antonio Osuna Mascaró and Jeroen Zewald. The work is funded by the Cluster of Excellence “Science of Intelligence”. The project investigates kinematic problem-solving mechanisms in parrots with the aim of deriving innovation strategies capable of informing robotic systems. The focus is on action selection, object manipulation and solution trajectories rather than task success alone.

Photo: Alice Auersperg/Vetmeduni

Theresa Rössler experiments with the robotic version of the so-called “lockbox” from the Parrot Project.

Minimal concept of death in animals

In an interdisciplinary project, Antonio Osuna Mascaró and Alice Auersperg (MRI), together with a group of philosophers led by Susana Monsó (UNED Madrid), are investigating whether non-human animals can acquire a minimal concept of death. Two studies funded by the Austrian Science Fund (FWF), conducted with Goffin’s cockatoos, showed that the birds can learn the concept of irreversible non-functionality. This capacity constitutes a necessary precondition for a minimal concept of death. The findings do not imply a human-like understanding of death in animals, however, and should not be interpreted as such.

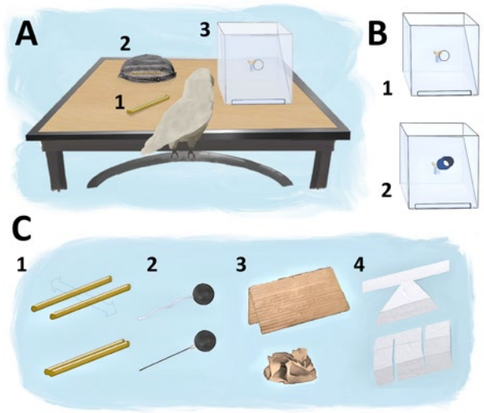


Illustration: Antonio J. Osuna Mascaró/Vetmeduni

The experimental setup and box types used in the project on the concept of irreversible non-functionality in Goffin’s cockatoos.

Highlights:
New Projects

We are delighted to report another highly successful year in terms of third-party funding. A total of €1.8 million in funding was secured through 17 projects – predominantly from competitive calls for proposals. Despite the highly competitive environment, five new projects were approved in 2025 alone. We would particularly like to highlight the outstanding success of Megan Lambert, who secured an ASTRA project on avian ingenuity (see below). Four new projects were launched, three of which are briefly presented here. The interdisciplinary project "Hard-to-rehome and non-rehomeable dogs in animal shelters" is presented on p. 22.

Avian Ingenuity: from Lab to Field

This ASTRA project, led by Megan Lambert, investigates how animals adapt to change and respond to new challenges through innovative problem-solving. Using kea parrots and striated caracaras as the model species, the project examines how individual traits, ecological conditions and social context shape novel behaviour across both laboratory and field settings. By improving our understanding of how novel behaviours emerge and persist, the researchers' work advances theory and informs conservation by identifying which behavioural phenotypes are most resilient to environmental change.

Project lead: Megan Lambert
Funding organisation and ID: FWF (AST3939724)
Project duration: 2025–2030

Photo: Oly Dempster

A striated caracara engaged in an innovation task.

Dexterity in the Object Use of the Goffin's Cockatoo

Researchers Alice Auersperg and Teresa Rössler have been collaborating with evolutionary biologist Frank Rheindt on a project investigating tool use in wild cockatoos in Singapore. The team documented tool use on three previously unreported types of stone fruit. Rather than relying on a single, generalised behavioural pattern, the birds employ fruit-specific manipulation techniques. This variation indicates that tool use is constrained both by the physical properties of the food items and by the birds' morphology and action capabilities. The findings point to a close coupling between ecological affordances and motor solutions, rather than abstract or context-independent tool-use routines.

Project lead: Alice Auersperg
Funding organisation and ID: FWF (PAT2728324)
Project duration: 2025–2028

Animal Suffering and the Politics of Shame

This project, led by Carlo Salzani, aims to develop a politics of shame centred on animal suffering. Rather than focusing on shame as a response to individual wrongdoing, the project explores shame as a response to the social norms that make such suffering acceptable in the first place. Looking at how animals are used and treated in contemporary society, the project shows how widespread animal suffering reveals the moral weakness of these norms. In doing so, it also invites broader reflection on how we relate to the environment and towards other humans. PhD candidate Thomas Kainberger is collaborating on this project under the supervision of Carlo Salzani and Herwig Grimm.

Project lead: Carlo Salzani
Funding organisation and ID: FWF (PAT2083324)
Project duration: 2025–2028

Highlights:
National and International Collaborations

ManyMany1: behavioural flexibility in a cross-species comparison

The ability to adapt behaviour to changing conditions is a key feature of animal cognition. It is often measured using reversal learning tasks. Despite their widespread use, the comparability of these tasks across different species remains unclear. Systematic differences in experimental design make comparisons across taxa difficult. In an article published in *Nature Human Behaviour*, a group of authors including Ludwig Huber and Raoul Schwing from the Messerli Research Institute discussed the benefits of big-team science. The large-scale collaboration was launched in 2025 and opens up a promising path towards a more robust and equitable science of behavioural flexibility.

Pandemic preparedness: One Health and AI

Led by the Competence Center for Food Safety at the University of Munich and together with 16 other institutions from Europe, the United States and Uganda, the interdisciplinary EU Horizon project "From Science to Action: AI Hub for One-Health Pandemic Preparedness and Response Using Highly Pathogenic Avian Influenza as a Model" was submitted in September 2025. Representing Vetmeduni Vienna are the Centre for Systems Transformation and Sustainability in Veterinary Medicine (Sonja Hartnack) and the Messerli Research Institute (Christian Dürnberger and Herwig Grimm). If approved, the OneHPai project aims to develop a novel AI-supported risk management system that will strengthen Europe's capacity to detect and respond to emerging zoonotic pandemics. The overarching aim is to shift from a reactive approach to a proactive, data-driven and participatory model of pandemic preparedness.

Veterinary ethics in companion animals

Svenja Springer is a Senior Researcher at the Centre for Companion Animal Welfare at the University of Copenhagen (Head: Peter Sandøe), where her research focuses on veterinary ethics. In collaboration with project partners, she has conducted empirical studies to investigate, for example, dog and cat owners' attitudes towards modern small-animal veterinary practices and their impact on animal welfare. These studies aim to identify opportunities and challenges within the veterinary profession and to develop sustainable solutions for practice. Through interdisciplinary approaches and exchange with experts, this research contributes to the promotion of responsible pet ownership and to a better understanding of the needs of companion animals.

The ManyBirds project: a big-team science approach to understanding avian neophobia

The ManyBirds project is a global open-science collaboration (co-founded by MRI researcher Megan Lambert) that advances the study of avian cognition through large-scale, standardised multi-site research. In its first empirical study, the consortium examined neophobia – the avoidance of novelty – using data from over 1,400 birds representing 136 species. The findings reveal consistent differences in neophobia across taxonomic levels and suggest that ecological factors such as dietary specialisation and migration shape its evolution. The project thus underlines the potential of big-team science to make broader behavioural patterns visible.

Fitness consequences of neophilia

As part of a project on curiosity funded by the Austrian Science Fund (PI: Megan Lambert), doctoral candidate Cornelia Habl spent a year with collaborator and co-supervisor Rachael Shaw at Victoria University of Wellington in New Zealand. During this time, she collected data on wild toutouwai (North Island robins) that allow her to analyse individual variation and potential fitness consequences of neophilia (attraction to novelty), a key component of curiosity.

Innovation and tool use in cockatoos

A collaboration between researchers at the University of Lincoln, the Lincolnshire Wildlife Park and the Messerli Research Institute, involving Jennifer Colbourne and Alice Auersperg, sheds new light on the phylogenetic distribution of innovation. Cockatoo species closely related to the Goffin's cockatoo perform at comparable levels to goffins in general innovation tasks using a multi-access box. In tasks requiring tool innovation, however, they are consistently outperformed by Goffin's cockatoos. This dissociation suggests that general problem-solving competence is not a predictor of tool innovation capacity. The findings also reopen the debate about the role of island habitats and island-like ecological conditions in the emergence of tool use.

PhD Programmes and Doctoral Schools

Doctoral School Programme in Cognition and Communication 2

This successful doctoral school programme has been running since 2011 at the University of Vienna and the University of Veterinary Medicine, Vienna (deputy spokesperson: Ludwig Huber). The programme has been extended twice, resulting in a total of three five-year cycles. This generously FWF-funded interdisciplinary doctoral training programme comes to an end in 2026 – leaving behind a series of innovations that are now central components of several Vienna doctoral schools. At the Messerli Research Institute, Louise Mackie successfully completed her PhD project on overimitation in dogs in 2025. As an associated PhD student, Jeroen Zewald continued his studies on innovative behaviour in Goffin's cockatoos before beginning research on object understanding in macaques in Bali (Indonesia) in autumn 2025.

Photo: private

The professors participating in the doctoral school programme met at Grundlsee to mark the completion of the project.

Vienna Doctoral School of Philosophy (VDP)

The Vienna Doctoral School of Philosophy is an international hub for doctoral projects in philosophy with the aim of promoting the plurality of philosophical traditions, methods and ways of thinking. In 2025, as part of the VDP programme, Erich Linder, Micol Volonteri and Konstantin Eckl were supervised at the MRI by Herwig Grimm, who is also a member of the Philosophy as Conceptual Engagement doctoral project at the University of Vienna. This FWF doc.funds programme runs from 2023 to 2028. The programme positions itself between dogmatic exclusion and resigned pluralism and stands for a cautious optimism. Despite methodological diversity, there is an overarching goal: conceptual engagement – the critical reflection on and clarification of our concepts.

Interdisciplinary One Health PhD Programme at the University of Veterinary Medicine, Vienna

In this doctoral programme, running from 2023 to 2027, Isabella Pali and Rupert Palme jointly supervise doctoral candidate Simona Winkler, who was chosen through an international competitive selection process. This One Health–oriented project on allergic diseases investigates how specific weaning conditions influence stress levels in dairy cows and whether this consequently alters the protein composition of their milk. Such changes may ultimately affect the properties of the milk and, for example, influence immune responses in human consumers. In this respect, the project links livestock welfare and its influence on food quality with human health.

In October 2025, the One Health PhD programme retreat was held in Gols, where students presented and discussed their projects.

Photo: Kathrin Rychli-Kober

PhD and Doctoral Degree Recipients

(in alphabetical order)

Aila Fakhimahmadi

Alternaria alternata *allergens for treatment and prevention of fungal allergy*

In her PhD thesis, Aila Fakhimahmadi investigated whether the allergen Alt a 1 from *Alternaria alternata* changes when bound to micronutrients like iron, quercetin or vitamin A. The "loaded" form showed reduced IgE binding and lower IgE induction, leading to weaker allergic responses in vitro and in mice. Immune reactions were more balanced, partly via the aryl hydrocarbon receptor. The fungus produced more allergen under iron scarcity. Overall, micronutrient binding lowers allergenicity and suggests new treatment strategies.

Dominik Hajosi

Apples and oranges in animal research: the challenges of harm–benefit analysis and its operationalization in transplantation studies

The aim of Dominik Hajosi's dissertation was to examine the current application of harm–benefit analysis (HBA) in Europe and to develop a structured methodological framework to support its consistent and transparent use. A key outcome was the development of a novel HBA method and its application in a case study involving a large-animal transplantation model. His work was recognised with the Vetmeduni Merit Scholarship.

Katherine Harrington

Innovative problem-solving and long-term memory in wild falcons

In 2025, Katherine Harrington defended her thesis on innovative problem-solving and long-term memory in wild striated caracaras, a rare island falcon species. She also published two manuscripts: a review article highlighting caracaras as an overlooked model in cognitive ecology, and original research demonstrating the ability of striated caracaras to adapt their behaviour to changing conditions. In October, she took up a postdoctoral position to further explore the ecological and evolutionary foundations of cognition in falcons.

Louise Mackie

Overimitation in dogs

In her thesis, Louise Mackie examined why dogs imitate irrelevant actions performed by their caregivers and found that dogs copy these actions even when they know how to solve a task more efficiently. Similar findings have also been reported in children. This suggests that such imitative behaviour does not stem from causal misunderstandings but is based in purely social motivations. The topic has since been expanded within the ManyDogs 2 project to investigate which traits make a dog an "overimitator".

Ariane Veit

Social learning in free-ranging domestic pigs

In February 2025, Ariane Veit successfully defended her PhD thesis, in which she investigated the circumstances under which adult domestic pigs learn by observing others. Pigs were shown to be able to solve a complex two-step task by observing either conspecifics, humans or non-social demonstrations and that they preferred information provided by close social partners, particularly if they were more sociable themselves.

Photos: (1) Thomas Suchanek/Vetmeduni, (2) private, (3) Katie J. Harrington, (4) private, (5) Florian Uhl

PhD and Doctoral Students

(in alphabetical order)

Jiao-Ling Appels

The impact of Chiari-like malformation and syringomyelia on the quality of life, behaviour, cognition and expression in Pomeranians

In 2025, I completed my master's degree at Vetmeduni and continued my work here as a PhD student with a self-chosen research topic. My project focuses on improving the welfare of Pomeranians by investigating the impact of a neurological condition from different perspectives. During the first months of my PhD, I focused on preparing the data collection for my first study; this process revealed opportunities to add further complementary studies.

Jennifer Anne Colbourne

Tooling innovation in children and Goffin's cockatoos (Cacatua goffiniana)

My PhD thesis, submitted in 2025, was very favourably reviewed by examiners Dorothy M. Fragaszy and Jean-Baptiste Leca, and my defence took place in March 2026. My last unpublished chapter has since been accepted with minor revisions in a special issue of *Acta Psychologica*. What was most important for me in 2025, however, was having one of my chapters, in which I propose a new theory of tool use origins together with Alice Auersperg, published in the prestigious journal *Biological Reviews*.

Konstantin Eckl

A tempered rationalism for animal ethics

In 2025, as part of my doctoral studies, I had the opportunity to contribute to a project dealing with the problem of long-term shelter dogs which will hopefully have a positive impact on the situation as it presents itself in Austria. As an ethicist, it is easy to become lost in moral theory and lose sight of the reality of actual animals. The access to practical realities and the relevant expertise that this project afforded me renewed my appreciation for the delicate and important connection between ethical theory and real-life practice.

Leslie-Ann Eickhoff

Dogs' and infants' perception of causality

For me, the most important event in 2025 was starting the data collection for my first study, in which I gather eye-tracking data from both dogs and human infants. Both groups provide unique challenges but are also very interesting to work with. Sharing and discussing my work with other researchers at the Austrian-Bavarian Child Development Meeting was another highlight for me, as I received some valuable feedback on my project.

Photos: (1) privat, (2,3,4) Thomas Suchanek/Vetmeduni

Karoline Gerwisch

Overimitation in dogs: the influence of relationship quality

The most important events in 2025 for me as a PhD student were the publication of my study "Comparing overimitation between assistance dogs and family dogs at home" and the completion of data collection with 59 puppies from nine litters bred across Austria for my second study. The start of data collection for my third study was also an important milestone, and I am looking forward to working with more dogs and their human partners in 2026.

Cornelia Habl

Individual variation and fitness consequences of neophilia in wild North Island robins (Petroica longipes)

The most important event for me in 2025 was my return to Vienna after a one-year sojourn in Wellington, New Zealand, made possible by the Marietta Blau Grant. First, I had to finish data collection on time for my projects on novel preferences in North Island robins and on kākā parrots' reactions to a model of a dead conspecific, as well as tying up all loose ends, and then focus on settling back into life in Vienna and starting the analysis of the data collected during my stay in New Zealand.

Thomas Kainberger

Animal ethics and social critique: toward an ethico-politics of shame

For me, the most important event in 2025 was the start of my doctoral studies at Vetmeduni in October as part of the FWF-funded research project "Animal Suffering and the Politics of Shame". Another important and rewarding event was the publication of a co-authored paper, "Attending with shame to the animal crisis", which allowed me to gain some valuable experience for my PhD in advance.

Johanna Karg

Stigmatization of a profession? An empirically informed ethical analysis of veterinary work in slaughterhouses

A major highlight in 2025 was the invitation to the "At the Animal Contact Zone" conference at Seoul National University (SNU), where I presented a segment of my PhD project on the societal perception of official veterinary inspectors working in slaughterhouses in Austria. It was fascinating to engage with the well-established field of veterinary ethics in South Korea and its current research priorities. I look forward to future collaborations between the Messerli Research Institute and SNU.

Photos: (1) Thomas Suchanek/Vetmeduni, (2) Michael Ellenbogen, (3) privat, (4) Alex Kasses

Anna Elisa Kempf

Dexterity in tool use in the Goffin's cockatoo

As a new PhD student, the most important event for me in 2025 was my first encounter with Goffin's cockatoos. Learning to work with a new species is always a challenge, but with the amazing support from the team, I was immediately accepted into the flock. I was especially impressed by the Goffins' ingenuity and technical skills, as well as by their gentle and curious nature.

Poppy Lambert

Comparing learning with weight cues between birds and primates

It was great to publish a study at the end of 2025 that we had conducted several years earlier. In the paper, we report how difficult Goffin's cockatoos found a particular type of discrimination task with weight cues. I had the opportunity to give an overview of the results of my PhD research and what I think they mean at the Winter Conference of the Association for the Study of Animal Behaviour (ASAB) in December.

Erich Linder

Pets, patients and practical reason

In 2025, my primary focus was on drawing conclusions from my dissertation and securing funding for its completion. The main thesis I defend is that ordinary conceptions of animals – such as pets, patients and vermin – have moral relevance because of the roles they play in practical reasoning. Specifically, I conclude that these ordinary conceptions are crucial for a moral agent's self-understanding and constitute a necessary condition for their autonomy.

Özge Nasa

Dexterity and beak use in parrots

One of the most important milestones of my first year as a PhD student was attending the Behaviour 2025 conference in India and delivering my first talk as a doctoral researcher. Being part of such a well-organised scientific event was immensely exciting, and presenting my research to such a large audience for the first time was deeply rewarding. Interacting with researchers from around the world inspired me and significantly enriched my scientific thinking.

Gabriella Elena Smith

Cognitive underpinnings of curiosity in kea parrots (Nestor notabilis) *and capuchin monkeys* (Sapajus apella)

The most important event for me in 2025 was reaching the final stages of my PhD: publishing two of my three scientific papers and transitioning from data collection to thesis writing. 2025 marked the moment I consolidated my data and analyses – supported by an advanced R linear models course in Göttingen together with fellow doctoral students – and began preparing to complete my PhD.

Photos: (1) Heidelinde Wanas/Vetmeduni, (2) Joelle Colbourne/Vetmeduni, (3) Karin Bayer/Vetmeduni, (4, 5) Thomas Suchanek/Vetmeduni

Ana Tomašić

Intention reading in dogs

2025 was full of special events and memories. Two that I would like to highlight are attending the Dubrovnik Conference on Cognitive Science (DUCOG), where I met many amazing researchers, including Josep Call, and conducting a study using a novel mobile eye-tracking technology.

Micol Volonteri

Ethical and epistemological challenges in harm–benefit analysis and biomedical research

In the summer of 2025, I presented the first paper of my dissertation at the Italian National Conference of PhD Students in Philosophy in Reggio Emilia. My aim was to highlight the topics of the 3Rs and HBA in the regulatory assessment of animal research project proposals within a multidisciplinary research and discussion context. I also contributed to the framework and content of an empirical study on the benefit aspect in harm–benefit analyses for a survey in Italy.

Simona Winkler

One Health in allergology: comparing weaning conditions of cattle with beta-lactoglobulin and binding partners in milk

In this PhD project, I worked as part of a team of researchers investigating how different weaning conditions influence milk composition, including proteins, ligands and cortisol. In 2025, we tested 2,700 raw milk samples for their cortisol and total protein content. We also reached the final stages in the establishment of a high-throughput ELISA test for the specific milk protein beta-lactoglobulin (BLG). The successfully established cell culture experiment will provide insights into the responses induced by different milk samples in a human immune cell line.

Jeroen Stephan Zewald

From combinations to innovations: how object play helps cockatoos in innovating new solutions

In 2025, I was awarded the Marietta Blau Grant to carry out a study with long-tailed macaques in Bali, Indonesia. This was definitely the event that shaped my entire year. I had the opportunity to travel to Bali and work with these extremely curious and playful monkeys at Uluwatu Temple. I really had a blast working in the tropical forest and observing the animals' crazy antics. The results of the study still have to be analysed, but my time in Bali with the macaques was definitely the highlight of the year for me.

Photos: (1) Thomas Suchanek/Vetmeduni, (2) privat, (3) Michael Bernkopf/Vetmeduni, (4) privat

Research Institutions at the MRI

Photo: Lucrezia Lonardo/Vetmeduni

Clever Dog Lab (CDL)

Intensive canine research continued at the CDL in 2025. A total of 18 researchers (9 postdocs and 9 PhD candidates) and 32 students were involved in major research projects and student theses.

In the FWF project on overimitation led by Ludwig Huber, Shany Dror developed a new method for administering oxytocin to dogs in order to test at a later stage whether this increases their tendency towards overimitation. In a further FWF project on perspective-taking in dogs, also led by Ludwig Huber, Lucrezia Lonardo conducted several elaborate studies on implicit sensitivity to the mental states of humans and on experience projection. We found evidence that dogs anticipate human behaviour even when the humans themselves are not present.

Funded by UK Research and Innovation (UKRI) and in collaboration with developmental psychologists and philosophers at the University of Stirling, Zsófia Virányi and Ariane Veit compared a basic form of reflective thinking in dogs, pigs and two-year-old human children. They investigated whether adapting to the perspectives of others is a suitable context for assessing this complex ability in non-verbal beings.

Methods used include behavioural tests as well as stationary and mobile eye tracking. Our professional trainers Laura Laussegger and Marion Umek trained more than 30 dogs to prepare them for the eye tracking and fMRI tests. In an FWF project, Christoph Völter, together with Andrea Sommese and Ana Tomašić, investigated dogs' ability to recognise intentions and communicative signals. In his second FWF project, Christoph Völter, together with Leslie-Ann Eickhoff, Beyza Gökçen Çiftçi, Jonathan Kominsky and Gergely Csibra of the Central European University (CEU), explored the perception of causality and animacy in infants and dogs.

In a real-world setting, Karoline Gerwisch showed that a positive relationship between PTSD assistance dogs and their human partners can reduce stress for both. Stefanie Riemer published the first study on addiction-like behaviour in dogs with extreme toy motivation, attracting considerable media attention. A follow-up study is currently under review by a scientific journal. Another focus within Companion Animal Management was the analysis of dogs' emotional facial expressions using machine learning.

Photo: Roobert Bayer

Haidlhof Research Station

The Kea Lab underwent a leadership transition in 2025, with Raoul Schwing accepting a new position at University College Roosevelt and Megan Lambert taking over as head of the lab. It was a busy year for the Kea Lab, with a total of seven master's theses and IMHAI projects on kea cognition, olfactory abilities and play behaviour. Two of the three master's students who defended their theses in 2025 have already accepted PhD positions.

Megan Lambert's FWF stand-alone project on curiosity in keas continued with studies on the birds' innovative problem-solving abilities, their attention to events that go against expectations about the physical world, and whether they can discriminate between useful and redundant information. Her research on the FWF Elise Richter project was completed in September, with final studies on into the keas' use of auditory cues to infer weight and comparisons with more neophobic species such as ravens, in collaboration with the University of Vienna.

In collaboration with the Autonomous University of Barcelona, Alex Taylor's ERC project on probabilistic reasoning in keas was also continued with additional studies on the birds' inferential abilities.

Associated Centres

Photo: Mark O'Hara

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

In 2025, the Goffin Lab continued to use the Goffin's cockatoo as a model species for innovation in the technical domain. Among other outputs, the lab published a follow-up study in *PLOS ONE* examining weight perception in this species. The study showed that cockatoos outperformed primates, including apes, in a weight selection task. When tested in a weight-sorting task using a methodology more closely aligned with primate studies, however, their performance became more primate-like. This pattern indicates strong task sensitivity and cautions against making cross-taxon comparisons based on non-equivalent paradigms.

A presubmission inquiry has been accepted by the *Journal of Comparative Psychology* for a study that directly applies the Goffin's cockatoos' weight-selection methodology to capuchin monkeys, enabling a more controlled comparison assessment. Özge Nasa also published a theoretical paper presenting an in-depth analysis of the beak-and-tongue apparatus of parrots, providing a valuable anatomical and functional framework for understanding the physical basis of parrots' problem-solving abilities. Teresa Rössler published a study in *PLOS ONE* demonstrating how motivational factors, specifically neophobia, influence performance in an innovation arena. The findings show that variation in innovation scores can arise from approach tendencies rather than from problem-solving capacity.

In addition, a comprehensive theoretical review by Jennifer Colbourne and Alice Auersperg, proposing a new account of the emergence of tool use through playful object combination, was published in *Biological Reviews* on 31 December 2025. Fieldwork at the Goffin Lab Tanimbar continued throughout the year. The team collected further data using a newly developed feeding platform and tested automated tracking approaches for identifying individual animals. The Tanimbar field team, Berenika Mioduszewska and Mark O'Hara, also obtained several months of footage from nest cameras, which are currently being systematically analysed.

Wolf Science Center (WSC)

Dogs are famous for their cooperation with humans. But is this cooperation in the sense of pursuing the same goal as two independent partners – or does it rather reflect a willingness on the part of dogs to comply with the human lead? In more practical terms: is it as easy to teach wolf pups and dog puppies to play fetch, tolerate a muzzle or learn simple commands? In a paper authored by Gwen Wirobski and published in *Frontiers in Ethology*, we analysed such different forms of cooperation to address fundamental but still outstanding questions about cooperation between dogs and humans. In another study published in *Frontiers in Psychology* together with Marianne Heberlein and Lina Oberließen, both trainers at the Wolf Science Center, we also investigated whether pet dogs communicate with humans in an intentional manner. The results show that they do: dogs indicate the location of food more intensively to someone who does not have this information and who appears willing to share the treat rather than keep it for themselves.

Tests with hand-raised animals at the WSC also continued this year: as part of an FWF project led by Ludwig Huber, and adopting methods developed at the Clever Dog Lab, all wolves and pack dogs at the WSC were tested and compared with family dogs with regard to their ability to adopt another's perspective.

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

The link with the Medical University of Vienna is particularly important for the *Comparative Medicine* team because of its bridging function and its research in immunology and allergology. As part of the IPA, *Comparative Medicine* is also embedded within the CePii.

The field of allergology has not only shaped the IPA but is also firmly integrated into the Messerli Research Institute and interpreted within the context of One Health.

Department of Philosophy, University of Vienna

Intensive exchange and regular collaboration exist with the Department of Philosophy at the University of Vienna, institutionalised in the form of an unlimited honorary professorship and the secondment of Herwig Grimm. The collaboration encompasses in particular the following areas: teaching, collaboration within the FWF-funded doctoral school programme for Philosophy as Conceptual Engagement, the Vienna Doctoral School of Philosophy and the FWF Cluster of Excellence Knowledge in Crisis. The Department of Philosophy is large by international standards and can draw on a wide range of expertise, which benefits the interdisciplinary character of the Messerli Research Institute.

Collaborations with our Partner Universities

University of Veterinary Medicine, Vienna

- Research Institute of Wildlife Ecology
- Clinical Centre for Small Animal Health and Research
- Clinical Centre for Equine Health and Research
- Clinical Centre for Population Medicine in Fish, Pig and Poultry
- Clinical Centre for Ruminants, Camelids and Herd Health Management
- Konrad Lorenz Institute of Ethology
- Animal Care School
- VetCore
- Centre for Biological Sciences
- Centre for Food Science
- Veterinary Public Health
- Centre for Systems Transformation and Sustainability in Veterinary Medicine
- Centre for Animal Nutrition and Welfare

University of Vienna

- Department of Functional and Evolutionary Ecology
- Department of Cognition, Emotion and Methods in Psychology (SCAN-Unit)
- Department of Behavioral and Cognitive Biology
- Vienna Cognitive Science Hub
- Department of Philosophy
- Department of Developmental and Educational Psychology

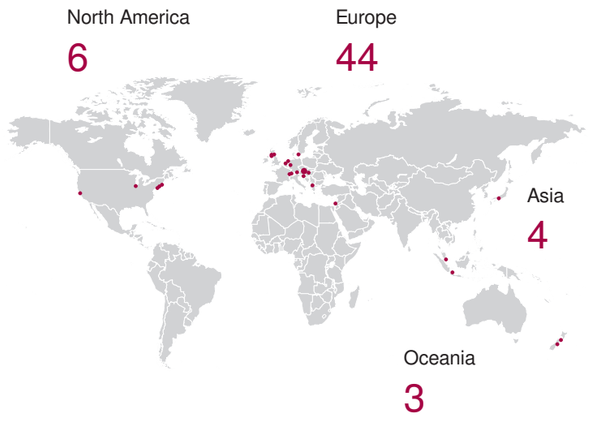
Medical University of Vienna

- Department of Biomedical Imaging and Image-Guided Therapy
- Immunology Research Cluster
- Austrian Pollen Information Service
- Department of Dermatology
- Department of Otorhinolaryngology
- Division of Gastroenterology and Hepatology, Department of Medicine III
- Department of Child and Adolescent Psychiatry
- Department of Psychiatry and Psychotherapy
- Centre for Medical Physics and Biomedical Engineering
- Centre for Pathophysiology, Infectiology and Immunology

Other National Research Partners

- Central European University
- Department of Biosciences, University of Salzburg
- Gut Aiderbichl
- Federal Higher Teaching and Research Institute for Agriculture Raumberg-Gumpenstein
- Karl Landsteiner University of Health Sciences, Krems
- Catholic Private University Linz
- Austrian Agency for Health and Food Safety (AGES)
- Austrian Academy of Sciences
- Professional Assistance Network, Vienna
- Vienna University of Technology (TU Wien)
- TAT WAZ Vienna – Animals as Therapy
- University of Applied Arts Vienna
- University of Natural Resources and Life Sciences, Vienna (BOKU)
- University for Continuing Education Krems
- Center for Health & Bioresources, AIT Austrian Institute of Technology
- Schönbrunn Zoo
- Wels Zoo

Overview of our International Research Partners



Cooperations with Swiss Partners

Advancing 3R: Swiss National Science Foundation (SNSF) – National Research Programme

The National Research Programme “Advancing 3R – Animals, Research and Society” (NRP 79) promotes the further development and implementation of the 3R principles (Replace, Reduce, Refine) in Switzerland. The aim is to replace animal experiments through innovative methods, reduce their number and minimise the burden on animals. The programme funds interdisciplinary projects in basic research, applied research and the regulatory field that combine scientific excellence with practical feasibility. It also serves to strengthen dialogue between research, public authorities and industry in order to embed 3R approaches sustainably within the scientific system. Herwig Grimm from the MRI serves as President of the Scientific Steering Committee. As a result of this commitment, events have been organised and collaborations with Swiss organisations have emerged, for example with the Institute of Laboratory Animal Science at the University of Zurich and its director, Thorsten Buch.

Species conservation and animal ethics: MRI collaboration with Borneo Orangutan Survival (BOS) Switzerland

For some time now, Judith Benz-Schwarzburg has been collaborating in the fields of animal ethics and species conservation with BOS Switzerland, the Swiss partner organisation of the Borneo Orangutan Survival Foundation (BOSF).

The Foundation operates the world’s largest orangutan rehabilitation and reintroduction programme in Borneo and combines species conservation with reforestation and educational work. As part of an IMHAI master’s project, the Messerli Research Institute is examining the normative foundations of rehabilitation and release programmes, with BOSF / BOS Switzerland serving as research partners.

On 19 September 2025, the Messerli Research Institute hosted a joint workshop titled “The Role of Research and Innovation in Orangutan Conservation”, bringing together international researchers and species conservation experts and attended by Science Counsellor Jonas Baumann of the Swiss Embassy in Austria. The cooperation also included several outreach activities, among them contributions to Kinderuni Wien (Vienna Children’s University) and support for the travelling exhibition “Moving Pictures”, curated by BOS Switzerland, at the Botanical Garden of the University of Vienna. The collaboration will continue, with plans for further academic events on species conservation and ethics.

Photo: AdobeStock

Addictive-like behaviour in dogs

In collaboration with researchers at the University of Bern, we published a pioneering study investigation addictive-like behavioural traits in pet dogs with extreme toy motivation. Our findings indicate that a subset of highly fixated dogs meets established criteria for behavioural addictions, including salience, craving, impaired self-control and mood modification.

Evidence for these traits was observed through heightened arousal and frustration during periods of toy unavailability, as well as continuous focus on these unavailable toys while foregoing primary reinforcers such as food and social interaction with the caregiver. Post-test observations also revealed a persistent inability to settle, while owner questionnaires suggested the presence of tolerance, withdrawal and continued engagement despite negative consequences. These results suggest that dogs may be the only non-human species to develop spontaneous addictive-like behaviours without artificial induction. A follow-up study is currently under revision.

Human–animal relationships in animal-assisted child and adolescent psychotherapy: foundations, ethics, implementation

The collaboration between the University Hospital of Psychiatry Zurich (PUK) and the Messerli Research Institute in Vienna on animal-assisted psychotherapy for children and adolescents was initiated in 2025. At its centre is the development of a joint research proposal that systematically combines animal ethics foundations, psychotherapeutic practice and empirical evidence. Three project strands – on ethically reflected intervention, on the role of dogs as therapy partners and on the development of evidence-based guidelines – are being coordinated scientifically and brought together within an integrative design. A core cross-cutting theme is the question of the “voluntariness” of therapy animals, including conceptual clarification, empirical operationalisation (among other things through video analysis and data-based evaluation) and practical implementation while fostering a “culture of care”. The aim of the collaboration is to establish a methodologically sound, ethically reflected and cross-site comparable research programme.

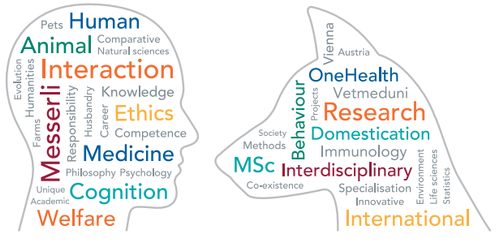
Teaching

Interdisciplinary Master's Programme in Human–Animal Interactions (IMHAI)

IMHAI is a research-oriented master's programme that prepares students for an academic career in the field of human–animal interactions. To keep pace with this fast-developing field and with the expansion of the Messerli Research Institute, teaching was transitioned to a revised curriculum in 2025. Adjusting to the interest and motivation of the latest student cohorts, the new curriculum has a stronger focus on the interconnectedness of human, animal and environmental health at individual and global levels as well as on practical aspects of human–animal interactions. For the latter aim, new courses have been added on companion animal management, animal husbandry, animal handling and animal training. Recognising the potential and value of research projects initiated by the students themselves, the new curriculum formally accommodates this process and helps students turn their ideas into well-defined research questions.

Reflecting the Institute's expansion, the team of IMHAI lecturers grew in 2025 as well. In addition to staff from the Messerli Research Institute, the Centre for Animal Nutrition and Welfare and the Domestication Lab, Alexa Müllner-Huber from the Faculty of Psychology at the University of Vienna also joined the team. From March 2026 onwards, she will teach an entire course on psychological methods that can be used to study what drives humans' interactions with animals.

In 2025, we were pleased to select the 24 most motivated and best-qualified students from among 43 applicants. Building on very different backgrounds, ranging from psychology, sociology, ethnology and philosophy to biology and veterinary medicine to animal production, environmental engineering and agricultural economics, the students began their studies in October 2025 and already in their first semester showed remarkable interest and creativity in identifying and discussing issues related to human–animal interactions.



At the same time, the more advanced IMHAI students not only continued to develop and conduct their research projects but also presented them at two formal events held by the Messerli Research Institute. Many of these projects addressed novel research questions and led to new collaborations both within and beyond Vetmeduni, thereby bringing additional expertise, such as ethnography or global change biology, into the programme. In recognition of their commitment and independence, the third-semester students were invited for the first time in 2025 to present their research projects during the visit of the Messerli Research Institute's Scientific Advisory Board. Furthermore, the IMHAI Symposium, a scientific event that the students organise themselves, took place a few months later.

In 2025, ten IMHAI students completed their studies. The titles of the completed IMHAI master's theses, covering a diverse range of topics, are listed below:

- *Manual Coding vs. Facial Landmark Analysis: Comparing Approaches to Classify Dogs' Emotional Expressions Using Machine Learning*
- *Which role does the reduction of livestock farming fulfil in political strategies for the socio-ecological transformation of agriculture in Germany?*
- *Olfaction in kea (*Nestor notabilis*): Inter-individual variability in behavioural responses to olfactory curiosity in kea (*Nestor notabilis*)*
- *Body Self-Recognition in Goffin's Cockatoos*
- *Investigating Dogs' Capacity for Reflective Responsiveness to Evidence*
- *Effect of Urbanization on Neophobic Behaviors in Wolves*
- *Behavioral responses of wild mammals to a novel object along an urban development gradient*
- *Consolation Behavior in Domestic Pigs*
- *The Power of Choice: consent-based vs. traditional equine training methods*
- *The Last Moment – An empirical investigation of horse owners' expectations on the euthanasia of their horses*

Additional Teaching Activities and Degrees

MRI staff are heavily involved in teaching within the Veterinary Medicine programme at the University of Veterinary Medicine, Vienna, as well as in various programmes at the two other partner universities. Principal teaching areas are veterinary ethics, animal ethics, applied ethics, comparative medicine, immunology, allergology, animal behaviour and cognitive science. These subjects are taught by MRI staff not only in Vienna, but throughout Europe and beyond.

Svenja Springer and Christian Dürnberger taught the subjects Veterinary Ethics and Communication in Veterinary Medicine as part of the interdisciplinary and international VetNEST Summer School at the University of Veterinary Medicine Budapest from 7 to 11 June 2025.

Photo: Thomas Suchanek/Vetmeduni

Students attending a lecture.

Ludwig Huber holds his *habilitation* at the University of Vienna, where he also serves as deputy spokesperson for the doctoral school programme Cognition and Communication, which includes the CogCom/BeCogBio seminar each semester. In addition, he has participated in the Seminar on Current Topics in Philosophy, Theology and Biology every semester for many years. At the Medical University of Vienna, he teaches each semester in the CLINS Basic Lecture Series (Doctoral Programme in Clinical Neurosciences). He has also taught extensively in an international context – for example at Mahidol University (Thailand), the University of Rennes (France), the Autonomous University of Tlaxcala (Mexico) and Barnard College (New York, USA).

Vienna Animal Studies Lecture Series

Starting in the 2025 summer semester, the interdisciplinary and interdepartmental Vienna Animal Studies Group, with participation of the MRI, has organised a lecture series hosted across several universities in Vienna. The series addresses a wide range of topics in animal ethics, philosophy, conservation and related fields. Monthly lectures by Vienna-based researchers are complemented by a visiting lecture series featuring international scholars in Vienna who wish to present their work.

Supporting and supervising University of Veterinary Medicine Vienna students, including their diploma theses, is a key priority for the staff of the Messerli Research Institute alongside their teaching activities on campus. In total, 25 master's and diploma theses were successfully completed at the University of Veterinary Medicine Vienna, partner universities, and other institutions. The following titles, among others, were addressed:

- *Methodological Limitations of Using Animal Models in Cognitive Science Research*
- *Testing the Waters – Comparing Weight Perception in Kea (*Nestor notabilis*), Ravens (*Corvus corax*) and Crows (*Corvus corone/cornix*)*
- *Tool holding techniques in Goffin's cockatoos*
- *World-Illuminating Descriptions: Alice Crary on Adequate and Inadequate Representation of Animals in Ethics*
- *Communication skills of veterinarians – An insight in the opinion of Austrian farmers*

Examination and Coordination Centre at the MRI

Assistance and Therapy Dogs

The Examination Centre for Assistance and Therapy Dogs at the Messerli Research Institute, established to implement § 39a of the Austrian Federal Disability Act, is unique at the international level. The pioneering work within the European Committee for Standardization (CEN) to develop a uniform standard for assistance dogs was successfully continued. The working group “Lifelong wellbeing of assistance dogs”, chaired by Karl Weissenbacher, successfully completed its work on the development of a standard during the reporting year. The standard, EN 17984-2 Assistance dogs – Part 2: Dog lifetime welfare, was published in November 2025 in the three official languages English, German and French. Karl Weissenbacher was re-elected chair of the working group, which will continue its activities.

At Austrian Standards, the national standards body for Austria, Karl Weissenbacher, Head of the Examination Centre, continues to chair Committee 196, “Assistive products for persons with disability”.

In the academic field, the following papers were published or presented at international conferences in 2025:

- *“No evidence of increased stress levels of service dogs, signal dogs and therapy dogs in comparison to family dogs without special tasks”; L. Huber, S. Mliner, S. Bruckner, K. Weissenbacher; Canine Science Forum, Hamburg, June 2025*
- *The effects of PTSD-assistance dogs’ work on their salivary cortisol levels and their handlers’ quality of life; K. Gerwisch, K. Weissenbacher, M. Proyer, R. Palme, L. Huber; 2025 Canine Science Forum, Hamburg*
- *“Standardised guide dog assessments: stress and performance across handlers”; F. Färber-Morka, L. Glenk, K. Weissenbacher, A. Bremhorst; 2025 Canine Science Forum, Hamburg*
- *“Balancing objectivity and welfare: physiological and behavioural responses of guide dogs during an independent certification protocol”; V. Färber-Morak, L. Glenk, K. Weissenbacher, A. Bremhorst;* Animals *2025,* 15*(13), 1896*

During the year under report, 1,632 therapy dog teams (+17% vs. 2024) were assessed in 195 examination sessions (+22% vs. 2024). For assistance dogs, 65 team assessments (–10% vs. 2024) and 36 quality assessments (+6% vs. 2024) were carried out.

The Examination and Coordination Centre is regularly contacted with media enquiries from print, online, radio and television. Animal welfare ombuds offices, state governments and federal ministries also consult with the Coordination Centre for information on dog-related matters and dog keeping. This is further reflected in the co-option of Karl Weissenbacher to the permanent working group of the Austrian Animal Welfare Council and his nomination to the commission for implementing the ban on extreme breeding established by the Federal Ministry of Labour, Social Affairs, Health, Care and Consumer Protection.

A highlight in our media relations was the presentation of the KYNtegra Award to the four best training associations in the field of therapy dogs, supported by Nestlé Purina. The winners were selected by an independent panel of judges, with prizes presented at a media event. The media response was very strong: print, online and social media coverage reached 15.5 million people. The various reports generated an advertising value equivalency of €41,208.

The presentation of the KYNtegra Award also marked the tenth anniversary of the Examination Centre.

Photo: Purina

The winners of the Kyntegra Awards 2025 are honoured in the presence of Vice-Rector Barbara Bockstahler.

Assistance Dogs:

Assistance dogs include:
1. guide dogs
2. signal dogs, especially for people with hearing impairments
3. service dogs for people with mobility disabilities

An assistance dog not only has to be suitable in terms of health and temperament but must also complete specialised training with a positive assessment, which is a prerequisite for registering the dog in the disability pass. The status of an assistance dog can only be maintained through regular continuing education.

Therapy Dogs:

The therapy dog accompanies its handler in so-called animal-assisted interventions for people of all ages with cognitive, socio-emotional and motor impairments, behavioural disorders and special educational needs, as well as in health-promoting, preventive and rehabilitative measures.

Recognition as a therapy dog must be renewed annually to maintain this status.

Animal Welfare Qualified Dog Trainers

A total of 190 trainers (+4% vs. 2024) took the examination in 23 assessment sessions in 2025 (+28% vs. 2024), of which 130 passed (–2% vs. 2024). The number of active animal welfare qualified dog trainers now stands at 798.

A total of more than 12,500 hours of continuing professional development were recognised, thereby ensuring the continuous improvement of the quality and knowledge of trainers in Austria.

Involvement in Committees and Advisory Bodies

The staff of the Messerli Research Institute serve in various capacities on committees and advisory bodies dealing with issues relating to human–animal interactions. With their engagement in the Extreme Breeding Commission pursuant to § 44a of the Austrian Animal Welfare Act or the Federal Animal Experimentation Commission as well as the Gene Technology Commisson, the MRI supports the implementation of normative principles in practice.

Overall, the MRI team is engaged in around 60 scientific committees and bodies and, through these roles, assumes responsibility for helping shape both human–animal relationships and the higher-learning landscape. Given the sheer number of these activities, only a small selection of examples can be presented here.

Scientific committees and expert panels	**in a leadership role***
Minding Animals Germany: Chairperson	Benz-Schwarzburg, Judith
European Society for Agricultural and Food Ethics (EurSafe): Vice President	Grimm, Herwig
Steering Committee of the Swiss National Research Programme 79 Advancing 3R – Animals, Research and Society: President	Grimm, Herwig
Supervisory Board Jane Goodall Institute Austria	Huber, Ludwig
Scientific Advisory Board of Schönbrunn Zoo	Huber, Ludwig
ManyDogs 2 Consortium: Leader	Huber, Ludwig
ManyMany: Core Contributor	Huber, Ludwig
Rote Pfote – Cancer Research for Animals: President	Jensen-Jarolim, Erika
ManyBirds: Leader	Lambert, Megan
AMICI, Austrian Microbiome Initiative: Board Member	Roth-Walter, Franziska
EAACI Working Group on Immunomodulation and Nutrition: Secretary General	Roth-Walter, Franziska
Austrian Standards, Committee 196, Assistive Products for Persons with Disability: Chairman	Weissenbacher, Karl
CEN (Comité Européen de Normalisation, European Committee for Standardization), Working Group 2, Dog Lifetime Welfare: Chairman	Weissenbacher, Karl

In addition, staff members of the Messerli Research Institute are actively involved in leadership roles in committees and collegial bodies of the University of Veterinary Medicine, Vienna.

University committees and collegial bodies	**in a leadership role***
Selection Committee for the Rectorate of the University of Veterinary Medicine Vienna: Deputy Chair	Grimm, Herwig
Senate, University of Veterinary Medicine Vienna: Chair	Grimm, Herwig
Messerli Research Institute: Head of Institute	Grimm, Herwig
Head of Department of Interdisciplinary Life Sciences, Vetmeduni	Huber, Ludwig
Curriculum Committee for Equine Sciences, Human–Animal Interaction, Wildlife Management: Chair	Huber, Ludwig
Educational Working Group at Vetmeduni EWG 7: Leader	Springer, Svenja
Messerli Research Institute: Deputy Head of Institute	Virányi, Zsófia

* in alphabetical order

Awards

Megan Lambert received an FWF ASTRA Award, presented at a formal ceremony attended by around 500 guests from politics, science and research, together with the award recipients and their teams and families. The highly competitive ASTRA Awards aim at allowing outstanding researchers to develop long-term research projects at the highest international level and are endowed with funding of one million euros.

Photo: FWF/Dar Knopfdruecker

Megan Lambert received the FWF Astra Award.

IMHAI student **Nikola Schlöglová** received the prestigious 2025 Würdigungspreis of the Federal Ministry for Women, Science and Research for her IMHAI master's thesis on olfaction in kea, supervised by Megan Lambert. After receiving several scholarship offers from universities in New Zealand and Australia, she accepted a PhD position at the University of Western Australia, where she will continue her research at the intersection of cognition and conservation.

Photo: BMFWF/Martin Lusser

Nikola Schlöglová receives the Award of Excellence from Ministerial Councillor Heribert Wulz (on behalf of the Minister of Science).

Dominik Hajosi was awarded the Vetmeduni Vienna merit scholarship for his dissertation "Apples and oranges in animal research: the challenges of harm–benefit analysis and its operationalization in transplantation studies". The work examined the implementation of harm–benefit analysis in Europe and developed a new methodological framework for its transparent application.

Society and Communication

Minding Animals

Minding Animals Germany (MAG), a subsection of Minding Animals International, invited participants to its 2025 annual symposium held at the Nuremberg University of Music. The conference was organised by Judith Benz-Schwarzburg (MRI and the representative from MAG) and Martin Ullrich (Professor of Interdisciplinary Music Research and Human–Animal Studies at the Nuremberg Academy of Music). The symposium featured an interdisciplinary and transdisciplinary programme at a high academic level, ranging from the urgently needed protection of habitat trees to colonial collections of exotic birds in natural history museums.

Illustration: Lena Winkel

Graphic recording created by Lena Winkel during the MAG Symposium 2025.

Children's University

In the summer, 160 eager children attending the Kinderuni Wien (Vienna Children's University) were offered a picture-book cinema presentation on animal ethics and species conservation in the large lecture hall under the title "When the Orangutan Steps Out of the Book". The interactive lecture was delivered by Judith Benz-Schwarzburg (MRI) and Sophia Benz (CEO of Borneo Orangutan Survival Switzerland) and was very well received by the young aspiring researchers. The children are now exceptionally well informed about how similar the great apes are to us and how the last orangutans on Borneo can be rehabilitated, reintroduced into the wild and effectively protected.

Virtual Animals

The Vienna Animal Studies Group organised a lecture series in which Judith Benz-Schwarzburg spoke on the topic of virtual animals in collaboration with the Interspecies Art Hub Vienna, Transformation Austria and Immersium Wien. The event provided the ideal setting for reflecting on the opportunities and pitfalls of the virtual representation of animals in immersive exhibitions.

Photo: Oliver Hirtenfelder/VAS

The Vienna Animal Studies lecture by Judith Benz-Schwarzburg attracted a large audience to the Immersium Wien.

Ethics Classes at the MRI

On 2 December 2025, an upper-school ethics class from Wasa Gymnasium Wien visited the Messerli Research Institute to discuss animal ethics with Judith Benz-Schwarzburg. The discussion ranged widely across topics such as keeping pets, zoo ethics and meat consumption.

Photo: Manuel Roth

Students of the Wasa Gymnasium together with Judith Benz-Schwarzburg.

Jane Goodall Institute Austria

As a member of the supervisory board of the Jane Goodall Institute Austria and as its honorary ambassador, Ludwig Huber helped to initiate projects for animal and species conservation. Following the unexpected death of Jane Goodall on 1 October 2025, it became all the more important to continue in her spirit and carry on her life's work. At a memorial event in Vienna on 9 November 2025, Huber paid tribute both to Goodall's work as a chimpanzee researcher and to her tireless commitment as an environmental activist and icon of peace. In the magazine of the Jane Goodall Institute Austria, *BEinspired*, Huber wrote an obituary for the English primatologist as the personified symbiosis of knowledge and morality.

Photo: Ernst Hammerschmid/Vetmeduni

Remembering Jane Goodall, here during her visit to the keas at Haidlhof.

Tierschutz macht Schule

The Austrian association Tierschutz macht Schule (Animal Welfare Goes to School) is committed to promoting knowledge and awareness of animal welfare, animal ethics and the respectful treatment of animals. The association offers scientifically grounded educational programmes to support schools, teachers and other interested parties in teaching children and young people how to interact responsibly with animals. Christian Dürnberger serves on the Scientific Advisory Board and contributes his expertise in the field of ethics.

Tierschutz macht Schule

Science Academy Lower Austria: "Animals and Us"

The Science Academy Lower Austria offers young people the opportunity to explore a scientifically relevant field in greater depth. Under the title "Das Tier und Wir" ("Animals and Us"), Vetmeduni organised a corresponding course covering the broad field of veterinary medicine and food safety. Johanna Karg, Judith Benz-Schwarzburg and Christian Dürnberger ensured that ethical questions concerning the human–animal relationship also played a central role.

Third Mission: Ethics and Animal Husbandry

Also in 2025, MRI staff were actively involved in transferring knowledge between science/ethics and practical animal husbandry. In workshops, lectures and panel discussions, the focus was on the question of responsibility in the human–animal relationship – with the aim of communicating scientific findings in an accessible way and fostering an open, self-critical exchange about values.

Conference: "Farmer – Who Am I, and If So, How Many?"

On 17 and 18 March 2025, the Messerli Research Institute (Christian Dürnberger), together with the Centre for Technology, Theology and Natural Sciences (TTN) and the University of Munich, organised a transdisciplinary conference at the Evangelische Akademie Tutzing on Lake Starnberg on the many dimensions of responsibility in agricultural work. In the dialogue between academia and practice, the discussion focused not only on economics, environmental protection and food supply, but also on animal welfare.

Infrastructure

The **Clever Dog Lab** at the end of 2025 set up a second room for measuring eye movements in dogs. The lab acquired a second stationary eye-tracking device from Eyelink and created a kind of “dog cinema” in-house as a way to intensify the use of this state-of-the-art method in the future.

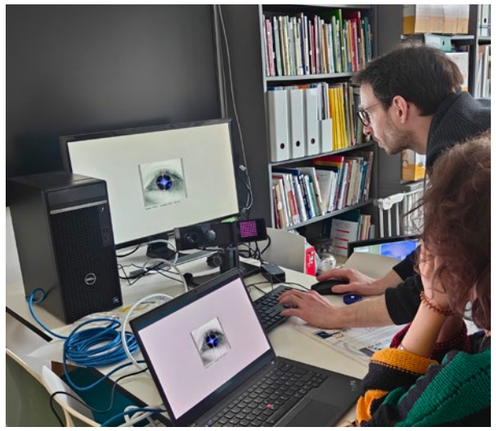


Photo: Karin Bayer/Vetmeduni

Christoph Völter testing the new eye-tracking camera.

Photo: Karin Bayer/Vetmeduni

Markus Fitzka works on the new eye-tracking apparatus in his workshop.

The **Kea Lab** held its twice-yearly “Sand Day”, in which 80 tonnes of sand were brought into the kea aviary to refresh the floor. Our sincere thanks go to the researchers, animal carers and staff at the Haidlhof Research Station for their effort.

Photo: Anna Peyer/Vetmeduni

“Sand Day” at Haidlhof, supported by numerous volunteers.

Events and Special Occasions

Photos: Karin Bayer/Vetmeduni

A celebration in honour of Erika Jensen-Jarolim.

Photos: (1) Dora Kosak/Vetmeduni, (2) Anna Kempf/Vetmeduni, (3) Karin Bayer/Vetmeduni

At the Open Day of the University of Veterinary Medicine Vienna, all three labs – the Goffin Lab, the Kea Lab and the Clever Dog Lab – had their own stands.

Photo: Judith Benz-Schwarzburg/Vetmeduni

Sara Tscholl and Franziska Falkner, organisers of the film screening *Eyes of the Orangutan*, together with speaker Dr. Sophia Benz (CEO of Borneo Orangutan Survival Switzerland).

Photo: Zsófia Virányi/Vetmeduni

Berenika Mioduszewska and Mark O’Hara traveled to Skopje, North Macedonia, to develop research ideas on street dogs.

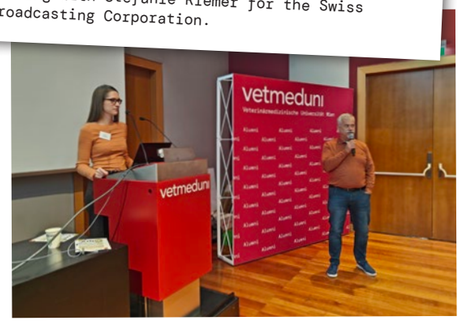
Photo: Karin Bayer/Vetmeduni

Photo: private

Celebrating the successful thesis defences of Aila Fakhimahmadi and Katie Harrington.

Photo: Karin Bayer/Vetmeduni

Filming with Stefanie Riemer for the Swiss Broadcasting Corporation.



Photos: Karin Bayer/Vetmeduni

A large number of participants attended this year's KYNtegra in the ceremonial hall of the University of Veterinary Medicine Vienna.

Photos: (1) Özge Nasa/Vetmeduni, (2) private, (3) Eugene Choi

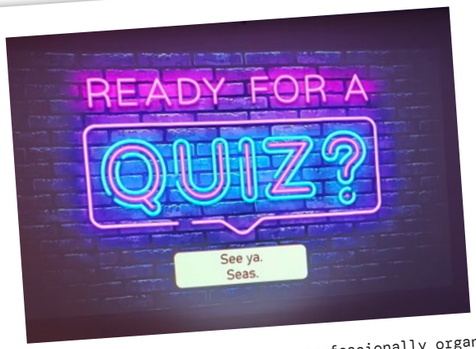
This year, conference visits took participants, among other places, to Kolkata, India (Behaviour Conference), Hamburg (Canine Science Forum) and Seoul, South Korea ("At the Animal Contact Zone" conference).

Photo: Petra Pesak

Haidlhof retreat: Staff members and researchers from the University of Veterinary Medicine Vienna and the University of Vienna gathered for a team-building event.

Photo: Karin Bayer/Vetmeduni

Summer party with the team at the Clever Dog Lab.



Photos: Karin Bayer/Vetmeduni

The annual pub quiz, as always professionally organised by Christian Dürnberger.

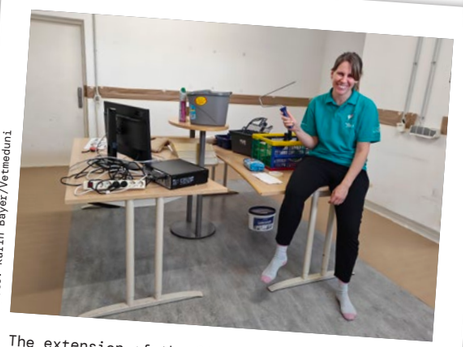


Photo: Karin Bayer/Vetmeduni

The extension of the Clever Dog Lab was renovated to prepare the space for the new eye-tracker apparatus.

Photo: Zsófia Virányi/Vetmeduni

A shared barbecue on the Donauinsel.

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