



## Editorial

In the past year at the Institute for Medical Education (IML) we have been moving forward together.

**Text:** Prof. Dr. phil. Sissel Guttormsen, 11.06.2026

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Across our services, teaching and research, we have continued to strengthen our role as a leading centre for medical education, for our partners and target groups:

- a) Students and faculty, who are the immediate target group for our activities
- b) Our many partners, whose needs we are dedicated to fulfil, with an important emphasis on collaboration locally, nationally and internationally
- c) The patients, who are the overarching purpose of our activities

Overall, the annual report documents a range of projects and developments across educational practice, research, and infrastructure. These activities reflect ongoing efforts to adapt teaching, assessment, and research practices to changing technological and institutional contexts.

A defining feature of this year has been our emphasis on collaboration—locally and internationally. Through initiatives such as the IMEX exchange, we welcomed global partners and experts in medical education and engaged in meaningful dialogue on the future of medical education. These exchanges enrich our perspectives and reinforce our shared responsibility to address the evolving needs of healthcare systems worldwide.

In teaching, the IML contributes to curriculum development and the implementation of effective learning formats. For example, a coaching programme for medical students in their 4th and 5th year was introduced, consisting of two individual sessions of 45 minutes each during clinical placements. Also, a new interprofessional ward-round training format was implemented to address previously identified gaps in interprofessional clinical education.

At the same time, we have continued to invest in innovation. The evolution of digital learning environments and the integration of new technologies into curricula highlight our commitment to modern, flexible, and learner-centred education. We strive to create learning experiences that are both effective and transformative. Digital learning and assessment remain a central area of activity. Existing web-based learning platforms—such as MedSurf, DocCom and FRONTLINERS—continued to be updated and expanded. Our Examic assessment suite (Measured, Valuatic, EOSCE) were further developed to support written, oral, and clinical exams with digital formats.

Research activities cover a broad spectrum of medical education topics. The publication list for 2025 reflects work in areas such as simulation-based training, feedback and assessment, self-directed learning, and the integration of artificial intelligence into clinical and educational contexts. Two large SNF projects were successfully finalised, including two PhD-projects (DLT «*Digital Learning and Teaching*» and BPSM «*biopsychosocial model of stress and challenge*»). A new research project, starting in 2025, on how to apply AI in medical education research is an important step in this context: LLM4Humans – Empowering qualitative research through local large language models is funded by the University of Bern and includes two dedicated PhD-projects in cooperation with the DCR.

Our progress is rooted in people: the dedication of our staff, the curiosity of our students, the well-being of our patients and the strength of our partnerships form the foundation of everything we achieve. Together, we are building an environment where reflection, learning, and growth are not only encouraged but embedded in everyday practice.

We hope you enjoy our report.

Sissel Guttormsen, June 2026



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# Inside IML

Highlights 2025: Key achievements from our departments at a glance.

15.06.2026

2025

## Bern Medical Faculty: Excellence in Academic Teaching

Prof. Dr. Dr. Sören Huwendiek's membership of the faculty has been extended for a further four years on the basis of his excellent academic performance in teaching. This is a well deserved honor, congratulations.

### «Titularprofessorin UniBE»

We congratulate Prof. Dr. med. Berger-Estilita on her appointment as «Titularprofessorin UniBE». This great recognition reflects her outstanding achievements in the field of medical education.

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My heartfelt thanks to the inspiring colleagues and mentors at the University of Bern and the Institute for Medical Education (IML) for their support and partnership. In particular, I would like to extend a special thank you to Prof. Sissel Guttormsen Schär for her support and encouragement.

— Prof. Dr. med. Joana Berger-Estilita PhD

## High precision medical education research

Congratulations to Michel Bosshard on completing his PhD project and the SNF project, together with Prof. Christoph Berendonk and team. Delivering bad news is a particular challenge for medical students. This research, conducted as part of a PhD, demonstrates how it can still be done—professionally and with empathy. In particular, this project has resulted in many high stakes publications: **a total of 6 publications, including a meta-analysis and a study protocol.** Read more [PhD project description](#)

## First-hand e-learning products

The Department for Education and Media (AUM) has 25 years' experience in e-learning development and is still going strong. We would like to thank the team for their dedication. [Link Story](#)

## **eAssessment Software – Innovative, Flexible, and User-Friendly**

The Software Department (ASCI)<sup>1</sup> not only focused on the continuous development of Examic<sup>®</sup> — a secure and efficient software suite for evaluating, assessing, or polling information without the need for paper checklists — but also prioritized the procurement of new tablets for exams. Furthermore, we laid the technical foundations for the implementation of ‘Bring Your Own Device’ (BYOD) for the new generation of electronic exams.

*1) Department for Software Development, Usability Consulting and IT Infrastructure*

# PhD project (SNF): Digital Learning and Teaching (DLT)

Implementing effective digital learning and teaching in higher education beyond the Covid-19 pandemic. Aligning key players' needs, bringing distant communication close and supporting students' individual learning.

2021 2022 2023 2024 2025 2026 Research

The pandemic has shown the importance of well-designed Digital Learning and Teaching (DLT). Many of the current applications and implementations have weaknesses. The role of the teaching organisations, as well as the needs of lecturers and students are not well understood nor well met. In this project we aim at understanding keyplayers needs and implementing specific solutions, while invesitgating their effectivity. In order to keep up the current disruptive DLT development, DLT needs a conceptual framework.

## Aims

We address the following overall research question: How can medical schools effectively support lecturers and students with DLT?

**Study I:** We aim at exploring how requirements and needs are aligned between the key players in Swiss medical schools, to set the stage for future developments.

**Study II:** We investigate the impact of students' simulated patient encounters with video vs. face-to-face on perceived 'social presence', acceptance and performance.

**Study III:** Various means to support individual learning for students in a DLT context will be investigated.

## Financing

SNF project 100019\_200811

## PhD Thesis Commission, Graduate School for Health Sciences

PhD candidate: Dr. med. Artemisa Gogollari

Thesis Advisor: Prof. Dr. phil. Sissel Guttormsen

Co-Referee: Prof. Stefan Schaubert, University of Oslo (Norway)

## SNF project partner

*IML partners:*

Prof. Dr. phil. Sissel Guttormsen (Main applicant)

Dr. med. Kai Schnabel, MME (Co-Project applicant)

Prof. Dr. Dr. med. Sören Huwendiek, MME (Project partner)

Dr. phil. Felix Schmitz (Scientific collaborator)

*External project partners:*

Dr. med. Christian Schirlo, Leiter Studiendekanat, Fakultät für Gesundheitswissenschaften und Medizin,  
Universität Luzern

Dr. med. Dr. sc. Stefan Gysin, Studiengangsleiter Joint Medical Master, Fakultät für Gesundheitswissenschaften  
und Medizin, Universität Luzern

Dr. rer. biol. hum. Daniel Tolks (Universität Bielefeld, D; LMU München)

**Project Information**

**Project period:** 2021 - 2026

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**Dr. med. Artemisa Gogollari**  
PhD student

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# PhD project: Post-graduate medical education programs

What makes post-graduate medical education programs (CME) at the University-level attractive?



2021 2022 2023 2024 2025 2026 Research

The number of participants of post-graduate medical programs increases significantly in later years. There are manifold challenges in this context, which need to be addressed in order to provide best-practice and up-to-date CME programs in the future: (1.) digitalization, (2.) globalization of knowledge, (3.) relevance for the society and professional development, and (4.) providing high quality, innovative teaching and learning opportunities.

Providers of CME programs must face these challenges to survive in the global competition and to attract candidates to join these programs. One way of addressing those challenges is to focus on the post-graduate program participants' needs and interests, as in the field of marketing with the strategy and concept of 'customer centricity'. This concept which normally embraces a company's strategy, structures and processes, and generates knowledge about its customers and the company's` culture, - is recently also used as a method for modelling continued educational offers at a university level.

## Aims

This PhD project will help us to develop a differentiated understanding of attractiveness of CME programs, including usefulness, accountability, practicality, return on investment, acceptability, etc.. Research on the structure, content and orientation of such programs is rare. This project sets out to fill this gap. The application of a new and efficient approach, gives structure to the research and supports a change of perspective, which is promising.

## PhD Thesis Commission, Graduate School for Health Sciences

PhD candidate: Melanie de la Rosa (M. A. Pädagogik)

Thesis Advisor: Prof. Dr. phil. Sissel Guttormsen

Co-Referee: Prof. Ara Tekian, PhD, MHPE, University of Illinois, Chicago (USA)

## Project partners

*IML project partners:*

Prof. Dr. phil. Sissel Guttormsen

Dr. phil. Felix Schmitz


**Project information**

**Running time:** 2021 - 2026



**Melanie de la Rosa**  
PhD student

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# PhD project (SNF): From threat to challenge

Improving medical students' stress response and communication skills performance through stress arousal reappraisal and preparatory worked example-based learning when breaking bad news to simulated patients

2021 2022 2023 2024 2025 Research

Breaking bad news (BBN) to patients is a frequent and stress-evoking task for many physicians. Medical students do already practice this demanding task in communication trainings with simulation patients. The intensity of their stress reaction is comparable to that in the real situation and can lead to a decrease of their BBN skills performance. Therefore, it is important to provide strategies that help medical students to effectively deal with this highly stressful communication task.

## Aims

The aim of this project is to explore the effects of the strategies «stress arousal reappraisal» and «preparatory learning with worked examples» on medical students' stress response and BBN skills performance. For this purpose, 200 medical students from Swiss universities will be tasked with BBN to simulation patients. BBN skills performance, cardiovascular activity, stress hormone release and the subjective stress perception of the students will be recorded.

## Financing

SNF project 100019\_200831

## PhD Thesis Commission, Graduate School for Health Sciences

PhD candidate: Michel Bosshard (Master of Science in Psychologie)

Thesis Advisor: PD Dr. med. Christoph Berendonk, MME

Co-Referee: Prof. Dr. Achim Alfering, Institut für Psychologie, Bern

## SNF project partner

IML:

PD Dr. med. Christoph Berendonk, MME (Main applicant)

Dr. phil. Felix Schmitz

Prof. Dr. phil. Sissel Guttormsen

*External project partners:*

PD Dr. Patrick Gomez, University Lausanne, Faculty of Biology and Medicine, Switzerland

Univ.-Prof. Dr. Urs Markus Nater, Universität Vienna, Austria

**Publications**

Bosshard, M., Nater, U. M., Guttormsen, S., Schmitz, F., Gomez, P., Berendonk, C. (2025). **Stress arousal reappraisal and worked example effects on the neuroendocrine stress response during breaking bad news in medical education,**

Psychoneuroendocrinology, Volume 176, 2025, 107439, ISSN 0306-4530,

<https://doi.org/10.1016/j.psyneuen.2025.107439>

Bosshard, M., Guttormsen, S., Nater, U. M., Schmitz, F., Gomez, P., Berendonk, Ch. (2025). **Improving Breaking Bad News Communication Skills Through Stress Arousal Reappraisal and Worked Examples.** Medical Education 2025;1-9: <https://doi.org/10.1111/medu.15658>

Bosshard, M., Guttormsen, S., Nater, U. M., Schmitz, F.\*, Gomez, P.\*, Berendonk, Ch.\* (2025). **A randomized controlled trial evaluating stress arousal reappraisal and worked example effects on psychophysiological responses during breaking bad news.** Sci Rep 15, 23290 (2025).

<https://doi.org/10.1038/s41598-025-06995-7>

\* Shared last authorship.

Bosshard, M., Guttormsen, S., Nater, U. M., Schmitz, F.\*, Gomez, P.\*, Berendonk, Ch. \*

**Exploring the Psychophysiological Predictors of Performance Under Stress — Insights from a Machine Learning Approach,** Royal Society Open Science.

<https://doi.org/10.1098/rsos.251699>

\* Shared last authorship.

Bosshard, M., Schmitz, F., Guttormsen, S., Nater, U. M., Gomez, P., Berendonk, C.

**From threat to challenge-Improving medical students' stress response and communication skills performance through the combination of stress arousal reappraisal and preparatory worked example-based learning when breaking bad news to simulated patients: study protocol for a randomized controlled trial**

<https://doi.org/10.1186/s40359-023-01167-6>

Bosshard, M., Gomez, P.

**Effectiveness of stress arousal reappraisal and stress-is-enhancing mindset interventions on task performance outcomes: a meta-analysis of randomized controlled trials.**

<https://doi.org/10.1038/s41598-024-58408-w>

**Project Information****Project period: 2021 - 2025****Dr. phil. Michel Bosshard**  
Doktorand+41 31 684 62 62michel.bosshard (at) unibe.ch**Prof. Dr. med. et MME Christoph Berendonk**  
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# PhD project: Peer teaching ultrasound

«Understanding and Facilitating Near-Peer-Teaching in Ultrasound Education.»

2020 2021 2022 2023 2024 2025 Research

Young doctors nowadays need to perform simple ultrasound investigations early on in their clinical career and ultrasound education is thus shifting to undergraduate medical education. Performing ultrasound scans is a complex skill with procedural and pattern recognition aspects best taught in small groups with just-in time feedback and verbalisation of cognitive processes. Near-peer teaching is increasingly used by medical schools to alleviate ultrasound teaching responsibility for faculty. Near-peer teaching is defined as an educational strategy in which one student teaches one or more fellow students whereas the teaching student is more advanced in the same curriculum. Little is known about near-peer teaching in the context of ultrasound education.

## Aims

The overarching aim of this PhD is to investigate how near-peers support fellow students in learning practical ultrasound skills.

## Team

PhD student: PD Dr. med. Roman Hari, MME (BIHAM)

PhD Co-supervisor: Prof. Dr. Dr. med. Sören Huwendiek, MME (IML)

Supervisor: Prof. Dr. phil. Diana Dolmans (Maastricht)

Daily supervisor: Ass. Prof. Dr. phil. Rene Stalmijer (Maastricht)

## Partners

BIHAM, School of Health Profession Education Maastricht

**Project information**

**Running time:** 2020 – 2025



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# PhD project: Evidence-Based Curriculum Development

Advancing medical education through applied research.

2024 2025 2026 Research

Medical education worldwide is shifting towards a competency-based approach. Medical curricula need to be revised to ensure that learners acquire the necessary skills, knowledge, and attitudes by the end of their studies. In Switzerland, competency-based learning outcomes are defined in the Profiles document. While these outcomes are standardized across Switzerland, individual medical schools have the flexibility to design their own curricula.

This PhD project explores different components of curriculum design: Developing a taxonomy of teaching methods, designing a coaching curriculum for large medical schools, evaluating the effectiveness of a longitudinal Clinical Reasoning curriculum, and medical students' preparedness for clinical work at the end of undergraduate education.

## Aims

Overall research question: How can medical curricula be designed to effectively teach relevant competencies?

- **Study I:** Development of a taxonomy of teaching methods based on existing teaching methods reported in the literature, and gaining insight how they can be applied to health profession education.
- **Study II:** Development of a coaching program for medical students and investigating its feasibility for large medical schools.
- **Study III:** Investigating the learning outcomes of a newly introduced clinical reasoning curriculum, grounded in a case-based learning approach.
- **Study IV:** Investigating how well students feel prepared for clinical work towards the end of undergraduate education.

## Financing

Medical Faculty, University of Zürich

**PhD Thesis Commission, Graduate School for Health Sciences**

PhD candidate: Lucia Weber (Master of Science in Psychologie), IML University of Bern and Medical faculty, University of Zurich

Thesis Advisor: Prof. Dr. phil. Sissel Guttormsen, IML University of Bern

Co-Thesis Advisor: Prof. Dr. med. Dominik Schaer, Vizedekan Lehre Klinik und Leitender Arzt, Klinik und Poliklinik für Innere Medizin, USZ, Universität Zürich

Co-Referee: Prof. Dr. Anders SONDÉN, Senior Lecturer, Department of Clinical Science and Education, Södersjukhuset, Karolinska Institutet Stockholm

***Project partners***

*IML partners:*

*Prof. Dr. phil. Sissel Guttormsen,*

*Dr. Sharon Mitchell,*

*Dr. Felix Schmitz,*

*Prof. Dr. Dr. Sören Huwendiek,*

*Dr. Daniel Stricker*

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Dr. med. Jonas Florin, Leiter klinische und praktische Ausbildung Joint Medical Master, Fakultät für Gesundheitswissenschaften und Medizin, Universität Luzern

**Project information**

Running time: 2024 - 2028

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# Integrating Precision Medicine into Tomorrow's Medical Curriculum

Building a collaborative network to advance genomic literacy and patient-centered care through interactive nephrology training.

2025 2026 2027 Research

Precision medicine is transforming healthcare, yet many healthcare professionals report limited confidence in applying genomic knowledge in clinical practice. Research at the Institute for Medical Education (IML) has identified a need for targeted education, particularly in nephrology, where understanding of genetic and rare kidney diseases is rapidly evolving. As part of the ENLIGHT funding initiative, this project will establish the foundations of a Precision Medicine education network through virtual exchange and collaboration. A new comprehensive Precision Medicine Nephrology module will cover the fundamentals of genetic and rare kidney diseases and include problem-based learning cases on lupus nephritis and kidney transplantation in a patient with IgA nephropathy. Interactive patient video cases will enable students to develop the communication and consultation skills required to discuss precision medicine approaches with patients. The initiative combines the University of Galway's expertise in genetic and genomic sciences, Ghent University's interdisciplinary student engagement, and the University of Bern's experience in precision medicine education for healthcare professionals.

## Aims

Establish a collaborative Precision Medicine education network and deliver an interactive nephrology module with the FRONTLINERS platform to strengthen genomic literacy and patient-centred care.

## Partner

University of Galway, Ghent University, University of Bern;

## Financing

ENLIGHT Grant

## Project Team

*IML:*

Dr. Sharon Mitchell, scientific collaborator, post-doctorate research in health education,  
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*Inselhospital Hospital, University Clinic for Nephrology:*

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### **Target group**

Medical students, healthcare professionals, nephrology trainees, allied health professionals, educators.

### **Publications**

Mitchell, S., Jaccard, E., Schmitz, F.M., von Känel, E., Collombet, P., Cornuz, J., Waeber, G., Guessous, I. and Guttormsen, S., 2022. **Investigating acceptability of a training programme in precision medicine for frontline healthcare professionals: a mixed methods study. BMC medical education**, 22(1), p.556.

[DOI:10.1186/s12909-022-03613-2](https://doi.org/10.1186/s12909-022-03613-2)

Mitchell S, Schmitz FM, Janczukowicz J, Buzzi AL, Haas N, Hitzblech T, Wagenfuehr J, Guessous I, Guttormsen S. **Does Education Design Matter? Evaluating an Evidence-Based Continuing Education Intervention on Genomic Testing for Primary Care; a Pre-Test Post-Test Study.** J CME. 2025 Jul 21;14(1):2526234

<https://doi.org/10.1080/28338073.2025.2526234>

**Project Information**

Project period: January 2025 – June 2027



**Dr. phil. Sharon Mitchell**  
Scientific collaborator

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# E-Learning Swiss Sepsis Program

Erstellung einer E-Learning-Plattform für die Früherkennung von Sepsis



2025 2026 Service Usability

Der Nationale Aktionsplan Sepsis Schweiz setzt sich für eine frühere Erkennung von Sepsis ein. Für die Schulung von Gesundheitsfachpersonen wird ein E-Learning erstellt. Das Projekt am IML umfasst das Hosting der Moodle-Plattform mit regelmässigen Updates, die Erstellung des ersten Moduls sowie die begleitende Beratung bei weiteren Modulen und Funktionalitäten wie Assessments, Zertifikaten und Login.

## Ziele

Gesundheitsfachpersonen sollen sich selbstständig in der Früherkennung von Sepsis weiterbilden. Dazu steht eine benutzerfreundliche E-Learning-Plattform zur Verfügung.

## Auftraggebende

Swiss Sepsis Program

## Partner

contav kompetenzentwicklung gmbh

## Team IML

Philippe Zimmermann, Priska Steiger, Axel Hahn, Martin Gasser, Daniela Schmid

**Projektinformation**

Laufzeit: Juli 2025 – noch offen

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# Das Kontinuum von ärztlicher Aus- und Weiterbildung verbessern

Brücken bauen: Kompetenzbasierte Bildung in der Schweiz von der medizinischen Ausbildung bis zur ärztlichen Weiterbildung gestalten – mit ePortfolio und medizindidaktischem Kompetenzprofil.

## WEITERBILDUNG

2025 2026 2027 Service Further training

Der kompetenzbasierte Bildungsansatz unterstützt als kontinuierliches Lehrkonzept den Übergang vom Studium in die ärztliche Weiterbildung. Um qualitativ hochwertige, arbeitsplatzbasierte Bildungsangebote zu gewährleisten, müssen klinische Lehrpersonen in Medizindidaktik geschult werden.

## Ziele

- Darstellung des individuellen Kompetenzzuwachs von Lernenden im Längsschnitt durch die Einführung einer ePortfolio-Software
- Entwicklung eines medizindidaktischen Kompetenzprofils für klinisch-ärztliche Lehrpersonen

## Partner

Projektteam Bachelor Humanmedizin der ETH Zürich

## Finanzierung

Philhuman Stiftung

## Projektteam

*IML:*

Dr. phil. nat. Elke Bayha, MME, Standortverantwortliche Eidg. Prüfung Bern, elke.bayha@unibe.ch

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*ETH Zürich:*

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**Projektinformation**

Laufzeit:

2025 - Dezember 2028

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**PD Dr. med. Monika Maria Brodmann Mäder**

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# Veterinärmedizin lernen mit VR

Einsatz von Virtual Reality zur Vermittlung der Anatomie des Harnsystems beim Hund in der veterinärmedizinischen Ausbildung.

2025 2026 Service Usability

Das Projekt untersucht die Nutzererfahrung und den Lernerfolg beim Einsatz einer Virtual-Reality-Lerneinheit zur Anatomie des Harnsystems des Hundes. Die Studie liefert Erkenntnisse zur didaktischen Integration immersiver Technologien in die veterinärmedizinische Lehre.

## Ziele

- Untersuchung von Nutzererfahrung,
- Akzeptanz und Lernerfolg einer VR-Lerneinheit sowie
- Identifikation von Potenzialen für den Einsatz von VR in der veterinärmedizinischen Ausbildung.

## Auftraggebende

Vetsuisse-Fakultät, Universität Bern

## Mitarbeitende

*Vetsuisse, Bern:* Barbara Drews, Sabine Kaessmeyer, Alexander Paul Viktor Trappe

*IML:* Felix Schmitz, Stephan Schallenberger, Sissel Guttormsen

## Zielgruppe

Studierende der Veterinärmedizin im ersten Studienjahr



**Projektinformation**

Laufzeit: 02/2025 – 08/2026



**Dr. phil. Felix Michael Schmitz**  
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# LLM4Humans

Empowering humans with local LLMs in research and clinical practice.

2025 2026 Evaluation Research

## Objective

This project will evaluate local Large Language Models (LLMs) and develop guidance for using LLMs for two use cases:

- unstructured medical reports from radiology within a clinical workflow
- qualitative research (data) within research projects

In addition, clear guidelines for the responsible and effective use of LLM at the University of Bern are to be drawn up.

## Financing

Digitalization Commission, University of Bern (Funding body)

Total funding amount: CHF 500,000

## Partner

Prof. Dr. Dr. Benjamin Ineichen (Co-applicant), Head of the Medical Data Science Unit at the Department of Clinical Research, University of Bern

## Team IML

Prof. Dr. Dr. med. Sören Huwendiek, MME (Applicant)

### Other participants:

Dr. phil. Felicitas Wagner

Dr. med. Wilma Anschuetz

Prof. Dr. phil. Sissel Guttormsen

**Project information**

Running time: since 2025



**Prof. Dr. Dr. med. et MME Sören Huwendiek**  
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# Blended Learning zum klinischen Denken

Die Vermittlung erfolgt über Online-Grundlagen, Übungen mit virtuellen Patientinnen und Patienten sowie moderierte Kleingruppen.

E-LEARNING

2025 Education

Klinische Lehre fokussiert oft auf Krankheiten anstatt klinischen Denkens. Dieses Blended-Learning-Projekt vermittelt online Grundlagen des Clinical Reasonings, bietet Übung mit virtuellen Patientinnen und Patienten und vertieft das Gelernte in moderierten Kleingruppen.

## Ziele

Das Programm vermittelt einen strukturierten Ansatz zum Clinical Reasoning. Studierende lernen,

- Symptome systematisch zu analysieren,
- Diagnosen abzuleiten und
- ihr Vorgehen zu reflektieren.

## Partner

Dr. med. Nino Räschle, Medizinische Fakultät Bern (Hauptantragsteller)

## Finanzierung

FILMED-Förderung

## Team IML

Sören Huwendiek (Mitantragsteller)

**Projektinformation**

Laufzeit: 2025



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# Interprofessionelles Clinical Reasoning

zu häufigen Gesundheitsproblemen mittels KI-assistierten virtuellen Fällen von Patientinnen und Patienten

2025 2026 Assessment Development Evaluation

Die Medizinische Fakultät Bern und die Berner Fachhochschule Gesundheit entwickeln ein Curriculum zu häufigen ambulanten Symptomen. Drei virtuelle Patientinnen und Patienten werden mit KI-Coaching erweitert und mono- sowie interprofessionell bearbeitet. Lernwirkung (quantitativ) und KI-Feedback-Erleben (qualitativ) werden evaluiert.

## Ziele

Ziel dieses Projekts ist die Entwicklung eines Curriculums, wobei für drei Symptome konkrete VP-Fälle mit komplementären, separaten Aufgabenstellungen für Medizinstudierende und Advanced Practice Nurses (APN) zur Förderung des Clinical Reasoning erstellt werden und deren Einsatz evaluiert wird.

## Partner

PD Dr. Roman Hari, Med Fakultät Bern (Hauptantragsteller)

## Finanzierung

Belearn Booster Fund

## Team IML

Sören Huwendiek (Mitantragsteller)

**Projektinformation**

Laufzeit: 2025 - 2026



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# Elektronische App im Blockpraktikum

Einführung einer App zur elektronischen Erfassung von Arbeitsplatz-basierten Assessments.

2025 2026 Assessment Service Development

Die bisherigen Papierbögen zur Dokumentation der Arbeitsplatz-basierten Assessments und Entrustable Professional Activities (EPAs) werden durch die Einführung einer elektronischen App im Blockpraktikum des Humanmedizinstudiums in Bern ersetzt.

## Ziele

Vereinfachung der Erhebung der Arbeitsplatz-basierten Assessment und EPAs durch die elektronische Erfassung derer, des Feedbacks und möglicher Lernziele.

## Partner

Studiendekanat der Medizinischen Fakultät und Studierendenvertreterinnen:

Roman Hari, Claudia Buser, Daniela Wullemin, Melanie Fisler, Nino Räschle, Florence Donzé, Julia Rieser

## Finanzierung

Durch Studiendekanat (20% WMA, für beides, Coaching Einführung und dieses Projekt)

## Team IML

Nina Loretz, Elke Baya, Sören Huwendiek

**Projektinformation**

Laufzeit: 2025 - 2026



**Dr. med. Nina Loretz**

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# CBME für Assistenzärzte für Innere Medizin in einem ländlichen Spital der Grundversorgung und im ambulanten Bereich

Welche Bedürfnisse haben Auszubildende und Supervisoren?

2025 Assessment

In einem Regionalspital wurden die Bedürfnisse zur kompetenzbasierten Weiterbildung (CBME) per Online-Umfrage erhoben. Die Ergebnisse zeigen, dass Arbeitsplatz-basierte Assessments und EPAs gut bekannt und akzeptiert sind, komplexere Elemente weniger. Chancen liegen in Feedback und Praxisnähe, Herausforderungen im Zeit- und Ressourcenmangel.

## Ziele

Erhebung der Bedürfnisse von Weiterzubildenden und Supervisor:innen zu CBME, Analyse von Akzeptanz, Ressourcen und Umsetzungschancen als Grundlage für die Implementierung im Grundversorgungsspital.

## Partner

Dr. med. Andreas Ebnetter, MME, Innere Medizin Tifers (Hauptantragsteller)

## Finanzierung

SIWF Projektförderung

## Team IML

Sören Huwendiek (Mitantragsteller)

**Projektinformation**

Laufzeit: 2025



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# EPAs in der Kindernotfallmedizin

Von der Bedarfsanalyse bis zur Evaluation der Implementierung

2025 Assessment Further training

Das Projekt entwickelt und implementiert Entrustable Professional Activities (EPAs) für die Kindernotfallmedizin in der Schweiz. Nach Analyse bestehender Arbeitsplatz-basierter Assessments werden EPAs per Delphi-Verfahren definiert, pilotiert und evaluiert. Ziel ist eine kompetenzbasierte Weiterbildung mit positiver Wirkung auf die Versorgung der Patientinnen und Patienten.

## Ziele

- Analyse aktueller arbeitsplatzbasierter Assessments,
- Definition nationaler EPAs,
- Evaluation von Implementationsfaktoren und Prüfung des Einflusses auf Weiterbildung und pädiatrische Versorgungsqualität.

## Partner

Dr. med. Isabelle Steiner MME, Kinderspital Bern (Hauptantragsteller)

## Finanzierung

Stiftung Kinderinsel Bern

## Team IML

Sören Huwendiek (Mitantragsteller)

**Projektinformation**

Laufzeit: 2025



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# Verbesserung der Feedbackqualität in einem Blended-Learning-Kurs

für Medizinstudierende mittels automatisierter Auswertung narrativer Zusammenfassungen und Visualisierung von Learning-Analytics-Daten.

2024 2025 Assessment Evaluation Education

Virtuelle Patienten (VPs) werden erfolgreich unterstützend eingesetzt, um das klinische Denken zu lernen. Zwei Prototypen sollen Feedback in Blended-Learning-Kursen mit diesen VPs verbessern:

1. automatisierte Analyse und Visualisierung studentischer Fallzusammenfassungen via Natural Language Processing
2. Darstellung von Learning Analytics zu VP-Interaktionen. Es erfolgt eine Evaluation dieser Prototypen mit Lehrenden und Studierenden.

## Ziele

Ziel ist die Verbesserung des Feedbacks in Blended-Learning-Kursen mit Virtuellen Patientinnen und Patienten. Dazu werden

1. ein NLP-Prototyp zur automatisierten Bewertung von Fallzusammenfassungen und
2. ein Learning-Analytics-Dashboard entwickelt, im Humanmedizinstudium Bern pilotiert und hinsichtlich Nutzerwahrnehmung evaluiert.

## Partner

Prof. Jürgen Vogel (Hauptantragsteller)

## Finanzierung

Belearn

## Team IML

Sören Huwendiek (Mit Antragsteller), Felicitas Wagner

**Projektinformation**

Laufzeit: 2024-2025



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# Precision Medicine for FRONTLINERS

Is a multi-support learning platform on Precision Medicine for the daily practice of frontline care professionals.

2019 2020 2021 2022 2023 2024 2025 Research Education

Nowadays, the majority of primary care professionals are not prepared to deal with issues related to precision medicine.

Frontliners is a training program that offers basic and advanced training opportunities to primary care professionals (PCPs) including physicians, pharmacists and nurses to support them in delivering high-value information, advice and care in precision medicine (PM) to their patients.

**Five online modules** have been included in the launch of Frontliners: an introduction to precision medicine, shared decision-making, genomic testing, pharmacogenetics and precision medicine in primary care.

## Objective

- Offer an online platform with practical ready to use content
- Provide onsite learning and networking opportunities
- Present quality resources and information on PM
- Bringing together the best experts as teachers and mentors

## Project team

Prof. Dr. med. Idris Guessos, Geneva University Hospitals, UNIGE (Co-IP)

Prof. Dr. phil. Sissel Guttormsen, IML, medical faculty, University of Bern (Co-IP)

Prof. Dr. med. Jacques Cornuz, Unisanté/UNIL (Co-Applicant)

Prof. Dr. Dr. med. Gérard Waeber, CHUV/UNIL (Co-Applicant)

## Financing

[health2030](#)

## Team IML, focus medical Education

Sharon Mitchell (PhD Candidate), Felix Schmitz (Scientific collaborator), Daniela Schmid (Web Design), Sissel Guttormsen (Co-Project head, PhD Supervisor)

## Extended Team, focus on content experts and implementation

A wider team of experts including the content experts, authors and reviewers have consistently supported development of Frontliners since 2020.

Ms. Samila Tankhimovitch University of Geneva (UNIGE)	Coordination and administrative support	Member of the project team, 2022 - 2024
Dr. James Nef, Hopital du Valais, Sion	Active member for 6 months. Content review of modules. Support educationalist to review content and development of content on website.	Scientific collaborator 2023 - 2024
Dr. Sarah Richtering, Hopitaux Universitaires de Genève (HUG)	Active member for 6 months. Content review of modules. Support educationalist to review content and development of content on website.	Scientific collaborator 2023
Dr. Daniel Widmer, Clinique de la Source, Lausanne	Lead content expert on module precision medicine in primary care.	Content expert 2022 - 2024
Prof. Chantal Csajka Research Centre, CHUV	Lead content expert on module Pharmacogenetics	Content expert 2023 - 2024
Aude Coumau Research Centre, CHUV	Author and content expert on module Pharmacogenetics	Content expert 2023 - 2024
Mr. Michael Balavoine, Médecine et Hygiène journal, Planète Santé	Lead branding <a href="#">development</a> Develop Frontliners website	Communications Advisor, 2022
Dr. Evrim Jaccard, Internal medicine unit, Hirslanden, Lausanne	Co-lead on research projects. Liasion with content experts. Project management of module development.	Member of the project team 2020 - 2022
Dr. Marie-Anne Durand, Unisanté, Lausanne	Lead content expert on module shared decision making.	Content expert 2021 - 2022
Dr. Kevin Selby, University of Lausanne (UNIL)	Lead content expert on module shared decision making & Introduction to Precision Medicine module.	Content expert 2021 - 2022
Roxane van Heurck, Hopitaux Universitaires de Genève (HUG)	Lead content expert on module genomic testing.	Content expert 2021 - 2022
Prof. Marc Abramowicz, Hopitaux Universitaires de Genève (HUG)	Lead content expert on module genomic testing.	Content expert 2021 - 2022
Dr. Daniel Roman, CHUV, University of Lausanne (UNIL)	Lead content expert on module Introduction to Precision Medicine	Content expert 2020 - 2021
Dr. Jacques Fellay, CHUV, University of Lausanne (UNIL)	Lead content expert on module Introduction to Precision Medicine	Content expert 2020 - 2021
Ms. Prune Collombet University of Geneva (UNIGE)	Coordination and administrative support	Member of the project team, 2019 – 2021

**Project information**

**Running time:** since 2019



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**Dr. phil. Sharon Mitchell**  
Scientific collaborator

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# Self-Directed Learning (SDL) in the Healthcare Professions

How can students and experts be supported in maintaining their personal knowledge?

2018 2019 2020 2021 2022 2023 2024 2025 Education

To guarantee high-quality services, healthcare professionals are required to successfully maintain their extensive knowledge base. Health professionals are expected to consistently stay up-to-date in their field, in which new knowledge is evolving continuously. Students are in a constant process of learning, which also involve searching and processes various information sources by their own initiative. On this background there is a need to understanding the SDL processes in order to effective support learners on all stages during their lifelong, self-directed, learning. We are investigated related topics in various running research projects.

## Objective

We investigate the SDL processes from different perspectives:

- elements of the SDL learning process, and the resulting needs and experiences of healthcare professionals in their daily lifes,
- elaborating technical tools supporting the learning process and needed features and functionalities,
- the view of work and organisational psychology (models and effects on individuals and systems).

## Partner

Prof. Dr. med. Andreas Raabe, University clinic for neurosurgery, Insel-Hospital Bern

Prof. Dr. phil. Achim Elfering, Institute of Psychology, Department of Work and Organisational Psychology, University of Bern

Dr. phil. Jodie Freeman, Institute für Sozial und Präventivmedizin, University of Bern (2022–2023)

Linda Christa, Schulpsychologin Ebikon (Masterarbeit 2020-2021)

Noa Lindner, Bildungsprojektleiterin SBB (Masterarbeit 2021-2022)

## Team IML

Prof. Dr. phil. Sissel Guttormsen

Dr. med Joana Berger-Estilita

Dr. phil. Felix Schmitz

Dr. med. Benny Wohlfahrt

## Publications

Joana Berger-Estilita, Linda Krista, Artemisa Gogollari, Felix Schmitz, Achim Elfering, Sissel Guttormsen (2025), Self-directed learning in health professions: A mixed-methods systematic review of the literature, in PLOS one, May 2, 2025. <https://doi.org/10.1371/journal.pone.0320530>

Freeman, J., Raabe, A., Schmitz, F., Guttormsen, S. (2024). How neurosurgeons maintain and update their professional knowledge in a self-directed learning context. *BMC Med Educ* 24, 763 (2024). <https://doi.org/10.1186/s12909-024-05692-9>

Wohlfahrt B., Linder N., Schmitz F.M., Hari R., Elfering, A., Guttormsen, S. (2024). Self-directed learning among general practitioners in the German-speaking part of Switzerland: a qualitative study using semi-structured interviews: Did habits change under recent technological shifts? *Swiss Medical Weekly*, 154, 7, 154:3436. <https://smw.ch/index.php/smw/article/view/3436>

Freeman, Jodie; Raabe, Andreas; Schmitz, Felix; Guttormsen, Sissel (2019). Lifelong self-directed learning in the digital age: an orientation of current software tools supporting experts in maintaining and updating their knowledge. In: *Sampson, Demetrios G.; Ifenthaler, Dirk; Isaías, Pedro; Mascia, Maria Lidia (eds.) CELDA 2019. 16th International Conference on Cognition and Exploratory Learning in Digital Age. Proceedings (pp. 443-446)*. Cagliari, Italy: IADIS Press, ISBN 978-989-8533-93-7

## Completed Mastertheses addressing SDL

Master-Thesis psychology: Noa Miranda Linder (2022).

### **Selbstgesteuertes Lernen bei Hausärzt:innen in der COVID-19 Pandemie**

Thesis Advisor: Prof. Sissel Guttormsen, Dr. Felix Schmitz, IML, Universität Bern

Submitted to: Prof. Achim Elfering, Institut für Psychologie, Abteilung für Arbeits- und Organisationspsychologie, Universität Bern

Master-Thesis psychology: Linda Krista (2021).

### **Self-Directed Learning in Health Professions: a Systematic PRISMA Review**

Thesis Advisor: Prof. Sissel Guttormsen, Dr. Felix Schmitz, IML, Universität Bern

Submitted to: Prof. Achim Elfering, Institut für Psychologie, Abteilung für Arbeits- und Organisationspsychologie, Universität Bern

**Project information**

Running time: 2018 -2025



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# Gender gap phenomenon

Gender differences in the career motivations of health professionals.



2020 2021 2022 2023 2024 2025 2026 Research

Despite numerous attempts to promote equality between women and men, there are still significantly more men in top positions in Switzerland. This gender gap phenomenon is not only found in companies, but is also visible in socially-oriented professions such as medicine and psychology.

## Aims

This project seeks to investigate whether there is a gender difference in career motivation among students of medicine and psychology. It will also examine whether career motivations change in a gender-specific manner over the course of the degree, and which of the influencing factors that are already known are most influential.

## Partners

Prof. Dr. phil. Achim Elfering, Institute of Psychology, Department of Work and Organisational Psychology, University of Bern  
Ellen Surdel, Psychologin

## Team IML

Prof. Dr. phil. Sissel Guttormsen,  
Dr. phil. Felix Schmitz

## Publications

Wohlfarth, B., Surde, E., Schmitz, F., Elfering, A., Guttormsen, S. (In print). **A Trend Analysis of Career Motivation: Gender-Specific Differences among Students of Human Medicine and Psychology in Switzerland and Germany.** BMC Medical Education.

## Masterarbeit

Ellen Surdel (2022).

**Karrieremotivation: Geschlechterspezifische Unterschiede von Medizin- und Psychologiestudierenden**

Hauptbetreuer:innen: Prof. Sissel Guttormsen, Dr. Felix Schmitz, (IML)

Co-Betreuer: Prof. Achim Elfering (Institut für Psychologie, Universität Bern).

**Project information**

**Running time:** 2020 - 2026

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# Viva VOscE

Virtual Objective structured Clinical Examinations



2023 2024 2025 Assessment

Viva VOscE will deliver a Virtual Reality platform to assist medical schools in delivering and assessing OSCEs.

## Aims

With Viva VOscE, we aim to create a Virtual Reality (VR) based OSCE platform. The purpose of this platform will be to assist medical schools in the assessment of students, and to do so with a significant reduction in logistical effort and overall cost.

## Ordering customer

Innosuisse

## Financing

Innosuisse

## Project team

Main applicant: Oliver Kannape, PhD (The Virtual Medicine Center - Hôpitaux Universitaires de Genève).  
Research project partners: Thomas Sauter MD MME, Emergency Telehealth University of Bern; Christoph Berendonk MD MME, Institute for Medical Education University of Bern; Implementation project partner: George Papagiannakis, ORamaVR SA

## Team IML

Christoph Berendonk, Florian Neubauer

**Project information**

**Running time:** 6/2023 - 5/2025

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**Prof. Dr. med. et MME Christoph Berendonk**  
Head of Group Practical assessment, Deputy Head of  
AAE

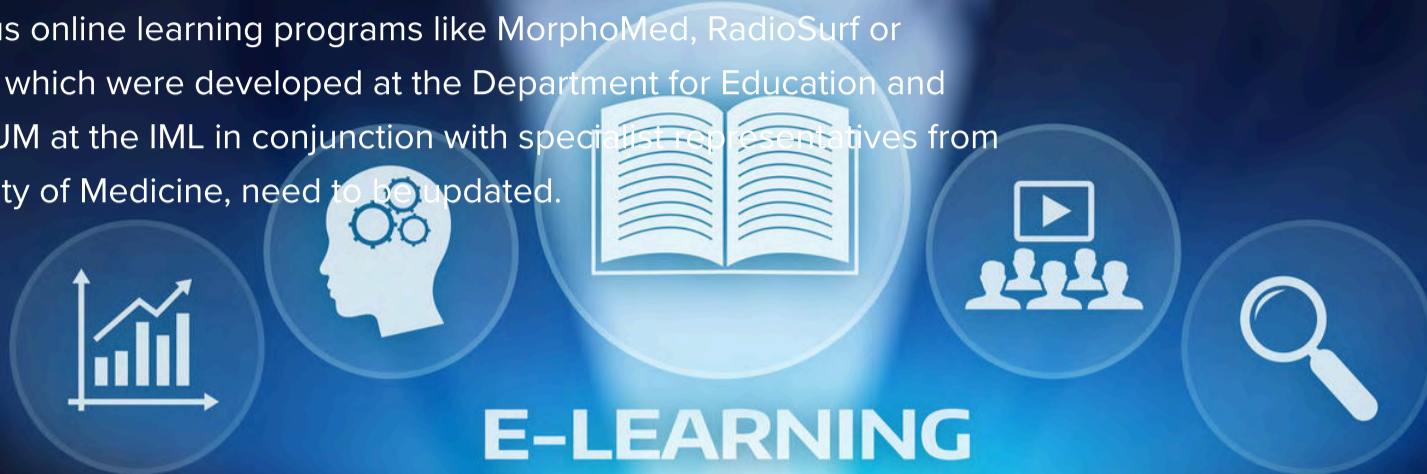
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# MedSurf

Numerous online learning programs like MorphoMed, RadioSurf or CliniSurf, which were developed at the Department for Education and Media AUM at the IML in conjunction with specialist representatives from the Faculty of Medicine, need to be updated.



2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 Education

To ensure the continued use and long-term success of these highly popular learning programs, a transition is essential - both from a technological and a creative perspective.

## Objective

Our online learning programs must meet the latest technical standards and function seamlessly across the full range of modern devices. New features - such as an advanced search function and deep linking - significantly enhance the user experience.

In addition, the development of an authoring system for learning content supports the creation of complex, didactically structured learning scenarios.

## The following learning modules have been developed using MedSurf:

- MorphoMed – for anatomy, histology, and pathology
- RadioSurf – for radiology of the chest, skeleton, and head
- ChiroSurf – for surgery
- DentoSurf – for dental medicine
- PediRad – for pediatric radiology
- CliniSurf – for pediatric auscultation. For clinical examination techniques

Additional learning modules are currently in development.

A complete list of all our online learning programs is available [\[here\]](#).

## Commissioned by

Faculty of Medicine, University of Bern

## Team

**Institute of Anatomy, University of Bern**

Prof. Dr. phil. nat. Benoît Zuber

**Institute of Tissue Medicine and Pathology**

PD Dr. med. et phil. nat. Yara Banz

**Department of Diagnostic, Interventional, and Pediatric Radiology (DIPR), Inselspital, University Hospital  
Bern**

Prof. Dr. Dr. med. Johannes Heverhagen

*And many more contributors*

**Institute for Medical Education (IML), University of Bern**

Dr. med. Nick Lüthi, MME

Florian Goll

Andrea Gottsponer

Thomas Guthruf

Stefan Lymbourides

Daniela Schmid

**Project information**

Running time: since 2016

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# DocCom.Deutsch: Webbasierte Lernmodule zur patientenzentrierten Kommunikation

DocCom.Deutsch ist eine Serie medienunterstützter Online Module für die Aus-, Weiter- und Fortbildung in der Kommunikation im Gesundheitswesen. Daran beteiligt sind Ärztinnen und Ärzte sowie Fachpersonen aus der Schweiz, Deutschland und Österreich.



2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 Service Research Education Usability

## Zielsetzung

Die Module vermitteln Theorie und praktische Beispiele, die als Vorbereitung für das praktische Kommunikationstraining konzipiert sind.

## Zielgruppe

Aus- und Weiterbildende in den Gesundheitsberufen

## Team IML

Sissel Guttormsen, Kai Schnabel, Daniel Bauer, Adrian Michel, Axel Hahn

## Partner, welche die Lernplattform bereits benutzen



## Publikationen

Schmitz FM, Schnabel KP, Bauer D, Woermann U, Guttormsen S. Learning how to break bad news from worked examples: Does the presentation format matter when hints are embedded? Results from randomised and blinded field trials, Patient Educ Couns. 2020. <https://doi.org/10.1016/j.pec.2020.03.022>

Schmitz FM, Schnabel K, Bauer D, Bachmann C, Woermann U, Guttormsen S. The learning effects of different presentations of worked examples on medical students' breaking-bad-news skills: A randomized and blinded field trial, Patient Educ Couns. 2018; 101(8):1439-1451. <https://doi.org/10.1016/j.pec.2018.02.013>

Guttormsen S, Langewitz W, Schnabel K. „DocCom.Deutsch“ Ein videobasiertes Instrument zum Kommunikationstraining in Gesundheitsberufen. Jahrestagung der internationalen Gesellschaft für Gesundheit und Spiritualität: Spiritual Care im Kontext Chronischer Erkrankungen und Schmerzen. Zürich, 27.-28.10.2017.

Schmitz FM, Schnabel K, Stricker D, Fischer MR, Guttormsen S. Learning communication from erroneous video-based examples: A double blind randomised controlled trial. Patient Educ Couns. 2017; 100(6):1203-1212-<http://dx.doi.org/10.1016/j.pec.2017.01.016>

Lanken PN, Novack DH, Daetwyler C, Gallop R, Landis JR, Lapin J, Subramaniam GA, Schindler GA. Efficacy of a Media-Rich, Internet-Based Learning Module Plus Small Group Debriefing on Medical Trainees' Attitudes and Communication Skills with Patients with Substance Use Disorders: Results of a Two-Center, Cluster Randomized Controlled Trial. Acad Med. 2015; 90(3): 345-354. <https://doi.org/10.1097/ACM.0000000000000506>

Daetwyler CJ, Cohen DG, Gracely E, Novack DH. eLearning to enhance physician patient communication: A pilot test of "doc.com" and "WebEncounter" in teaching bad news delivery. Med Teach. 2010; 32: e381-e390. <https://doi.org/10.3109/0142159X.2010.495759>

**Projektinformation**

**Laufzeit:**

Phase I: 2011 – 2014

Seit 2014: kontinuierliche(r) Unterhalt und Weiterentwicklung

**Finanzierung:**

Phase I/Spende durch Novartis Stiftung für Mensch und Umwelt



**Link**

[Website DocCom.Deutsch](#)



# Examic Valuatic

Valuatic is an easy-to-use and efficient system for conducting oral and clinical assessments (especially OSCEs) without the use of paper forms.

2021 2022 2023 2024 2025 Assessment Service Development Examic Usability

Examic Valuatic is a new software system that will replace Examic EOSCE over the years. Valuatic is being developed with all the experience and feedback we have gathered over the last 10 years from our partners and in close collaboration with assessment practitioners who run OSCEs.

There are 2 Valuatic applications: **Valuatic Studio**, a Windows application that allows you to create, distribute and observe exams as well as collect and export results. And **Valuatic Touch**, an iOS application that allows examiners to assess candidates.

Valuatic has some powerful features, such as a wide range of item types within the checklists/forms, the ability to run random, not predefined schedules, scanning QR codes to select checklists, students and examiners, remote data distribution to iPads without even touching a tablet, customisable PDF reports and different server types to store the data.

## Ordering customer

Medical Faculty University of Bern  
Federal Office of Public Health FOPH  
Institute for Medical Education

## Target group

Everyone that administers or runs clinical or oral examinations, or evaluates the performance of people, products or processes (OSCE exams, evaluations, surveys, product evaluations, vocational training, quality controls, checklists, etc.)

## Team IML

Hansmartin Geiser, Florian Goll, Stephan Schallenberger, Christian Steck, Florian Neubauer, Philippe Zimmermann, Barbara Zurbuchen

## Publications

<https://valuatic.com/news/>

The screenshot shows the Valuatic Studio interface. The main window title is 'Valuatic Studio'. The top navigation bar includes a search field with the text 'Pain in right leg' and a 'Save Form PDF...' button. The left sidebar contains menu items: Content, Exam, Devices, Results, Export, and Settings. The central workspace is titled 'Edit Document' and displays a form with four numbered questions:

- 1. Pain:** Includes an 'asks about' field, a 'Multi Select Answer : location - character - radiation -...' option, and a 'Single Select Answer : Yes - +/- - No' option.
- 2. Modifying factors:** Includes an 'asks about' field, a 'Multi Select Answer : relieving factors -...' option, and a 'Single Select Answer : yes - 1/- - no' option.
- 3. Asks about precipitating event such as trauma or...** Includes a 'Single Select Answer : yes - no' option.
- 4. Asks about pain worsening with Valsalva.** Includes a 'Single Select Answer : yes - no' option.

The right-hand sidebar is titled 'Multi Select Answer Modifiers' and contains the following sections:

- Content:** A table with columns 'Label' and 'Points'. It lists 'relieving factors' with 1 point and 'aggravating factors' with 1 point.
- Properties:** An 'Optional' toggle switch is turned 'On'. Below it are fields for 'Min. Selection Needed' (set to 0) and 'Max. Selection Allowed' (set to -).
- Display:** A section for visual styling options.

**Project information**

Running time: since 2018

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**Link**

Further Information

[Valuatic.com](http://Valuatic.com)

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Head of ASCII Department

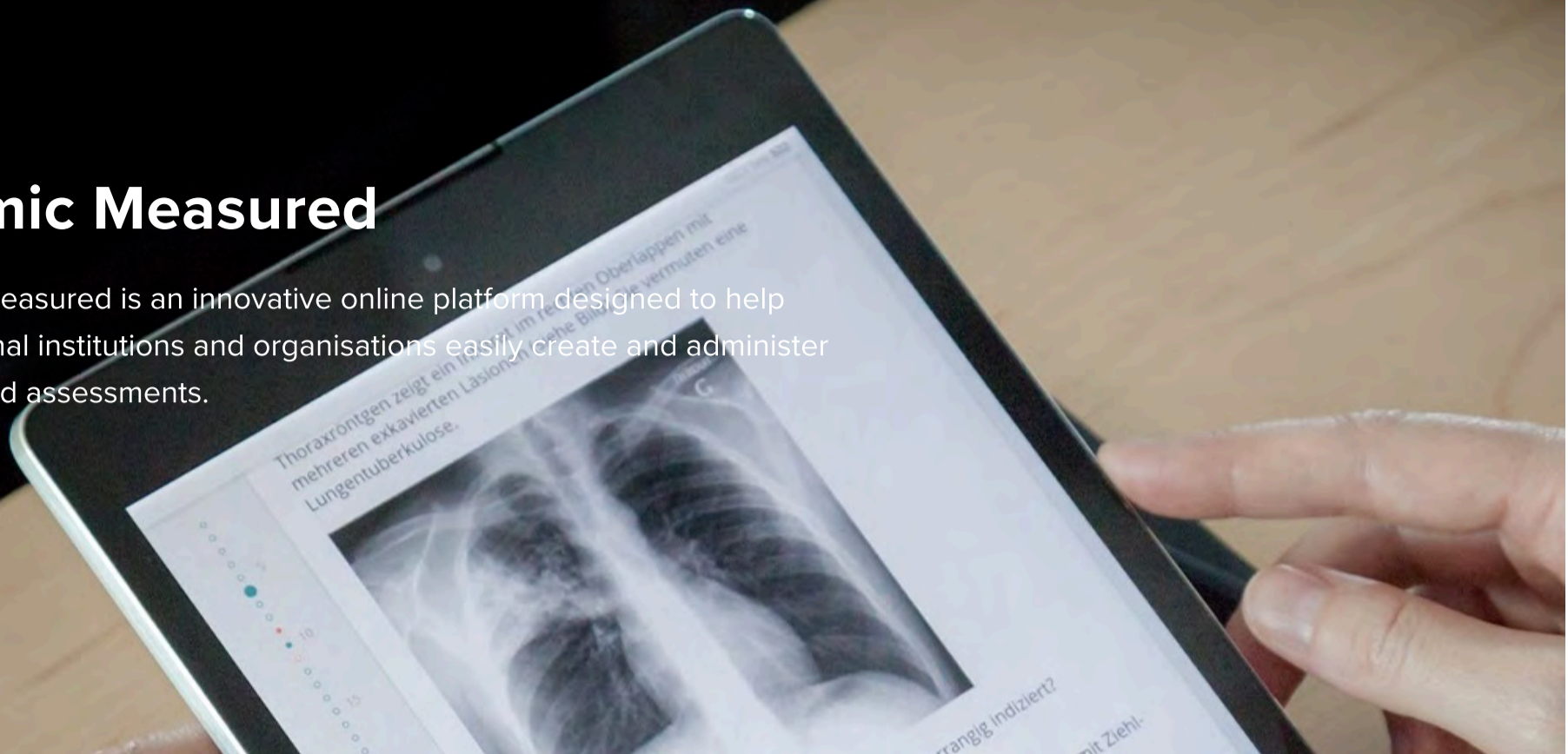
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# Examic Measured

Examic Measured is an innovative online platform designed to help educational institutions and organisations easily create and administer exams and assessments.



2017 2018 2019 2020 2021 2022 2023 2024 2025 Assessment Service Development Examic Usability

Measured offers a wide range of features and advantages that make it an ideal solution for educators, administrators, and students alike.

## Aims

Development of an application suite to support the entire assessment cycle of written examinations.

## Ordering Customer

Federal Office of Public Health  
Faculty of Medicine, University of Bern  
Institute for Medical Education

## Team IML

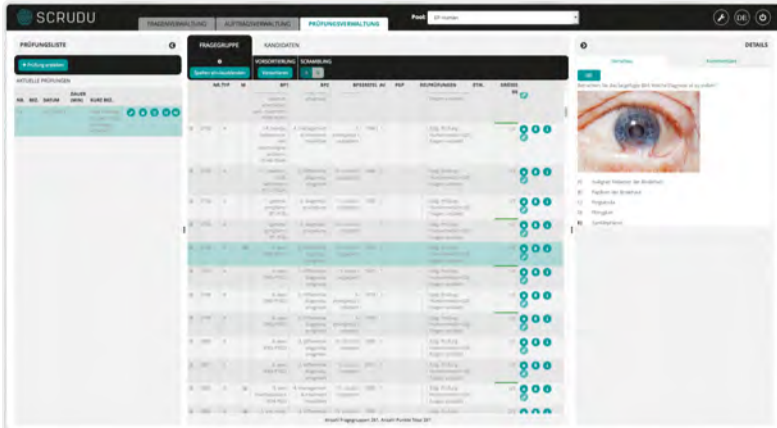
Radan Antic, Andreas Beschorner, Karin Braun, Raphael Breukel, Neil Docherty, Corinne Dreifuss, Florian Goll, Jana Henschel, Patrick Jucker-Kupper, Benjamin König, Rabea Krings, Jeanne Kunz, Roger Meier, Vladimir Pavlyukov, Lukas Rieder, Stephan Schallenberger, Tina Schurter, Priska Steiger, Daniel Stricker, Philippe Zimmermann, Elisabeth Zwahlen

## Target group

Educational institutions and organisations that create, administer, run or analyse exams: students, teaching and administrative staff of Higher Education Institutions

**Project information**

Running time: since 2017



**Examic Measured**

[LINK](#)



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# Examic EOSCE

EOSCE is an easy-to-use and efficient system for conducting practical medical examinations (especially OSCEs) without the use of paper forms.

2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 Assessment Service Development Examic Usability

Assessments using EOSCE have less erroneous or missing data than exams using paper checklists and can be analysed immediately after the exam. The three EOSCE applications help exam administrators to easily setup and monitor an exam and download results centrally. It helps examiners focus on candidate performance through visual aids in the user interface. Assessments are conducted on iPads and can be run with a central server as an additional layer of security or completely offline.

## Aims

Development of an application suite to support Objective Structured Clinical Examinations (OSCE).

## Ordering customer

Federal Office of Public Health  
Faculty of Medicine, University of Bern  
Institute for Medical Education

## Team IML

Christoph Berendonk, Sabine Feller, Hansmartin Geiser, Florian Goll, Natascha Lüthy, Christian Steck, Daniel Stricker, Philippe Zimmermann

## Target group


Educational institutions and organisations that create, administer, take or analyse exams: examiners, teaching and administrative staff of Higher Education Institutions

**Project information**


Running time: 2008 - 2025

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**Links**

[EOSCE](#) 

[Examic Assessment Suite](#) 

[Story «10 years of clinical skills exams with Examic EOSCE»](#) 

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# Evaluation von Praxisassistenzen

Überarbeitung der Erhebungsinstrumente für die Evaluation von Praxisassistenzen.

2023 2024 2025 Service Evaluation

Überarbeitung der bestehenden Fragebögen zur Evaluation von hausärztlichen Praxisassistenzen.

## Ziele

Die bestehenden Fragebögen sollen so angepasst werden, dass diese auch für andere Fachbereiche eingesetzt werden können.

## Auftraggebende

Schweizerisches Institut für ärztliche Weiter- und Fortbildung (SIWF)

## Team

Felicitas Lony Wagner, Kexel Ann-Kathrin Lea, Sören Huwendiek

**Projektinformation**

Laufzeit: 06/2023 – 2025



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## IMEX network: visit to the IML Bern

Over a period of five days, the Institute for Medical Education (IML) provided a high-ranking international delegation an insight into its activities in medical education. Key figures from the IML and the Bern medical community highlighted central topics from different perspectives. The exchange took place as part of the IMEX programme (International Medical Educators eXchange).

**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, Prof. Dr. Dr. med. et MME Sören Huwendiek, Elisabeth Pacher Wiedmer, 16.04.2026

2025

Event

Further training

The Institute for Medical Education (IML) has been part of the international IMEX network since 2023. Following scientific exchange visits to Stockholm (2023) and Utrecht (2024), the return visit took place in Bern from 2 to 7 November 2025. Under the motto "Let's learn from each other", medical educators from Sweden, Germany and the USA met with experts from the IML (see info box).

The exchange focused on shared challenges, proven approaches and diverse solutions in medical education, which were discussed in depth from multiple perspectives.



Prof. S. Huwendiek, Prof. D. Ansari, Dr. L. Günther, Prof. K. Famous, Prof. M. Wijnen-Meijer, Prof. C. Berendonk, Prof. E. Westerlund, Prof. G. Palmer, Prof. K. Schnabel, Prof. S. Vetrone (from left to right)

### Medical studies in Bern and Switzerland

One focus was on the special features of medical education in Bern and Switzerland. Contributions from university leadership (Prof. Sager), faculty leadership (Prof. Bassetti), the Faculty of Medicine's Dean of Education (PD Dr. Hari), the IML, and numerous other participants provided an overview of the national framework conditions, key organisational and strategic parameters from the perspective of the university and the Faculty of Medicine, as well as in-depth insights into innovative activities within medical education. In addition, educational development, career pathways in medical teaching, habilitation and structures for educational research were presented.

The Bern Medical Students' Association (fsmb) presented itself as an important body through its participation in all teaching committees and its own initiatives. The issue of some graduates not pursuing a career in medicine was discussed as a shared challenge.

### Role and activities of the IML

The IML has more than 50 years of experience in assessing and promoting high-quality medical education. In the area of assessment, the examination procedures developed by the IML in collaboration with Swiss faculties were presented and discussed. The federal examination (EP) with its practical component (OSCE), is unique to Switzerland and is a prerequisite for entry into postgraduate medical training. «*The key advantage of this type of exam is that it assesses not only knowledge, but also the ability to apply that knowledge in concrete clinical situations*», the IML experts emphasised. The Swiss approach was compared with models from Germany, Sweden and the USA.

The IML's own simulated participants (SP) programme was also presented. SP have been specifically recruited, trained and deployed in Bern for many years, both in assessment and in teaching. Particular attention was paid to the nationally unique OSCE examination track with schoolchildren in paediatrics, which is distinguished by its high degree of authenticity, as well as the development and use of moulages to make examination situations in SP encounters even more realistic. In Addition, participants gained further practical insights into key areas of activity, including e-learning and video production. The active participation of the guests fostered a lively professional exchange.

“  
The key advantage of this type of exam is that it assesses not only knowledge, but also the ability to apply that knowledge in concrete clinical situations.

— IML experts on the OSCE examination

### **Innovation and outlook**

Modern medical education must meet a wide range of needs. This was illustrated, for example, by a current pilot project on student coaching based on Gibbs' reflective cycle<sup>[1]</sup>. The focus is on supporting students' personal development, guided by experienced clinicians. Gradual integration into the Bern curriculum is planned from the spring semester of 2026.

### **Conclusion**

The IMEX meeting in Bern provided in-depth insights into Bern as a centre for medicine from the perspective of medical education and enabled intensive international exchange.

The particular value of the IMEX format was especially evident in the small, focused setting: jointly reflecting on challenges, learning from one another and inspiring each other. The evaluation confirms that the meeting met the participants' expectations and there is already anticipation for the next meeting in Dresden.

*[1] Gibbs, G. (1988) Learning by Doing: A guide to teaching and learning methods. Further Education Unit, Oxford Brookes University, Oxford*



Prof. Eli Westerlund (Karolinska Institutet)



dia Günther (Dresden University of Technology) & Prof. Katie Famous (Kaiser Permanente Bernard J. Tyson School of Medicine)



Prof. Sylvia Vetrone (Kaiser Permanente Bernard J. Tyson School of Medicine)





Prof. Sissel Guttormsen (Director IML) & Prof. David Ansari (University of Illinois College of Medicine)



Group discussion with Prof. Sören Huwendiek & Prof. Christoph Berendonk (IML)



Prof. Kai Schnabel (IML)



Dr. Beate Brem (IML)



Example: use of moulages



Moulage demonstration with IML make-up artist Miria Germano (test subject Kai Schnabel, IML)



Example of moulages



Moulage demonstration with Dr. Daniel Bauer (IML)



Prof. Sissel Guttormsen in the IML video studio





Dr. Nina Loretz (research assistant for the coaching programme) and Prof. Sissel Guttormsen



Group photo with students

**Participants in the international group with 9 visitors from 5 universities**

USA, Kaiser Permanente Bernard J. Tyson School of Medicine, Pasadena

Prof. Katie Famous, Department of Clinical Science

Prof. Sylvia Vetrone, Biomedical Science Department

USA, University of Illinois College of Medicine, Chicago

Prof. David Ansari, Department of Medical Education

Schweden, Karolinska Institutet, Stockholm

Prof. Eli Westerlund, Department of Clinical Sciences

Prof. Gabriella Palmer, Department of Molecular Medicine and Surgery

Germany, Dresden University of Technology

Prof. Marjo Wijnen-Meijer, Institute of Medical Education

Dr. rer. nat. Lydia Günther, Department of Medical Biology

Clinic for Psychiatry and Psychotherapy

Switzerland, Faculty of Medicine, Bern, IML

Prof. Sissel Guttormsen

Prof. Sören Huwendiek

Prof. Christoph Berendonk



**Story**

«IML has joined the IMEX Program»

[Link](#)

# Interprofessionelles Visitenttraining, eine Lücke im Curriculum wird geschlossen

In der klinischen Routine ist die Visite ein Grundpfeiler der Patientenversorgung. Hier fallen Entscheidungen, hier wird kommuniziert. Doch während jede Berufsgruppe für sich einzeln ausgebildet wird, fehlte es bisher an genügend gemeinsamen Raum, um genau diese Zusammenarbeit zu trainieren.

**Text:** PD Dr. med. et MME Kai Schnabel, 16.04.2026

2026 Education

Mit dem Projekt InterViT (interprofessionelles Visitenttraining) hat das Institut für Medizinische Lehre gemeinsam mit dem Berner Bildungszentrum Pflege, an der das Projekt ursprünglich entstanden ist (Schlegel et al, 2022, <https://doi.org/10.1024/1661-8157/a003890>), und der Berner Fachhochschule ein innovatives Trainingsformat implementiert. Das Ziel ist klar: Studierende aus bis zu acht Studiengängen – von der Humanmedizin über die Pharmazie bis hin zur Physiotherapie und Hebammenkunde/Geburtshilfe – sollen lernen, eine Visite nicht nur nebeneinander, sondern miteinander und vor allem auf Augenhöhe zu gestalten.

## Die Methode: Realität im geschützten Raum

InterViT setzt auf einen modernen didaktischen Mix, der Theorie und Praxis nahtlos verbindet:

- **Flipped Classroom:** Onlinevorlesungen, kurze Podcasts und Skripte bereiten die Teilnehmenden zeitlich flexibel auf die Kursinhalte vor.
- **Peer-Learning:** Die Studierenden schlüpfen in ihre zukünftigen Rollen und lernen dabei auch die Perspektive der anderen Disziplin hautnah kennen.
- **Simulationsbasiertes Lernen:** In realistischen Szenarien treffen Studierende auf Simulationspatient:innen. Hier darf probiert, korrigiert und neu angesetzt werden.

## Pionierarbeit und erste Meilensteine

Der Weg zur interprofessionellen Exzellenz ist kein Sprint, sondern ein Marathon der Koordination. Die größte Hürde? Die Synchronisierung der unterschiedlichen Stundenpläne und Curricula der beteiligten Institutionen. Dennoch konnten in den Pilotphasen 2024 und 2025 bereits wichtige Erfolge erzielt werden.

“

Das Training war unglaublich realistisch. Ich fühle mich jetzt viel sicherer in der Kommunikation mit anderen Berufsgruppen.

— Teilnehmerin aus der Humanmedizin.

## Was wir aus den Pilot-Tests lernten

Die Evaluationen der ersten Durchgänge, die als Wahlfach durchgeführt wurden, sprechen eine deutliche Sprache: Die Studierenden schätzen die hohe Praxisnähe und die Atmosphäre auf Augenhöhe. Besonders das strukturierte Debriefing nach den Simulationen wurde als „echter Augenöffner“ bezeichnet.

Natürlich gab es auch Lernfelder für das Projektteam:

- **Rollenklarheit:** Gerade für Pharmazie-Studierende muss die spezifische Rolle im Visitenteam noch schärfer konturiert werden.
- **Effizienz:** Die theoretische Einführung wurde bereits gestrafft und durch kompakte Videoformate ersetzt, um mehr Zeit für das eigentliche Üben am Bett zu schaffen.
- **Digitaler Zugang:** Die Harmonisierung der Lernplattformen bleibt eine logistische Aufgabe, um allen Teilnehmenden den gleichen Zugriff auf Materialien zu ermöglichen.

### **Ausblick: Der Weg zum Roll-out 2027**

InterViT ist mehr als ein Pilotprojekt – es ist ein Vorzeigemodell für eine innovative Lehrkultur unter Einbezug verschiedener Berufsgruppen am Standort Bern. Die Pläne für die Zukunft sind wie folgt:

1. **Erweiterung der Breite:** In den kommenden Semestern werden weitere Professionen wie die Physiotherapie und Ernährungsberatung fest integriert.
2. **Institutionelle Verankerung:** Geplante „Interprofessionelle Wochentage/-halbtage“ sollen sicherstellen, dass das Training kein Wahlfach bleibt, sondern fester Bestandteil der Ausbildung wird.
3. **Nachhaltigkeit:** Durch die Unterstützung der Fakultätsleitung und des Studiendekanats strebt das Projekt einen flächendeckenden Roll-out bis zum Frühjahr 2027 an.

**Das Fazit fällt positiv aus:** Trotz der organisatorischen Komplexität zeigt InterViT, dass die Begeisterung der Studierenden für die Zusammenarbeit institutionsübergreifend ist. Wenn angehende Mediziner:innen, Pharmazeut:innen, Hebammen, Physiotherapeut:innen und Pflegefachkräfte bereits im Studium lernen, die Kompetenzen der jeweils anderen Gruppe wertzuschätzen, profitieren am Ende die, um die es wirklich geht: die Patientinnen und Patienten.

© Bild Shutterstock

**Didaktische Hintergründe & beteiligte Partner**

Besuchen Sie die Projektseite von IAVI  
(der FIT-Dachorganisation:  
<https://ipzswiss.ch/>).

**FILMED Grant**

Das Projekt wurde 2024 von der  
Medizinischen Fakultät Bern im  
Rahmen des FILMED-Programms mit  
einem Grant von CHF 40'000.-  
gefördert.



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# The Evolution of Digital Learning Environments in Medical Education at the Institute for Medical Education (IML), Faculty of Medicine, University of Bern

Stratum spinosum

This overview traces the development of the IML's digital learning programmes - from the first interactive CD-ROM through web-based platforms to MedSurf 2.0 - the current curriculum-based platform.

**Text:** Dr. med. et MME Niklaus Fritz Alexander Lüthi, 16.04.2026

2025

Service

Development

This overview traces the development of the IML's digital learning programmes - from the first interactive CD-ROM through web-based platforms to MedSurf 2.0 - the current curriculum-based platform.

It highlights technological milestones, didactic concepts, teamwork and current innovations - illustrating how the programme has become a central component of the digital learning landscape in medical education at the University of Bern.

## Video production (since 1972)

Since its founding, the IML has provided video production services for the Faculty of Medicine in Bern as well as for numerous external clients. The professionally equipped video studio offers ideal conditions for producing learning media, webinars, examination videos for the federal examination, and many other applications.

## CD-ROM as the origin (since 1995)

What has evolved into today's comprehensive digital learning ecosystem began with the classic CD-ROM. At a time when fast Internet connections were still rare, locally installed learning programmes provided access to medical knowledge - interactive, multimedia-based and independent of time and place. At the IML, we produced around 50 different CD-ROM projects, with a total print run of over 30,000 copies.

## Web-based Learning Platforms (since 2000)

As technology advanced, the next logical step was the transition to web-based learning platforms. This shift opened entirely new possibilities - not only for the availability and updatability of content, but also for collaboration, personalised content, and the integration of multimedia elements. The IML's first web-based platform was StudMed, a role now fulfilled by Ilias.

## Surf series (since 2001)

Early on, the IML launched «lighthouse projects» that continue to play a central role in digital learning today. Under the common product line Surf – inspired by surfing the World Wide Web, a series of specialised modules were created: CliniSurf, RadioSurf, HemoSurf, DentoSurf, and UroSurf. Over the years, these have become key

players in medical e-learning. They provide students and medical professionals with in-depth insights into clinical processes, imaging procedures or medical conditions - always at the forefront of didactics and technology.

### **MedSurf Viewer 1.0 and MedSurf Author 1.0 (from 2015)**

Through continuous adaptation, the Surf series evolved into the MedSurf Author authoring system - a platform designed specifically to meet the needs of content creators. MedSurf Author offers author-centred editing through a user-friendly, web-based interface. Complementing it, the MedSurf Viewer complements MedSurf Author as the viewing platform for students.

### **MedSurf-MorphoMed (since 2015)**

MedSurf was initially launched with the production of content for MorphoMed, an interactive learning environment for morphology in medicine, covering anatomy, neuroanatomy, histology, virtual microscope, pathology and radioanatomy. In this way, MedSurf combines technological flexibility with rich, in-depth content, offering optimum conditions for the efficient creation and maintenance of high-quality teaching and learning materials.

### **MedSurf Viewer 2.0 and MedSurf Author 2.0 (since 2025)**

MedSurf 2.0 has long since evolved beyond a mere authoring tool to become the centrepiece of a comprehensive learning ecosystem. Developed and maintained by an interdisciplinary team of computer scientists, UX designers and educationalists, it enables targeted content delivery for defined user groups. In 2025, several key features were introduced: a new rights distribution system, integration of a web shop, foundations for multilingual support, a dedicated support platform, and significant advancements in the use of interactive videos.

### **DocCom.Deutsch (since 2011)**

The e-learning platform for communication training was developed with funding from the Novartis Foundation for People and the Environment as part of an international collaboration. Since then, the IML has continuously expanded the platform with new modules in cooperation with clinical partners. Designed for flexible use, the platform increasingly supports interprofessional communication training in a blended learning format across basic, advanced and continuing education. The modules portray various patient communication scenarios. DocCom.Deutsch is also well established as a key learning resource within communication training courses at the Faculty of Medicine in Bern and in numerous faculties across the DACH region.

### **Frontliners (since 2024)**

Frontliners is the latest e-learning platform developed through national funding and collaboration. It aims to provide primary care professionals - including doctors, pharmacists and nurses - with high-quality access to information, advice and care in the field of precision medicine.

### **ILIAS and MedSurf - two systems, one goal**

While ILIAS serves as the central learning management system primarily for organisational processes, course materials and communication within courses, MedSurf functions as a specialised learning platform focused on interactive and multimedia content.

## **Student Collaboration**

A distinctive feature of all our developments is the close integration with academic work. Numerous contents and new modules are created within the framework of media dissertations or media master's theses, supported by the IML's didactic expertise. Students work in close cooperation with medical practitioners. This has led, among other achievements, to the development of a comprehensive learning platform for hand surgery, curricularly integrated and highly effective modules in pathology, and entirely new teaching formats such as Inquiry-Based Education. This close collaboration enables the direct transfer of the latest findings of learning and teaching research directly into clinical practice.

## **Teamwork - Working Together for High-Quality Learning Media**

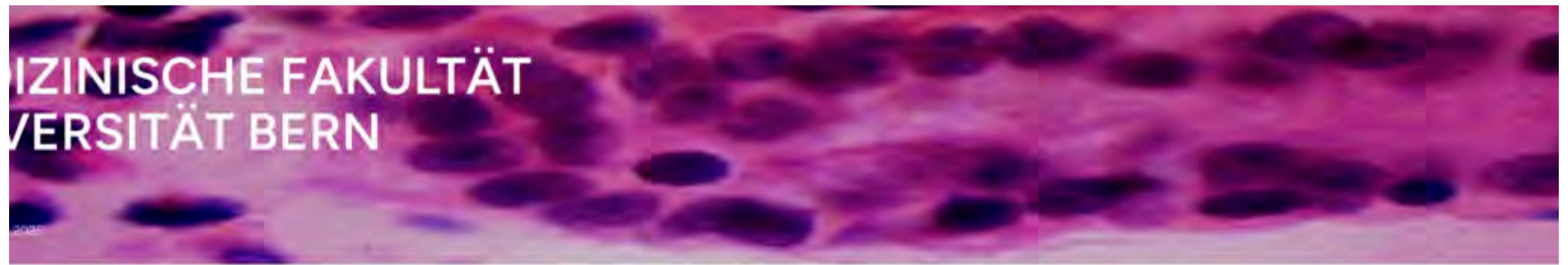
The production of modern learning media builds on a long tradition, continuously evolving technical expertise, and an open attitude towards technological change – and, not least, on close teamwork. Specialists from various fields contribute their expertise: the mediamatics team, the video team, didacticians, medical experts, computer scientists, and UX design professionals.

## **Focus on Interactive Learning Processes (since 2025)**

MedSurf is currently entering a new chapter: Two ongoing media dissertations are dedicated to the implementation of interactive videos. These innovative formats enable learners not only to passively view content, but also to actively make decisions, influence clinical processes and thereby gain an even deeper understanding of medical contexts.



Video studio IML



## MorphoMed

Eine Sammlung interaktiver Lernmodule zur Morphologie des Menschen zur Unterstützung des Unterrichts in Anatomie, Histologie und Pathologie.

- ANATOMIE
- NEUROANATOMIE
- HISTOLOGIE
- VIRTUELLES MIKROSKOP
- PATHOLOGIE
- RADIOANATOMIE

## RadioSurf

Interaktive Lernmodule zur Diagnostischen Radiologie für Studierende der Medizin und Ärzten in Weiterbildung

- THORAXRÖNTGEN
- SKELETRRÖNTGEN
- SCHÄDEL-CT

## ChiroSurf

Eine Sammlung interaktiver Lernprogramme zur Chirurgie

- TRAUMATOLOGIE

## DentoSurf

Ein interaktives Lernprogramm zur Zahnmedizin.

- ZAHNMEDIZIN

## Pedirad

Eine Sammlung interaktiver Lernmodule zur Radiologie des Kindes für Ärzte in Weiterbildung zur Radiologie.

- EINFÜHRUNG
- THORAXRÖNTGEN
- SKELETRRÖNTGEN
- DR. TSCHÄPPELER-ARCHIV

## CliniSurf

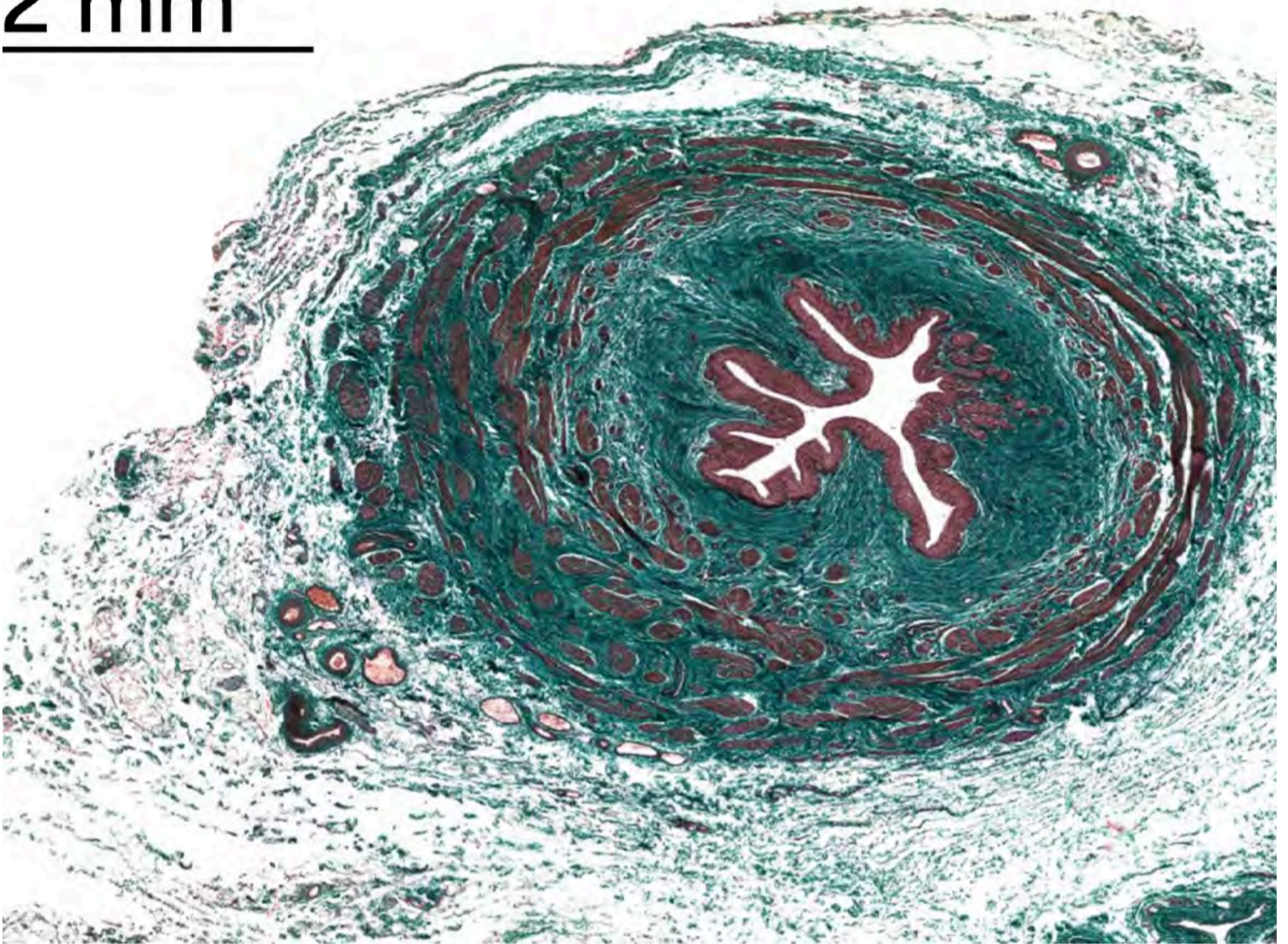
Eine Sammlung interaktiver Lernmodule zur Klinischen Medizin und Pädiatrie.

- AUSKULTATION IN DER PÄDIATRIE
- «BERN36»

Learning Programmes for Medical Students: MedSurf Homepage

**2 mm**

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Virtual Microscope

36» | CST-VIDEOS | BEWEGUNGSAPPARAT



Grundlagen der orthopädischen Untersuchung >



Die Untersuchung der Wirbelsäule >



Die Untersuchung der Schulter >



Die Untersuchung des Ellenbogens >



Die Untersuchung der Hüfte >



Die Untersuchung des Kniegelenks >



Die Untersuchung der Füße >

[DATENSCHUTZERKLÄRUNG](#)

[IMPRESSUM](#)

[FEEDBACK](#)

Example: MedSurf / CliniSurf Musculoskeletal System (CST Videos, «Bern36»)

ilweise sitzen

raten Video



0°

80°-90°

80°

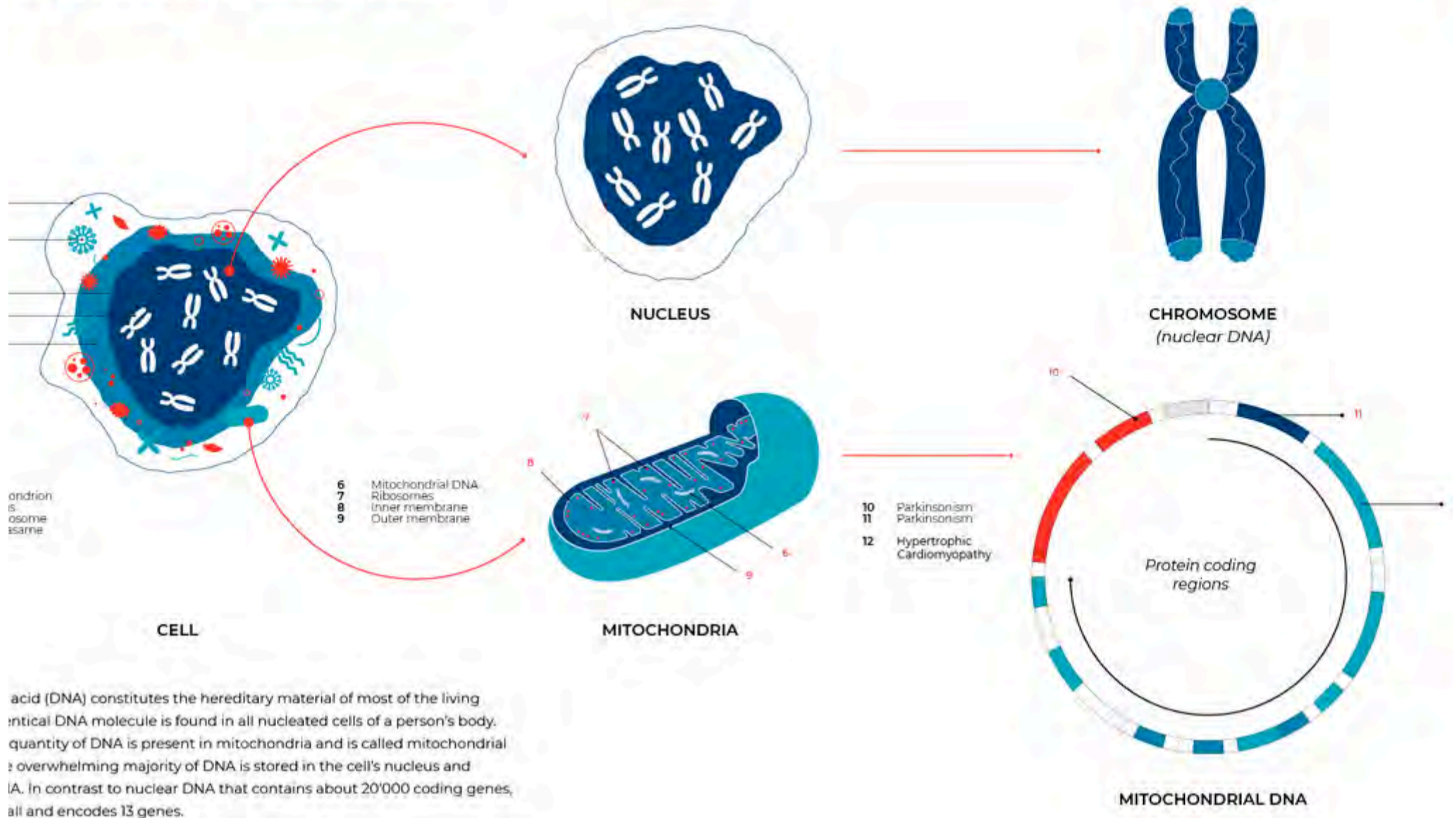
Pro-/Supination  
Normwerte: 90° - 0° - 90°

04:18

The image shows a video player interface for an educational video. The main content is a video frame showing a person's hands examining another person's elbow. The video frame has an orange overlay at the bottom with the text 'Pro-/Supination' and 'Normwerte: 90° - 0° - 90°'. The video frame also has three orange boxes with degree markings: '0°' at the top, '80°-90°' on the left, and '80°' on the right. A yellow arc connects the '80°-90°' and '80°' boxes. The video player interface includes a progress bar at the bottom with a play button and the time '04:18'. On the left side of the video player, there is a vertical sidebar with several blue and yellow buttons, a 'raten Video' button, and a 'ilweise sitzen' button.

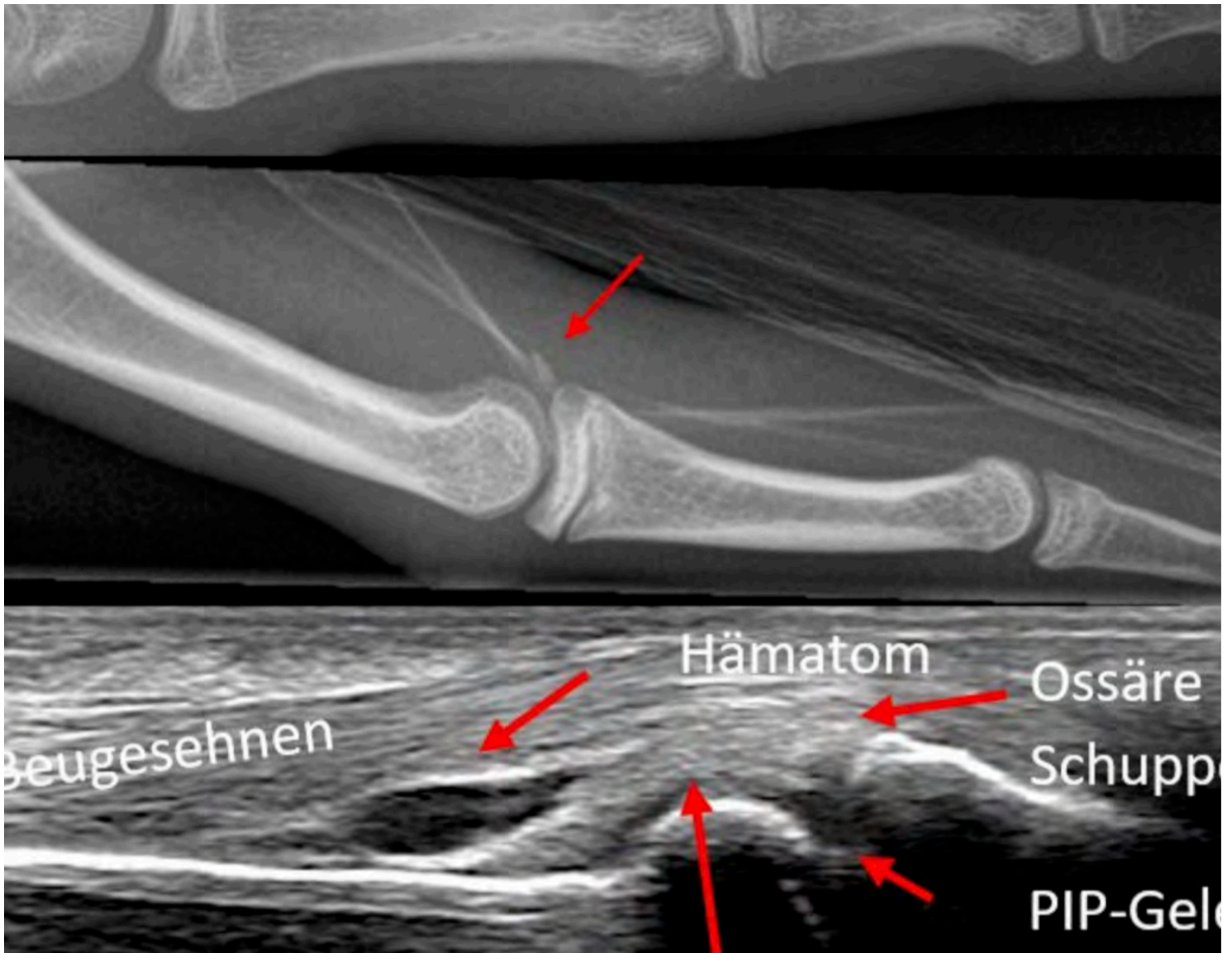
Example: CliniSurf «Elbow Examination» (CST Videos, «Bern36»)

# is genetic material stored?



acid (DNA) constitutes the hereditary material of most of the living  
 mtical DNA molecule is found in all nucleated cells of a person's body.  
 quantity of DNA is present in mitochondria and is called mitochondrial  
 : overwhelming majority of DNA is stored in the cell's nucleus and  
 IA. In contrast to nuclear DNA that contains about 20'000 coding genes,  
 all and encodes 13 genes.

Example: Frontliners



Example: Master Thesis Hand Surgery



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**Frontliners**

Story

Project website



**MedSurf**

Learning Programmes for Medical Students



**DocCom.Deutsch**

[Story](#) (in DE)

[Project website](#)



**Medical learning media**

[Story](#)

[Bern e-learning programmes](#) (en DE)

CST videos [‘Bern 36’](#) (en DE)

# Reflektieren. Lernen. Wachsen. Coaching im Medizinstudium

Mit dem neuen Coaching-Programm begleitet die Medizinische Fakultät Bern Studierende im 4. und 5. Studienjahr während der Blockpraktika. In zwei Einzelgesprächen à je 45' reflektieren sie gemeinsam mit erfahrenen Ärztinnen und Ärzten ihre Lern- und Berufserfahrungen – und stärken dabei ihre Fähigkeit, aus Erlebnissen Klarheit zu gewinnen, Bewertungen vorzunehmen und Reflexion in konkretes Handeln umzusetzen.

**Text:** Dr. med. Nina Loretz, 16.04.2026

2025

2026

Education

Further training

Der Übergang vom Hörsaal in den Spitalalltag ist für Medizinstudierende ein entscheidender Moment: Die vertraute Umgebung der Universität weicht der klinischen Realität, und plötzlich stehen Patient:innen und Angehörige, Teamdynamiken und neue Verantwortlichkeiten im Zentrum. Viele Studierende erleben diese Phase als bereichernd, zugleich aber auch als herausfordernd.

Um Studierende in dieser Übergangszeit zu unterstützen, führt die Medizinische Fakultät der Universität Bern im Rahmen der Blockpraktika des 4. und 5. Studienjahres ein Coaching-Programm ein. Es bietet Raum für Reflexion, Orientierung und persönliche Entwicklung und fördert die bewusste Auseinandersetzung mit den eigenen Erfahrungen, Werten und Zielen. Die Coaches, die diese Einzelcoachings durchführen, sind erfahrene Kliniker:innen. Das Programm wurde durch eine Arbeitsgruppe mit Vertreter:innen von IML, Studiendekanat und der Studierendenschaft entwickelt.

## Was Studierende brauchen – Ergebnisse des Needs Assessment

Im Vorfeld wurde ein Needs Assessment unter Studierenden des vierten Studienjahres durchgeführt. Das Ergebnis war eindeutig: Coaching wurde durchwegs als sinnvolle und gewünschte Ergänzung zum Curriculum eingeschätzt. Besonders häufig nannten die Befragten Themen wie den Umgang mit schwierigen Situationen, Work-Life-Balance, den Transfer von theoretischem Wissen in die Praxis sowie Fragen zur Karriereplanung und zum Wahlstudienjahr, bei welchen Bedarf für ein Coaching besteht. Diese Rückmeldungen bildeten die Grundlage für die Entwicklung dieses Coaching-Programms.

## Strukturierte Reflexion als Lerninstrument

Zentraler Bestandteil des Coachings ist ein Reflexionsformular, das auf dem etablierten Modell des Reflexionszyklus nach Gibbs (1) basiert. Dieses Modell führt Schritt für Schritt durch die Auseinandersetzung mit einer konkreten, häufig herausfordernden Lernsituation: von der neutralen Beschreibung über Gefühle, Evaluation und Analyse bis hin zur Schlussfolgerung und einem konkreten Handlungsplan. So lernen Studierende, Erfahrungen systematisch zu reflektieren und daraus neue Strategien für zukünftige Situationen abzuleiten – eine Schlüsselkompetenz für die ärztliche Tätigkeit. Das Modell basiert auf der Theorie des

erfahrungsbasierten Lernens, welche davon ausgeht, dass Lernen durch einen Zyklus aus Erfahrung, Reflexion, Schlussfolgerung und Anwendung entsteht. Entscheidend ist nicht nur das Erleben selbst, sondern vor allem die bewusste Verarbeitung dieser Erfahrung (2).

### **Ausblick**

Nach der erfolgreichen Pilotphase im Jahr 2025 wird das Coaching-Programm ab 2026 schrittweise in die Blockpraktika integriert. Das Coaching-Programm soll Studierende in einer prägenden Phase des Studiums begleiten und sie auf ihrem Weg zur Ärztin oder zum Arzt unterstützen.

### **Referenzen**

1. Gibbs, G. (1988) *Learning by Doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Brookes University, Oxford
2. Kolb, D. A. (2015). *Experiential Learning: Experience as the Source of Learning and Development*. (2. Aufl.) Upper Saddle River, NJ: Pearson Education

**Projektinformation**

Mehr erfahren



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