

Messerli Research Institute

University Competence Centre for Research into Human-Animal Interactions

The Messerli Research Institute was founded in 2010 with support from the Messerli Foundation (Sörenberg, Switzerland) under the management of the University of Veterinary Medicine, Vienna in cooperation with the Medical University of Vienna and the University of Vienna.

Our research is devoted to the interaction between humans and animals, as well as its theoretical principles in animal cognition and behavior, comparative medicine and ethics. Our work is characterized by its broad interdisciplinary approach (biology, human medicine, veterinary medicine, philosophy, psychology, law) and strong international focus. Research findings are an integral part of the academic curriculum in a new Master's program and are also designed to provide guidelines for the responsible and acceptable treatment of animals. Thus, we see one of our main responsibilities in providing scientific information to help people responsible in the field of human-animal interactions.

Our Objectives

a) Principles and criteria for the ethically acceptable treatment of animals

One of the main focal points of the Messerli Research Institute's work is the development of convincing criteria and methods in animal ethics. A key aspect of our teamwork relates to the interdisciplinary transfer of knowledge about salient findings from current research in the fields of biology, veterinary medicine, human medicine and philosophy. We also place great weight on ensuring that principle-oriented debate on life-science, philosophical-ethic and scientific theory issues in human-animal interactions are constantly kept in mind while following this application-oriented goal.

b) Research into Human and Animal Health and the 3Rs

One of our targets is the promotion of human and animal health (e.g. in the fields of cancer research, allergology and nutritional sciences) using comparative medical research projects. Regular knowledge transfer will be encouraged through direct interdisciplinary exchange between local and international universities, as well as institutes and clinics on the campus of the University of Veterinary Medicine. The resulting synergies will create an impact through rapid, health-sector developments and the avoidance of dual structures. The consistent communication of the potential of comparative studies will improve awareness of the topic in the scientific world. Our aim is to promote research on the theme of "One Health" and thereby to influence the direction of related subject categories.

The chances of improving the fulfillment of the 3Rs (Replacement, Reduction and Refinement) in medical research are realistic with the use of systematic comparative studies between humans and animals and the increasing encouragement of clinical studies in the veterinary field as an important alternative and supplement to studies using laboratory animals. Knowledge compiled from the fields of cognition and animal behavior and ethics will contribute to human-animal interactions, reflect on present laboratory practice in a critical

way and improve it in terms of the 3Rs. We expect to see new discussion points in the debate on ethically justifiable animal experiments because of the institutionalized, interdisciplinary working environment within the Messerli Research Institute and its incorporation in the University of Veterinary Medicine.

c) Basic Research in Natural Sciences as a Platform

We strive to achieve a balance between excellent basic and applied research. Key findings stemming from scientific work carried out at the Messerli Research Institute are the platform on which human-animal interactions can be examined in a practically oriented manner. For instance, the field of comparative cognitive research increases levels of empirical knowledge on cognitive, emotional and moral-analogous skills in animals, which will change not only the general perception of animals but also the way we humans see ourselves. This will bring new insights into the structural characteristics of human-animal interactions and contribute to a better understanding of such relationships.

Our Research Focus

Public and political debates on issues relating to animal protection, animal rights and animal ethics are often characterized by huge conflicts of interests and seemingly irreconcilable points of view. This is not surprising, as dealing with human-animal interactions also touches on issues from personal values to existential questions of humanity. The Messerli Research Institute is making a significant contribution to this discussion by creating scientifically sound and transparent concepts that answer ethically and socially relevant questions.

These concepts include the discussion of the following issues, which are organized thematically by the research fields in our departments:

1. Comparative Cognitive Research

- Which cognitive skills do animals use to find their way in their social and physical environments?
- What influence does domestication and development have on the cognitive and emotional characteristics of animals?
- Which cognitive and emotional dimensions reveal both significant differences and similarities between humans and animals?
- To what extent and in which way should the behavior and cognition of animals in human care be supported?
- What are the foundations of the discrepancy between behavior and attitude in the treatment of animals? How can this discrepancy be reduced?

2. Comparative Medicine

- How do pets affect human health?
- How do humans and their environment affect pets' health?
- How can veterinary medicine benefit from human medicine and vice versa?
- How can medication be developed more rapidly and contribute to commercially viable treatment concepts in humans and animals?

3. Ethics in the Human-Animal Interactions and Animal Philosophy

- What are viable foundations for the ethical respect of animals?
- Which methods and theories are suitable and practical for dealing with current ethical problems in human-animal interactions?

- What can be expected from more recent theories in animal ethics?
- How do we determine the significance of the role that science, law, business and politics have in regard to questions on animal ethics?
- What can empirical science contribute to ethical reasoning in particular?

Networking with institutes and individuals at the University of Veterinary Medicine is not only helpful but also essential for answering such questions. Thus, the Messerli Research Institute sees itself as an institute working within both the grounds and the context of the University of Veterinary Medicine, integrating the available knowledge and expertise into its own work. In exchange, the Messerli Research Institute makes its findings available to the University of Veterinary Medicine for use in teaching and research. This mutual relationship helps both veterinary research and teaching to benefit from innovative scientific approaches and ethical expertise in human-animal interactions. In addition, students and staff at the Messerli Research Institute can also profit from the integration of veterinary expertise.

Our Target Groups

The most important target group for our work is our students. They will receive a basic- and applied-science oriented education at high international standards through the newly created Master's program "*Interdisciplinary Master in Human-Animal Interactions*". This advanced degree is a suitable qualification for an academic career, as well as for a professional career in socially relevant fields in human-animal interactions. The Master's degree is designed to educate experts who can reflect ethically and on a scientific basis on how to take responsibility for the development of human-animal interactions.

We promote continuous knowledge transfer and discussion with selected multipliers and cooperation partners to ensure well functioning debate and exchange in both theoretical and practical fields. Such partners include not only academic international research colleagues but also non-university research institutes, vets, medical doctors, societies, companies, associations and schools. Our experts are available for social dialogue and scientific policy consultancy to promote a scientifically based and ethically justifiable interaction with animals while maintaining our scientific independence.

Our Working Methods

Excellence in Research and Teaching

We strive to provide our scientists and students with a unique research and learning environment. To achieve this, we cooperate with excellent institutes as well as top-level individual scientists in our fields. Collaboration is most intensive in international research projects. In addition, we contribute to specialist international conferences and events on a regular basis, are involved in international networks – sometimes in a leading role, and found and intensify university and trans-national exchange programs, as well as recruiting international scientists at a pre- or post-doc level.

Cooperation with the Messerli Research Institute is valuable to its partners because of the intensive and individual discussion in an interdisciplinary discourse, a high level of professional expertise and the availability of an excellent infrastructure (such as the field station for cognition and communication research "Haidlhof", the Clever Dog Lab and a high-tech laboratory at the Institute for Pathophysiology and Allergy Research).

Fully Integrated Interdisciplinarity

Very few of the sample questions can be answered by a single research discipline. Therefore, taking an interdisciplinary approach to key issues in human-animal interactions is an essential element in our work. The appropriate resources will be provided for such cooperation, allowing expertise from individual subjects to be incorporated into interdisciplinary discourse in a structured manner. It is expected that the results can be used in interdisciplinary discourse and will find recognition in individual scientific discourses through this strategy.

International Visibility

We plan to raise our international visibility and establish the Messerli Research Institute as a reliable and excellent partner through international research projects and networks, as well as through exchanges of students, scientists and lecturers with other universities.

Independence

We work in an environment characterized by different interests. In doing so, we attach great importance to scientific autonomy. The basic funds provided by the Messerli Foundation and our university partners are invaluable. They enable us to operate in this dynamic field, as well as to raise and discuss socially delicate questions and issues on human-animal interaction academically, independently and openly.

Our Values

Thanks to its focus, the Messerli Research Institute is a unique platform for dialogue relating to research and teaching. The interdisciplinarity described in this mission statement should become a tangible feature of the institute for external persons, as well as being a strong identification point for its employees. This mutual understanding is fostered in numerous ways, such as through seminars and retreats and by proximity to our partners. Our disregard of the usual hierarchies creates a working atmosphere that enables free exchange, enjoyment and open communication. Our staff work closely with their supervisors and are encouraged to work independently and to develop their own research directions.

Staff with different mentalities, backgrounds and specific needs work together in an international environment. The promotion of women and a family-friendly atmosphere are important to us. We support, for example, home-office days, or participation at career-building events such as courses or conferences. We view the targeted mentoring of students and staff by professors at the Messerli Research Institute as a tool for promoting new talent to achieve excellence. Thus, the Messerli Research Institute attains and maintains the highest standards, not only in terms of science. We are also conscious of the recommendations and guidelines given to us by the three cooperating universities.

Transparency and Knowledge Transfer

The Messerli Research Institute presents its research findings and methods transparently and in a clear and comprehensible way on its home page, as well as being active in public-relations work. The institute is open for discussions with interested members of the public and strives for cooperation with non-university institutions of further and higher education. One such partner is the association "*Tierschutz macht Schule*", which aims at promoting ethical reflection about human-animal interactions in schools and teacher-training colleges. A further partner is the association "*Rote Pfote*", with which we hold regular public discussions, as well as working together on research projects on cancer in humans and animals and communicating the results. Scientific communication is a central activity with responsibility shared by all staff.