

Overview Third-Party Funded Projects

ZELDA

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1 Overview of Funding (2021–2024)

E-Learning Service = ELS | Clinical Skills Lab = CSL

Project	Funding recipients	Funding (in EUR)
INUTERO	CSL	103.582,10
CarePig	ELS	52,052.88
FERVET	ELS & CSL	930,840.00
FERVET II	ELS & CSL	418,698.00
SOUVER@N	ELS	379,000.00
SOUVER@N II	ELS	170,541.00
AGRISKILLS	CSL	46,397.00
Future-VET	ELS & CSL	178,000.00
TeamKomm	ELS & CSL	50,000.00
VetRepos	ELS	47,480.00
SOFTVETS	ELS	41,000.00
Audiovisuelle Systeme und Videoplattform (AVVP)	ELS	25,000.00
Connecting Experts & Services (ConnEx)	ELS	100,629.12
DILEAVET	ELS & CSL	248,330.00
Basis-SOUVER@N	ELS	127,237.00
OER II	ELS	6,733.00
OER I	ELS	6,347.00
InZukunft	ELS	20,100.00
Total		2,951,967.10

2 Ongoing projects

2.1 Funded by the federal government

2.1.1 INUTERO | Development of a simulator for small ruminants to acquire important skills for appropriate and animal friendly midwifery for small ruminants and its integration into training and education | 2023–2026

The aim of the "InUtero" project is to develop a lifelike simulator for obstetrics in small ruminants and to implement it in the teaching of students and the training of farmers. The Clinical Skills Lab, together with the Clinic for Small Cloven-hoofed Animals, is responsible for the development and validation of the simulator and the preparation of the accompanying teaching materials, including an instructional video. The animal husbandry school at the Triesdorf Agricultural Training College and the Echem Agricultural Training Centre will use and evaluate this simulator as part of the obstetrics lessons for their trainees and as part of seminars and workshops in adult education. The close cooperation between the project partners will enable the simulator to be continuously adapted and modified so that, at the end of the project phase, a lifelike simulator for obstetrics in small ruminants that is optimised to the requirements and needs of both teachers and students will be available.

- funded by the <u>Federal Ministry of Food and Agriculture</u>
- project management: Prof Dr Martin Ganter; Dr Sandra Wissing; Tabea Tenninger
- Project partners:

Echem Agricultural Training Centre	Triesdorf Agricultural Training Centre
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2.1.2 CarePig | Handling seriously ill/injured pigs | Which criteria justify a veterinary and ethically responsible determination of the time for killing? | 2022–2025

The aim of CarePig is to develop criteria for determining the time at which seriously and terminally ill pigs should be killed in a way that is responsible from a veterinary and ethical point of view.

Previous studies in processing plants for animal by-products in Germany and Austria have shown that dead or killed pigs frequently show findings relevant to animal welfare, which definitely give reason to take improvement measures.

Diseases and injuries to pigs occur in every form of pig farming. Despite intensive care and treatment, it is not always possible to cure the affected pigs. In order to prevent further pain and suffering for the animals, it may be necessary to kill the affected pigs. For veterinarians and pig farmers, the decision to euthanise an animal is a considerable challenge.

The aim of CarePig is to make it easier for veterinarians and pig farmers to decide when to kill an animal by developing easy-to-collect, practical, valid and disease/injury-specific criteria. These criteria should make it possible to reliably assess the welfare of sick pigs and make a responsible, well-founded decision on the killing of sick/injured pigs.

- funded by the <u>Federal Ministry of Food and Agriculture</u>
- Sub-project management: Dr Christin Kleinsorgen

2.1.3 FERVET | Digital teaching and testing of clinical-practical skills in veterinary medicine from an animal welfare perspective | 2021–2024 | FERVET II | 2024–2025

The FERVET project is part of the E-Learning Service and the <u>Clinical Skills Lab</u> and addresses the digital teaching and testing of necessary clinical-practical skills in veterinary studies.

The aim of the FERVET project is to achieve the following innovations:

Enriching face-to-face, hybrid and virtual teaching with new, innovative formats Further development and evaluation of existing audit scenarios

Subsequent structural anchoring of the innovations

Video production and video annotations

In E-Learning Service, the accompanying video production for new and existing learning stations in the Clinical Skills Lab as well as the expansion of <u>video production</u> at the TiHo will be realised. In addition, the implementation of annotations in videos for interactive and video-based exercises is to be realised.

Simulators and learning stations

In the Clinical Skills Lab, face-to-face, hybrid and virtual teaching is enriched by the development of simulators. This is to be done using 3D printing and electronic control mechanisms, among other things. Work is also underway to establish further learning stations.

Digital teaching material

The planned measures will be accompanied by digital teaching and learning material. There are also plans to develop a virtual learning lab as an interface between preclinical and clinical work in the Clinical Skills Lab.

Digital performance monitoring

Existing formative and summative e-examination formats are to be evaluated and further developed through an eOSCE examination and through the subject-specific conceptualisation and implementation of online open-book examinations.

Structural anchoring

By integrating the innovative measures into study and examination regulations as well as general teaching operations, digital teaching is to be further anchored in university structures.

FERVET II is merely an extension of the FERVET project. The objectives are identical.

- Funded by the <u>Foundation for Innovation in Higher Education</u> (federal and state governments)
- Project management: Prof Dr Andrea Tipold
- Sub-project management E-Learning Service: Dr Elisabeth Schaper
- Sub-project management Clinical Skills Lab: Dr Sandra Wissing

2.1.4 SOUVER@N | Sovereign digital teaching and learning in Lower Saxony | 2021–2024 | SOUVER@N II | 2024–2025

The aim of the joint project is to promote confident digital teaching and learning: To this end, high-quality digitally enriched teaching and learning concepts and content are to be developed and the confident, i.e. competent and learning goal-orientated use of digital tools on the part of teachers and students = digital literacy, is to be promoted.

Advancing digitalisation and the effects of the Covid-19 pandemic have changed the conditions and opportunities for studying and teaching enormously. With the intensive use of digital learning technologies, the experience and digital skills of teachers and students have increased, as has the need for didactic, technical and legal support and the demands on the quality of digital teaching and learning scenarios.

The network partners want to meet these increased requirements by pooling their expertise and services in the areas of IT basis, services and content and do so in the long term - with the partner universities each benefiting from their specific focal points and strengths. The experience gained in the project is to be secured and used as a basis for the systematic further development and flexibilisation of digital teaching. The project is particularly focussed on the digital sovereignty of the universities.

The SOUVER@N project sees itself as the nucleus for the development of a state-wide network whose services and offers are to be extended to all universities in Lower Saxony.

THE SOUVER@N PROJECT AIMS TO REALISE THE FOLLOWING OBJECTIVES WITHIN DIFFERENT WORK PACKAGES:

the confident, i.e. competent and learning goal-orientated use of digital tools on the part of teachers and students (digital literacy)

the professional development of high-quality, digitally enriched teaching/learning concepts and content

the digital sovereignty of the universities as institutions strengthened by the alliance.

SOUVER@N II is merely an extension of the <u>SOUVER@N</u> project. The objectives are identical. The extension is valid for the period from 1 August 2024 to 31 December 2025.

- Funded by the <u>Foundation for Innovation in Higher Education</u> (federal and state governments)
- Project manager at the University of Veterinary Medicine Hannover Foundation:
 Dr Elisabeth Schaper
- Project partners:

University of Osnabrück (project management)	Leuphana University of Lüneburg (project leader)
Carl von Ossietzky University of Oldenburg (project leader)	Clausthal University of Technology
University of Hildesheim Foundation	University of Vechta
Hanover Medical School	

Project website:



as of 07/24

2.1.5 AGRISKILLS | Establishment of an Agricultural Skills Lab to improve knowledge transfer and animal welfare in agriculture training | 2023–2024 |

The aim of the project is to establish an Agricultural Skills Lab for the first time to improve practical skills in agricultural vocational training in order to promote better animal welfare in training, among other things. New social and political requirements in agriculture, which may require new practical skills, can be implemented in the skills lab and learnt and deepened in a protected learning environment. The Agricultural Skills Lab to be established should address different target groups e.g. trainee farmers/animal managers and students of agricultural science / farm animal science and improve the exchange and learning from and with each other between the different target groups.

- Funded by the Federal Ministry of Food and Agriculture
- Project manager at the University of Veterinary Medicine Hannover Foundation: Dr Sandra Wissing, Lena-Marie Sölter
- Project partners: Lehr- und Versuchszentrum Futterkamp, Landwirtschaftskammer Schleswig-Holstein

as of 07/24

2.2 Funded by the state of Lower Saxony

2.2.1 Future-VET | Strategic site development at the University of Veterinary Medicine Foundation | 2023–2026

The Future-VET project has several focal points. Several institutions of the University of Veterinary Medicine Hannover Foundation are involved in the project. In E-Learning Service, one sub-project aims to adapt veterinary teaching more closely to the needs of students. The project work focuses on expanding the blended learning format and strengthening (e-) didactic competences.

- Funded by the <u>Lower Saxony Ministry for Science and Culture</u>
- Sub-project management: Dr Elisabeth Schaper, Dr. Sandra Wissing

as of 07/24

3 Completed projects

3.1 Funded by the EU

3.1.1 VetRepos | A shared item repository for progress testing in European veterinary schools | 2020–2023

The joint project VetRepos, which was launched in September 2020 under the leadership of the University of Copenhagen, aimed to develop a joint progress test question database for veterinary medicine with test items in English. Progress tests can be used to formatively measure the cognitive competence growth of students longitudinally. Progress tests are therefore a feedback instrument to provide an overview of the level of knowledge in the degree programme. The project established a question database with psychometrically validated questions for formative linear and adaptive progress tests and a joint quality assurance system for item development and selection. The tests were compiled using a blueprint based on the subject areas defined in EU Directive 2013/55/EU and the EAEVE first-day competences. Training programmes for question authors and electronic information material for students were also developed as part of the project.

- Funding in the <u>ERASMUS+ Strategic Partnerships for Higher Education</u> programme
- Responsible for the project: Dr Elisabeth Schaper
- Project partners:

Faculty of Veterinary Medicine, University of Copenhagen, Denmark (UCPH) (project leader)	Faculty of Veterinary Medicine, Utrecht University (UU)
Faculty of Veterinary Medicine, University of Helsinki (UH)	Faculty of Veterinary Medicine, Swedish University of Agricultural Sciences (SLU)
Faculty of Veterinary Medicine, Norwegian University of Life Sciences (NMBU)	European Association of Establishments for Veterinary Education (EAEVE)

project website:



3.1.2 SOFTVETS | Pan-European soft skills curriculum for undergraduate veterinary education | 2018–2021

The scientific literature and surveys of veterinarians show that there is an increasing need to equip veterinarians with the skills they need to cope with the challenges imposed on them by the rapidly changing world and the enormous pressures of the profession. The Covid-19 pandemic is a perfect example of how important it is to see complex problems in a wider context. The acquisition and development of skills are essential for the performance and modernisation of the profession, offering veterinarians new forms of flexibility and security. The objectives set at the beginning of the project were achieved in full and within the project period:

- 1. development of recommendations for life skills for veterinary students (IO1).
- 2. development of a new life skills curriculum applicable in veterinary higher education institutions. (IO2).
- 3. development of 3 training concepts for teachers (IO3) in the areas of communication, entrepreneurship and digital skills.
- 4. 46 teachers were trained in teaching and training activities for competence in specific modules of the new life skills curriculum.
- 5. the implementation partners carried out a pilot project in their institutions and implemented and evaluated selected learning outcomes in the existing courses of the new curriculum.
- 6. the participants of the pilot project (more than 200 students) evaluated their experience, their overall satisfaction with the new course and the competences acquired in an online survey based on IO4.

IO1 contains recommendations on life skills for veterinary students focussing on three key areas: communication, digital skills and entrepreneurial skills. The list of competences applies to higher education in veterinary medicine and can be fully or partially integrated into existing curricula.

IO2 offers a proposal for a life skills curriculum that can be used in higher veterinary education. The curriculum includes 3 curricula in 3 sections: Communication Skills, entrepreneurial skills and Digital Skills. The SOFTVETS Curriculum for Life Skills in Veterinary Higher Education is aimed at veterinary practitioners, teacher trainers, students as well as faculty management and regulators. The aim of this document is to support the implementation or integration of the proposed curricula into existing curricula.

IO3 offers training concepts for the education of veterinary teachers involved in teaching life skills in three areas: communication, digital skills and entrepreneurial skills. The training concepts are also suitable for teachers of all veterinary subjects who want to improve their teaching methods. The training ensures that teachers gain new knowledge about specific life skills, gain insight into how these topics are taught elsewhere and get ideas that they can incorporate into their daily teaching.

IO4 The SOFTVETS Evaluation Questionnaire for Students and the SOFTVETS Reflection Questionnaire for Teachers were developed for higher education institutions that want to evaluate competence-based courses.

The project results are applicable in the institutions that have recognised the importance and necessity of implementing life skills education in their curricula.

In the course of the project, three teaching and training workshops were organised for teachers in the schools of the implementation partners. The project team also organised an online conference on the topic of "Teaching life skills in medical education".

The members of the project team and all participating individuals (especially teachers and students) have gained a comprehensive overview of the scope, importance and necessity of life skills in veterinary education. The need to implement such skills, which we foresaw when applying for the project, has intensified in the years of the pandemic. What started as a 'nice idea' is finding its way into the strategic documents of institutions and associations, largely due to the 'buzz' generated by this project and its members spreading the word both in personal communication within institutions and at more formal occasions. The long-term benefits of this project are systemic and include both higher veterinary education and the

veterinary profession at EU level, with a focus on student teaching (competency-based teaching).

The project team worked in a very interdisciplinary way, involving veterinarians, psychologists, experts in communication, education and entrepreneurship as well as veterinary students. They managed to identify the positive aspects of the various veterinary curricula across Europe, which are very different, and to highlight the most common topics and competences that should be included in future skills curricula. Implementing new, non-vocational skills into veterinary curricula is a difficult task, but you have to start somewhere and the project results are a good help on the way.

- funded in the <u>ERASMUS+</u> programme
- Project partners:

Faculty of Veterinary Medicine, University of Zagreb (project management)	University of Veterinary Medicine Hannover
University of Veterinary Medicine, Vienna	University of Veterinary Medicine Budapest
Faculty of Veterinary Medicine, University of Ljubljana	Vienna University of Economics and Business (WU)
European Association of Establishments for Veterinary Education (EAEVE)	

3.2 Funded by the state of Lower Saxony

3.2.1 AVVP | Audiovisual systems and video platform | 2022

The AVVP project was funded by the Ministry of Science and Culture of Lower Saxony. The University of Veterinary Medicine Hannover Foundation was part of this joint project, which was led by the University of Osnabrück.

At the beginning of the coronavirus pandemic, many universities were left to fend for themselves with the sudden establishment of important technologies for digital teaching and were sometimes overburdened as a result. The coronavirus pandemic has highlighted the importance of centrally hosted resources that can be used jointly by all universities in Lower Saxony.

The aim of the AVVP joint project was to improve the existing audiovisual systems for video recording and communication at universities in Lower Saxony for digital teaching, to provide them with interfaces for interactive use, to integrate them better into existing learning platforms and to prepare them for provision via the Academic Cloud.

- funded by the Lower Saxony Ministry for Science and Culture
- Project manager at the University of Veterinary Medicine Hannover Foundation: Dr Elisabeth Schaper
- Project partners:

University of Osnabrück (project management)	University of Applied Sciences and Arts Hildesheim/Holzminden/Göttingen
Georg-August-University Göttingen	Braunschweig University of Art
Hanover University of Music, Drama and Media	Hanover University of Applied Sciences and Arts
Osnabrück University of Applied Sciences	Jade University
Ostfalia University of Applied Sciences	Braunschweig University of Technology
Clausthal University of Technology	University of Vechta

3.2.2 ConnEx | Connecting Experts & Services | Cross-university transfers of expertise and services as catalysts for the umbrella initiative Hochschule.digital Niedersachsen | 2022

The aim of the ConnEX joint project was networking, as well as the exchange and transfer of experience between lecturers on the one hand and the technical and didactic service and support facilities of Lower Saxony's universities on the other. Lecturers and service and support organisations are among the strategically relevant stakeholder groups for the umbrella initiative Hochschule.digital Niedersachsen. Approaches from the joint project "Souver@nes digitales Lehren und Lernen in Niedersachsen" (SOUVER@N), funded by the Stiftung Innovation in der Hochschullehre, are to be extended to ConnEX.

Since the coronavirus pandemic, all lecturers at universities in Lower Saxony have been able to gain a wide range of experience with digital teaching and learning settings. As a result, the pandemic-related shift to digital teaching has permanently changed the requirements and expectations of teaching on the part of lecturers and students. According to surveys, both wanted digital teaching/learning settings to continue even after the coronavirus pandemic. For this reason, the demand for support and qualification programmes from lecturers has increased significantly. In order to continue to provide lecturers with the best possible support in the future and to meet the continued high demand for digital teaching/learning settings in the long term, it makes sense to network the service and support facilities throughout Lower Saxony so that resources and expertise can be pooled and offers can be mutually opened up or developed.

The project had three objectives:

- 1. expanding, improving and increasing the efficiency of service and support offerings for lecturers at all locations by mapping and networking the relevant facilities
- 2. transfer of *best practice examples* and *peer-to-peer bench learning* through networking in *communities of practice* and transfer of the results to the universities in Lower Saxony as a whole
- 3. to improve the quality of teaching in the long term by offering a wider range of training and support programmes for lecturers at universities in Lower Saxony.
 - funded by the Lower Saxony Ministry for Science and Culture
 - Project manager at the University of Veterinary Medicine Hannover Foundation: Dr Elisabeth Schaper

Project partners:

Leuphana University of Lüneburg (project management)	Braunschweig University of Applied Sciences and Arts
Hanover University of Applied Sciences and Arts	Emden/Leer University of Applied Sciences
Braunschweig University of Art	Hanover University of Music, Drama and Media
Osnabrück University of Applied Sciences	Jade University
Leibniz University Hanover	Hanover Medical School
Ostfalia University of Applied Sciences	University of Veterinary Medicine Hanover
Braunschweig University of Technology	Clausthal University of Technology
Georg-August-University Göttingen	University of Vechta

3.2.3 DILEAVET | Digital teaching and e-assessment in veterinary medicine under COVID-19 pandemic conditions | 2022

DILEAVET was a project funded by the Lower Saxony Ministry of Science and Culture for 12 months. DILEAVET was intended to support the individual project <u>FERVET</u>, which is funded by the Foundation for Innovation in University Teaching. The DILEAVET project was based both in the E-Learning Service and in the <u>Clinical Skills Lab.</u>

The aim of DILEAVET was to optimise the existing framework conditions at the TiHo for the design of digital teaching, the examination system and the teaching of practical clinical skills. At the same time, DILEAVET aimed to create conditions that support the individual FERVET project.

Further development of digital training materials and offerings

Existing training materials and courses on digital learning technologies and electronic examinations were reviewed, optimised and expanded by DILEAVET in order to create an updated offer for students and lecturers.

Knowledge transfer

In addition to new video materials, new training materials and scientific results from training research were also generated and made available. In particular, the models and simulators developed in the Clinical Skills Lab, which are used to train practical clinical skills, are of interest across the university, as they can be used as a replacement or supplement to animal experiments. Knowledge transfer took place via the homepage, the YouTube channel or "twillo", the OER portal of Lower Saxony.

Development and establishment of models and learning stations in the Clinical Skills Lab

This work package focused on the development and establishment of models, learning stations and scenarios in the Clinical Skills Lab. These have then been established as part of practical training sessions.

Digitisation concept for communicative skills

In order to further develop communication training at the TiHo in the long term, best-practice videos were created using actors. The aim was to develop scenarios that show how good communication between vets and pet owners can work.

- funded by the Lower Saxony Ministry for Science and Culture
- Project management: Prof Dr Andrea Tipold
- Sub-project management E-Learning Service: Dr Elisabeth Schaper
- Sub-project management Clinical Skills Lab: Dr Sandra Wissing

3.2.4 Basis-SOUVER@N | Creation of optimal, basic framework conditions for sustainable cross-university cooperation in Hochschule.digital Niedersachsen and the implementation of the SIHL project | 2021–2022

The aim of the joint project was to create optimal basic conditions for cross-university cooperation and the implementation of the <u>SOUVER@N</u> project, which is funded by the Foundation for Innovation in University Teaching.

As part of the SOUVER@N project, the partner universities are pooling their expertise and services in the areas of IT basis, services and content in order to promote confident digital teaching and learning at universities and to meet the increased demand for didactic, technical and legal support on the part of teachers and students. Depending on the location-specific focus and existing expertise, the partners are involved in different projects within the project.

The resources requested as part of the Basis-SOUVER@N project were used to enable experts to work on realising the objectives of the SOUVER@N project by providing personnel support during regular operations. Part of the funding was also used to expand the existing IT structure required for the implementation of the SOUVER@N project at the respective locations and to add new components if necessary.

- funded by the <u>Lower Saxony Ministry for Science and Culture</u>
- Project manager at the University of Veterinary Medicine Hannover Foundation: Dr Elisabeth Schaper
- Project partners:

University of Osnabrück (project management)	Leuphana University of Lüneburg (project leader)
Carl von Ossietzky University of Oldenburg (project leader)	Clausthal University of Technology
University of Hildesheim Foundation	University of Vechta
Hanover Medical School	ELAN e.V.

3.2.5 TeamKomm | Innovation Plus: "Interprofessional team communication for veterinary practice" as a cross-professional course | 2022–2023

As part of the "Innovation plus" funding programme, the state of Lower Saxony has announced project funding for the development and implementation of innovative teaching and learning concepts. The project "Interprofessional team communication for veterinary practice" was successful and therefore supported for 12 months as a pilot project for veterinary teaching in the form of a cross-professional course.

The project was based in the E-Learning Service, the Clinical Skills Lab and the Clinic for Small Animals. As part of a blended learning event, the content was taught across all professional groups via self-study units in TiHoMoodle, in video conferences and in live events in the Clinical Skills Lab. With the help of actors, relevant aspects of communication between veterinarians and veterinary assistants as well as animal owners were simulated and practised in order to lay the foundation for effective and harmonious cooperation in veterinary practice.

Aims of the project:

Implementation of a cross-professional course

Improving teamwork, communication in the workplace, role and task responsibilities
Increasing efficiency and effectiveness and improving the satisfaction of all parties involved

- Supported by the Innovation Plus funding programme of the <u>Lower Saxony Ministry</u> for Science and Culture
- Project management: Dr Christin Kleinsorgen, Dr Sandra Wissing, Dr Verena Nerschbach

3.3 Project participations

3.3.1 OER II | Human-Animal Relationship from a Regulatory and Ethical Perspective: Focus: Farm Animal Husbandry with Special Consideration of the One Health Concept | 2022–2023

Agriculture is of great importance in Lower Saxony. However, the ethical discussion of livestock farming from the perspective of medical and public health ethics was largely unresearched, especially in the German-speaking world. This joint project with the Hannover Medical School set itself the goal of expanding and developing the OER collection "Animal Welfare and Ethics" on the Lower Saxony OER platform "Twillo" to include OER contributions on livestock farming. The OER contributions were intended to help Twillo users understand the basics of the human-animal relationship in agricultural livestock farming by addressing the economic importance of the individual livestock farming sectors in the OER contributions, as well as the different forms of animal husbandry and the related state animal welfare initiative.

As a cooperation partner, the E-Learning Service supported the project with quality assurance and evaluation measures.

- Funding organisation: German National Library of Science and Technology (TIB)
- Project management at the University of Veterinary Medicine Hannover Foundation:
 Prof Dr Bernhard Hiebl, ITTN

3.3.2 LMS+ | Learning Management Systems + | Basic maintenance for the fundamental further development of the learning management systems Stud.IP, Moodle & ILIAS | 2022

The LMS+ project was funded by the Lower Saxony Ministry of Science and Culture. The project was led by Cornelis Kater from Leibniz Universität Hannover, Hannover University of Applied Sciences and Arts was a partner in the project.

At least one learning management system (LMS) is used at all universities in Lower Saxony. These learning management systems include Stud.IP, Moodle and ILIAS. All universities in Lower Saxony with the aforementioned LMS benefited from this project.

The aim of the LMS+ joint project was to prepare learning management systems for rapid further development, to make current requirements for learning management systems realisable in the short term and to realise technical and legal framework conditions such as security or accessibility of learning management systems.

• funded by the <u>Lower Saxony Ministry for Science and Culture</u>

3.3.3 OER I | Alternatives to animal testing: basics, examples and ethical considerations | 2021–2022

The "OER for Higher Education" funding programme of the Lower Saxony Ministry of Science and Culture focuses on the production, curation and dissemination of open teaching/learning materials. The aim is to develop a stronger network in the area of OER-based teaching, create incentives for the production of OER and provide impetus for innovative community approaches to OER.

As part of the "Alternatives to animal testing" project funded by the programme and carried out in collaboration with the Hannover Medical School, an OER collection on the topic of animal welfare and ethics was initiated and shared on the OER portal "Twillo". Access to the OER, which deal fundamentally and ethically with animal welfare and alternatives to animal testing, was intended to support teachers in human, veterinary and dental medicine as well as natural science subjects, philosophy and ethics.

As a cooperation partner, the E-Learning Service supported the project with quality assurance and evaluation measures.

- Project management at the University of Veterinary Medicine Hannover Foundation: Prof Dr Bernhard Hiebl, ITTN
- funded by the Lower Saxony Ministry for Science and Culture
- Funding programme: "OER for the higher education sector promoting the creation, maintenance and dissemination of open educational resources at universities in Lower Saxony"

3.3.4 InZukunft | Food of the future: Insects and alternative protein sources - a solution for future social challenges? | 2021–2022

In collaboration with scientists from the Institute for Food Quality and Safety (LMQS), this project initiated a dialogue with interest groups in order to determine the acceptance of alternative protein sources. A particular focus was entomophagy, the consumption of edible insects.

The aim of the project was to better understand and categorise consumer wishes and expectations as well as attitudes towards novel foods.

On the one hand, a questionnaire was be used to determine the status quo with regard to the acceptance of alternative food sources in Germany and, on the other hand, an important future discourse was promoted under scientific supervision in order to familiarise interested consumers with this topic and to answer questions that arise directly.

For this purpose, information material was continuously made available on the homepage of the LMQS of the Hanover University of Veterinary Medicine Foundation as part of the project.

- funded by the Lower Saxony Ministry for Science and Culture
- sponsored by the Volkswagen Foundation

3.3.5 Innovation plus

The Lower Saxony Ministry of Science and Culture (MWK) has funded the development and implementation of innovative teaching and learning concepts with the "Innovation plus" programme with up to **50,000.00 euros per project**. 15 TiHo projects received funding. The programme was aimed specifically at teachers to enable them to develop innovative teaching and learning concepts. The ZELDA provided support with the project application and implementation.

Academic year 2022/2023 - funding period 2023/2024

- Physics Escape Room "Save Schrödinger's Cat" (Dr Sascha A. Bräuninger, Dr Matthias Lüpke, Prof. Dr Hermann Seifert, Department of General Radiology and Medical Physics)
- **Insight (360° pig barn tours)** (Prof Dr Isabel Hennig-Pauka, Department of Epidemiology)

Academic year 2021/2022 - funding period 2022/2023

- **Game over for risks in the workplace VetSafetyGame**: The game for occupational safety and infection protection in veterinary medicine (Prof. Dr von Köckritz-Blickwede, Institute of Biochemistry and Research Centre for Emerging Infections and Zoonoses)
- Interprofessional team communication for veterinary practice (Dr Kleinsorgen & Dr Wissing, Centre for E-Learning, Didactics and Educational Research; Dr Nerschbach, Clinic for Small Animals)
- Perspective: Reproductive medicine in horses in simulation and practice (Dr Köhne, Reproductive Medicine Unit of the Clinics and Clinic for Horses)
- **Dr-Feed (Digit-Real-Feed): Practical animal nutrition offered digitally** (Dr Hankel, Prof Dr Visscher, Institute of Animal Nutrition)
- Comparative haematology in domestic, wild and zoo animals (Dr Wagener, Clinic for Small Cloven-hoofed Animals and Forensic Medicine and Outpatient Clinic)

Academic year 2020/2021 - funding period 2021/2022

 Implementation of an Electronic Objective Structured Clinical Examination (eOSCE) for testing clinical-practical and communicative skills in the treatment of pets as part of the practical year (Dr Wissing, Clinical Skills Lab; Dr Lübke, Clinic for Pets, Reptiles and Birds)

Academic year 2019/2020 - funding period 2020/2021

- Supervision concept for an extramural internship in veterinary medicine BePra-Vet (Dr Sudhaus-lörn & Prof. Dr Plötz, Institute for Food Quality and Safety)
- FarmSkills4Vets The virtual dairy cow farm self-directed learning of herd animal medicine (H. Arndt & Dr S. Woudstra & Prof. Dr M. Hoedemaker, Clinic for Cattle)

Academic year 2018/2019 - funding period 2019/2020

- Neurology case-based learning with key feature tasks (Prof Dr Tipold, Clinic for Small Animals)
- **Distance injection course for wild and domestic animals** (Prof. Prof. h. c. Dr Siebert, Institute for Terrestrial and Aquatic Wildlife Research; Prof. Dr Kästner, Clinic for Small Animals)
- Webinar selected topics from small animal medicine (Prof Dr Nolte, Clinic for Small Animals)
- Practice Ethics Practice (PEP) for veterinary medicine (Prof. Dr Kunzmann, Institute for Animal Hygiene, Animal Welfare and Farm Animal Ethology)
- Animal observation and communication in livestock farming an innovation project in veterinary training (Prof. Dr Hennig-Pauka, Branch Office for Epidemiology (Bakum); Dr Campe, Institute for Biometry, Epidemiology and Information Processing)
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