Introduction

The University of Veterinary Medicine Hannover, Foundation (TiHo Hannover) started the project AMeViTH (Automated multichannel video recording at the University of Veterinary Medicine Hannover) in cooperation with the association ELAN e.V. (Elearning Academic Network), funded by the Ministry for Science and Culture of Lower Saxony in 2015.

- Aim: improving the quality of learning and teaching in veterinary medical education
- increased flexibility in time management (students with children, working students)
- possibility to recapitulate lectures in an individual speed
  - understanding and repetition
- exam preparation

Methods

Technical implementation I

- Evaluation of the technical equipment of different lecture halls
- Installation of an Extron SMP 351 processor, a streaming media processor for capturing and distributing live AV sources and presentations

Technical implementation II

- Setting up the virtual machines
- Integration of the SMP 351 processor in the TiHo intranet
- Installation of Opencast, a free, open source video management software to support the management of educational audio and video content

Results

- Installation of the Extron SMP 351 processor and Opencast have been finished successfully
- First lectures were recorded and made available for the students (figure 3)

Work in Progress

- Establishing lecture recordings in higher education courses
- Implementation of a mobile solution for recordings in clinical or laboratory settings in the future (figure 4)

Take home message

Learning clinical skills can be supported by lecture recordings in a significant way because procedures can be demonstrated and recapitulated as often as the students like.
Introduction: Opencast (Matterhorn) is a free, open source video management software to support the management of educational audio and video content. The software is an all in one solution from lecture recording about editing recorded videos to supply students with educational videos (http://www.opencast.org/). One positive aspect of Opencast: lecturers don’t need any special technical instruction or must spend additional time for lecture recording because with Opencast recordings can be scheduled and start automatically (Greweling, et al., 2014).

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Methods: After evaluation of the technical equipment of different lecture halls, one auditorium of the TiHo Hannover was selected, the existing technology has been extended and an Extron SMP 351 processor, a streaming media processor for capturing and distributing live AV sources and presentations was installed. In cooperation with co-workers from the University of Osnabrück (virtUOS) and the TiHo-IDS (Central information and data processing service) virtual machines needed for the installation of Opencast were set up and the SMP 351 processor was integrated in the TiHo intranet.

Results: The Extron SMP 351 processor and Opencast have been successfully installed. The first lectures and presentations were recorded at the TiHo Hannover (Fig. 1) and made available for learning purposes.

Discussion: For students lecture recording offers many advantages. Not only the positive aspect of increased flexibility in time management (students with children, working students), but also the possibility to recapitulate lectures in an individual speed in order to clarify yet not understood parts of the live presentation or to prepare for examinations. Further plans are to establish lecture recordings in higher education courses and to implement a mobile solution for recordings in clinical or laboratory settings. These new technologies provide great potential to improve the quality of learning and teaching in veterinary medical education.

Conclusions: Learning clinical skills can be supported by lecture recordings in a sig-
significant way because procedures can be demonstrated and recapitulated as often as the students like.

References:

Figure 1: Screenshot of a lecture recording with Opencast