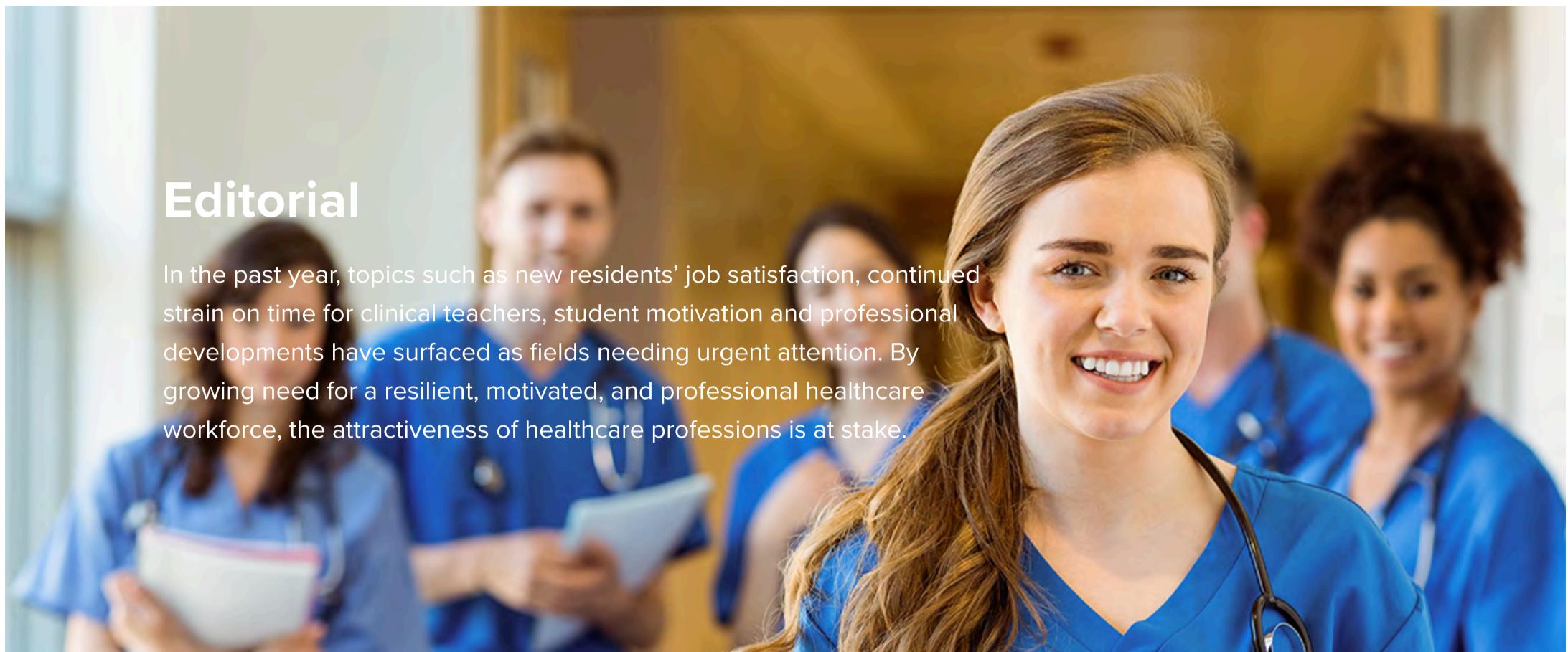


# Editorial

In the past year, topics such as new residents' job satisfaction, continued strain on time for clinical teachers, student motivation and professional developments have surfaced as fields needing urgent attention. By growing need for a resilient, motivated, and professional healthcare workforce, the attractiveness of healthcare professions is at stake.



**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, 23.04.2024

## «Education and assessment on the highest level are our passion»

In the past year, topics such as new residents' job satisfaction, continued strain on time for clinical teachers, student motivation and professional developments have surfaced as fields needing urgent attention. By growing need for a resilient, motivated, and professional healthcare workforce, the attractiveness of healthcare professions is at stake.

Medical education does not have the overarching solutions to all these challenges but, we can contribute with some elements that are getting more and more relevant in this complex picture. Medical education, - research and development, have inherently been focussing on professional challenges for the healthcare workforce for a long time. The compartmental thinking between medical fields, the 'silos', picture the situation well. In the everyday, the (clinical) work is all consuming, necessary resources to analyse the problems within a broader perspective are limited.

Many of IMLs activities would remain in a silo if we would not actively seek cooperation. Our regular tasks and services are to offer knowledge and support for high quality of teaching, elearning, media, simulations with SPs as well as tools and implementation for assessment. Content development for learning resources proceeds in close cooperation with subject matter experts in the various medical fields, this cooperation is indeed indispensable. Without the expert knowledge from the anatomy, physiology, radiology, haematology, and many more, 'Medsurf' would not be clinically grounded, and not so close to needs in teaching, and our eLearning platforms for communication training (Doccom.Deutsch) and Precision Medicine (Frontliners) would not be grounded in clinical needs. Without the close cooperation with the dermatologists, our moulages would not look life like, which they indeed do, and so become an enrichment in teaching and assessment. Without the close cooperation with all the various clinical experts, we could not develop and deliver exams reflecting the clinical needs from the various medical fields. This has several implications:

First, the division of work between content experts and medical education specialist is indeed also an opportunity to take off some work from the medical experts and clinical workforce. All the different fields of learning and assessment need optimised infrastructure and processes to reach the learners, and electronic

exams need to be presented with high usability. The time when a medical experts had to fulfil all different roles in teaching and clinical work alone, belong to the past. The knowledge, infrastructure and skills needed call for broad networking and cooperation.

Second, the quality of teaching and assessment is an important issue for students' satisfaction and effective learning and fair exams close to the clinical reality is appreciated by all stakeholders. To put something on the screen and make it available is easy, but to create a positive learning experience, which is meaningful for learners, which is attractive, engaging, and results in knowledge that can be applied, that is another issue. Delivery of learning and exam content is not enough, the form of presentation, matching assessment format with content, evaluation of results depend on expert's knowledge. The science within medical education is to deliver models and evidence for what works best. In our research we can show that quality and didactic concepts result in learning, which is sustainable, and transferable to clinical practice; that exams that are fair representative and practically handleable, are accepted by the examinees. Through continuous development of exams with high relevance and high quality of presented clinical pictures, the acceptance by the examinators and content exerts is of high concern for us.

Third, medical teachers need support to keep up effective and attractive teaching, this also applies to clinical teachers at the workplace. Good teaching skills are not a question of talent, they can be learned. Engaged teachers, that can motivate students to endure challenges, that are role models for the respectful work with patients, that communicate well – with colleagues and patients - are also motivating new healthcare professionals to stay in the job. All medical fields need high quality teaching, need engaged and enabled teachers who are effective models for the new generation to come.

The small differences that matter in education are the concerns of our research and development. Between the communities of medical education and the medical fields, there are often remarkable gaps. With the call for attractiveness of the healthcare professions, building cooperation for educational matters, for resilience and compassion, is not anymore just nice to have, it is a perspective that defines quality and satisfaction for new clinicians over decades to come. Medical education is a part of the solution.

Sissel Guttormsen, April 2024



**Prof. Dr. phil. Sissel Guttormsen Schär**

Director IML

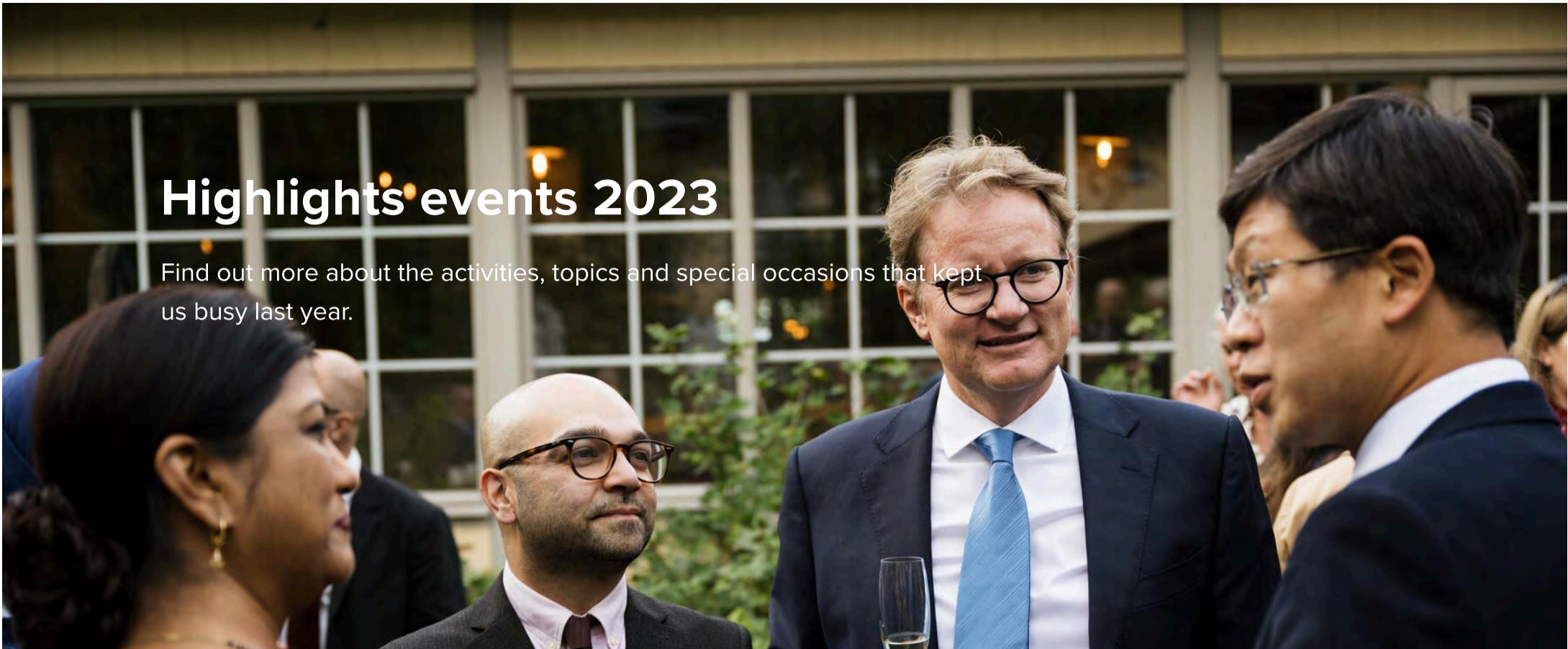
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# Highlights events 2023

Find out more about the activities, topics and special occasions that kept us busy last year.



23.04.2024

## Among the international elite of research in medical education

Professor Sören Huwendiek, MD, PhD, MME, Head of the Department of Assessment and Evaluation at the Institute for Medical Education (IML), has been invited to participate in this year's Karolinska Institutet Prize for Research in Medical Education Fellows Program.

[Read interview](#)

## International Medical Educators eXchange (IMEX)

The IML joined the IMEX programme. This international network focuses on the intensive exchange between partners in order to promote new ideas and innovations and to support the development of curricula and the fruitful continuous development of medical education. We look forward to the valuable contacts and co-operation with medical educators from other countries. As a part of the Program Prof. Sissel Guttormsen visited the Karolinska Institute in October 2023. The Karolinska team shared their educational ideas and medical education program with the participants. A truly inspiring week !

[Link Story](#)

## Federal Licence Exam conducted in Italian for the first time

Together with the medical faculties, the Institute for Medical Education has for many years developed and organised the Federal Exams in Human Medicine in French and German. With the completion of the first cohort of the Master of Medicine in Lugano in 2023, it became necessary to offer the exam in the third national language. Thanks to the joint efforts of the IML and the USI (Università della Svizzera italiana), it has been possible to administer the exam in Italian. This makes Switzerland one of the very few countries where a structured practical exam is conducted at national level in three languages.

## Symposium 50 years of the IML

Half a century with the Institute for Medical Education (IML): In light of the 50 anniversary of the IML, we have recently analysed the background for the foundation of the institute, what the most important events and who the key figures were. A symposium with around 120 invited guests on the 7 July 2023 marked the conclusion of the 50 anniversaire celebrations.

## Interview extract Prof. Sissel Guttormsen, Director IML since 2005 (in DE) and Story

### MME Bern

The MME program cycle 2022-23 completed the two-year course program in December 2023. A highlight for the group was the MME module abroad, which took place at the University Medical Center Utrecht and at Maastricht University in the Netherlands. MME participants were given an insight into competency-based postgraduate education, interprofessional education, Faculty development, leadership and technology-enhanced learning. Interest in the MME program is growing. The new program cycle 2024-25 was already fully booked at the end of August 2023



MME graduation ceremony on 09.03.24; © Adrian Moser, 2024



Sandra Trachsel-Rösmann, MME programme leader



Government Councillor Pierre Alain Schnegg



Of the 16 MME graduates in 2023, 7 were present at the graduation ceremony



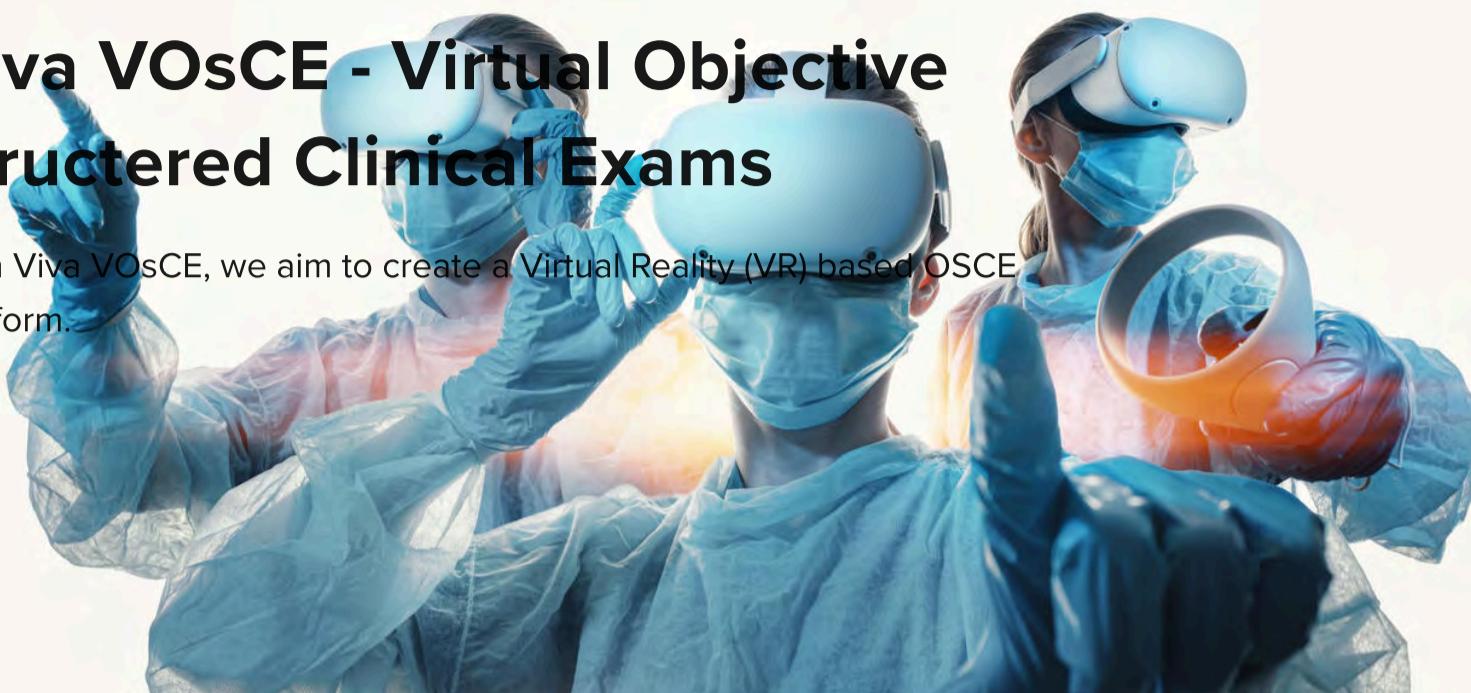
Prof. Dr. med. Claudio Bassetti Dean, Medical Faculty, University of Bern





# Viva VOsCE - Virtual Objective structured Clinical Exams

With Viva VOsCE, we aim to create a Virtual Reality (VR) based OSCE platform.



**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

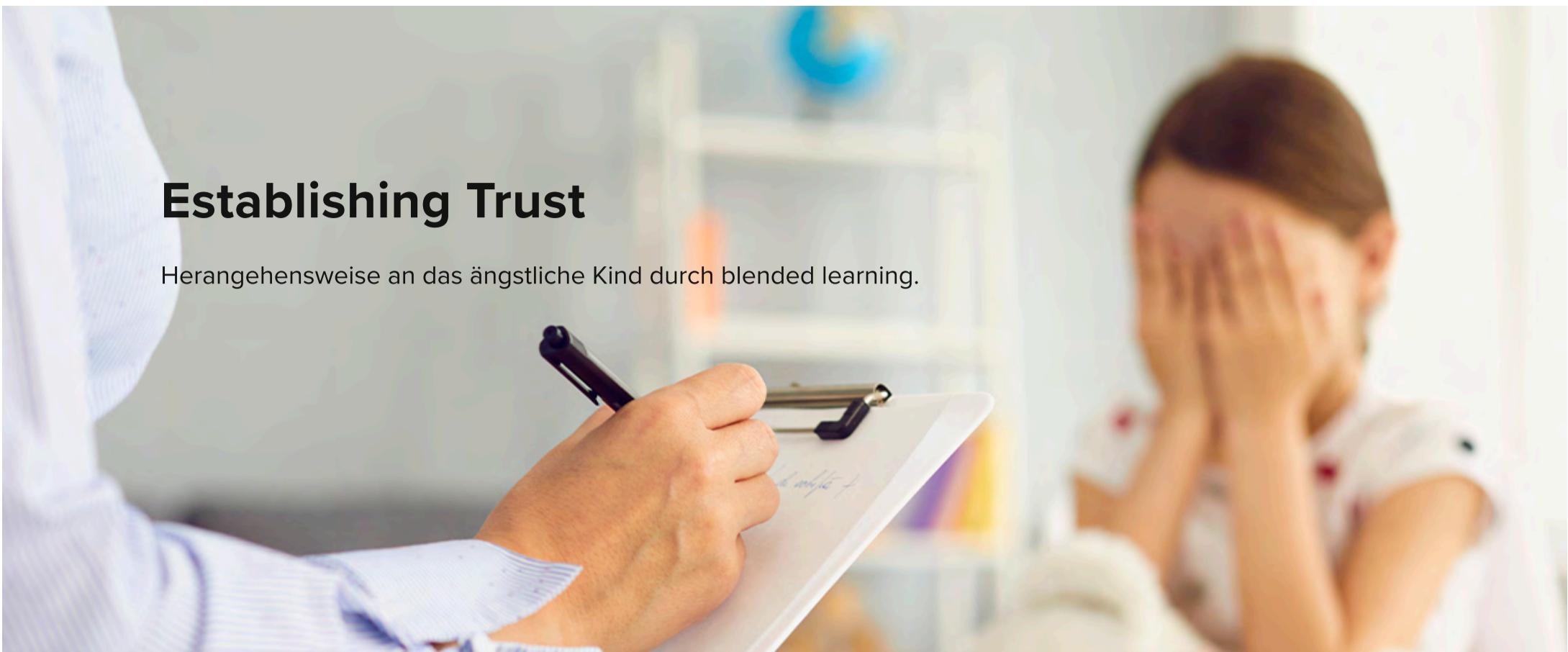
**PD Dr. med. et MME Christoph Berendonk**  
Head of Group Practical assessment, Deputy Head of  
AAE

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# Establishing Trust

Herangehensweise an das ängstliche Kind durch blended learning.



2023 2024 Research Education

Der Umgang mit ängstlichen Kindern stellt im klinischen pädiatrischen Alltag eine große Herausforderung dar. Je nach Alter können Kinder die Notwendigkeit von medizinischen Untersuchungen und Behandlungen nicht nachvollziehen und dementsprechend den dadurch entstandenen Stress nicht rational überwinden. Der Aufbau einer vertrauensvollen Beziehung und der gezielte Einsatz von Kommunikationsstrategien mit Kindern ist von grundlegender Bedeutung zur Schaffung einer stress- und angstfreien Umgebung und zur Erzielung einer kindgerechten und effizienten pädiatrischen Versorgung.

## Ziele

Durch ein strukturiertes blended learning mit Einsatz von Virtual Reality, interaktiven Workshops und direkter Supervision bei Patient:innen sollen Assistenzärzt:innen auf den Umgang mit ängstlichen Kindern im klinischen Alltag optimal vorbereitet werden.

## Auftraggebende

Stiftung Kinderinsel Bern

## Partner:innen

Dr. med. Fabrizio Romani Oberarzt Kinderspital (Projektleiter)

Dr. med. Isabelle Steiner, Chefärztin, Co-Leiterin Notfallzentrum für Kinder und Jugendliche

## Finanzierung

Stiftung Kinderinsel Bern

## Team

IML: Prof. Dr. Dr. med. Sören Huwendiek (Abteilungsleiter AAE)

## Projektinformation

Laufzeit: 2023 – 2024

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**Prof. Dr. Dr. med. et MME Sören Huwendiek**

Head of AAE Department

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# PhD project (SNF): Digital Learning and Teaching

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](#) [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 investigating their effectiveness. 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

## Project Team

### PhD candidate:

Dr. med. Artemisa Gogollari (PhD candidate)

PhD Supervisor: Prof. Dr. phil. Sissel Guttormsen

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

### SNF Projekt:

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

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

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

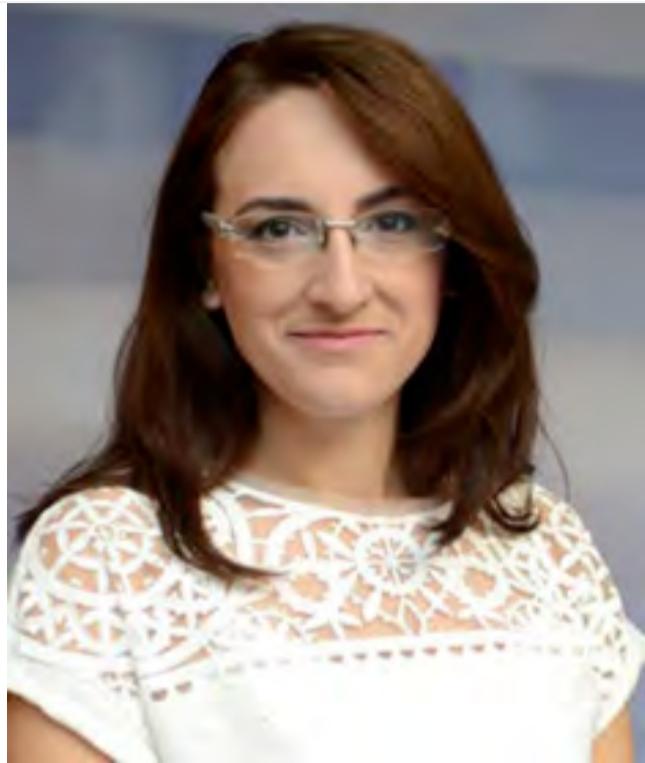
Dr. phil. Felix Schmitz (Scientific collaborator)

*Further project partners:*

Dr. med. Christian Schirlo, MME (Universität Luzern)

Dr. med. et PhD Stephan Gysin (Universität Luzern)

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

**Project Information****Project period:** 2021 - 2025**Dr. med. Artemisa Gogollari**

PhD student

[artemisa.gogollari\(at\)unibe.ch](mailto:artemisa.gogollari(at)unibe.ch)

# 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

## Project Team

### Team IML:

PD Dr. med. Christoph Berendonk, MME, Dr. phil. Felix Schmitz, Prof. Dr. phil. Sissel Guttormsen, Michel Bosshard

### Project partners:

Dr. Patrick Gomez (Uni Lausanne), Univ.-Prof. Dr. Urs Markus Nater (Uni Vienna)

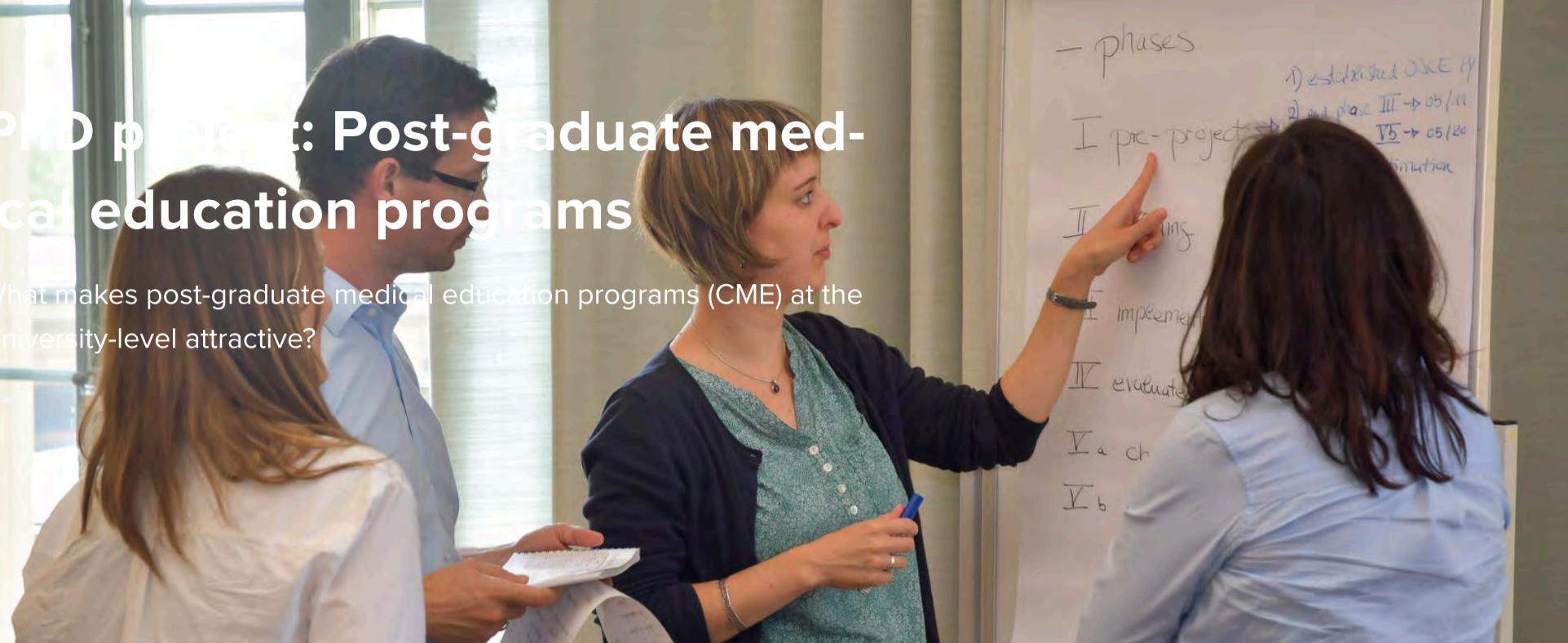
**Project Information****Project period:** 2021 - 2025**Michel Bosshard**

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 Research

The number of participants of post-graduate medical programs increases significantly in later years. There are manyfold 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.) prividing 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.

## Team IML

Melanie de la Rosa (PhD Candidate)

Prof. Dr. phil. Sissel Guttormsen (PhD Thesis advisor)

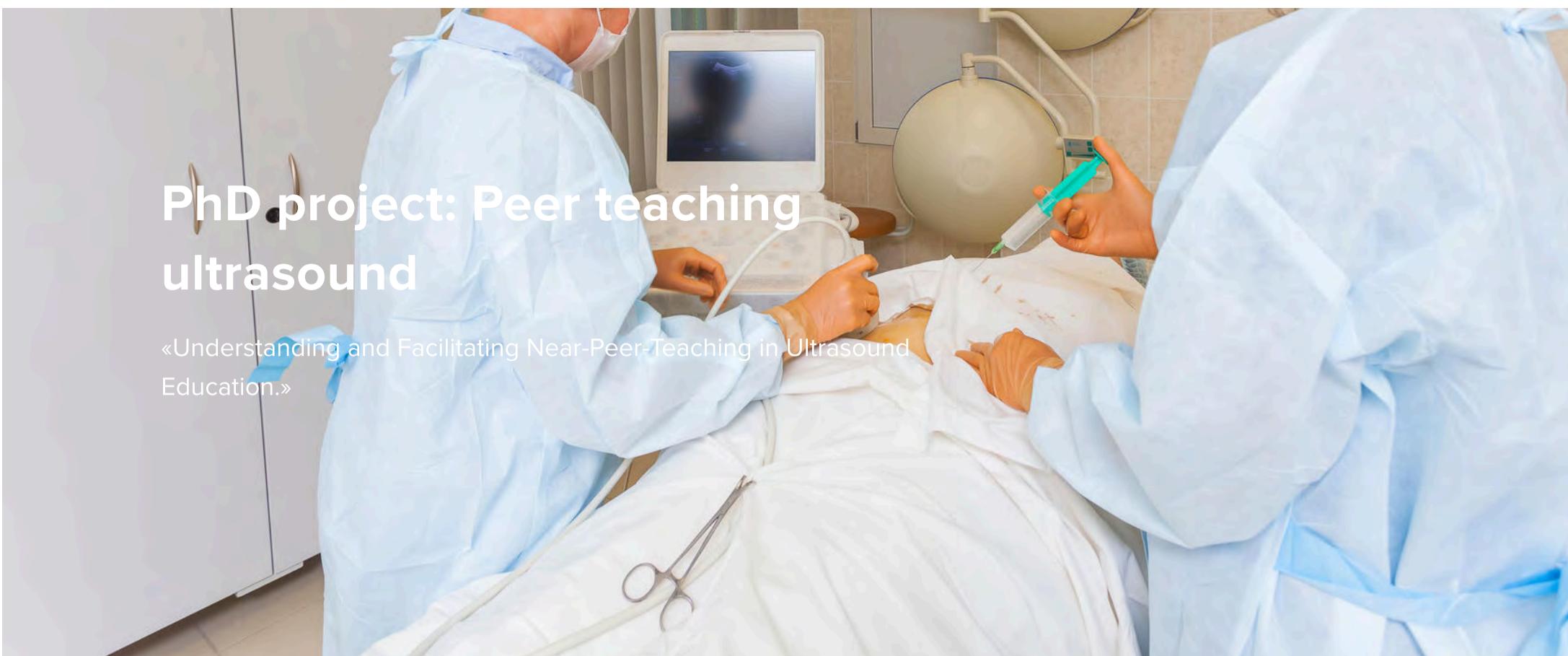
Dr. phil. Felix Schmitz (Project partner)

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

**Project information****Running time:** 2021 - 2025**Melanie de la Rosa**  
PhD student[melanie.delarosa \(at\) unibe.ch](mailto:melanie.delarosa@unibe.ch)

# PhD project: Peer teaching ultrasound

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



2020   2021   2022   2023   2024   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 – 2024**Contact****Roman Hari**

Prof.

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# PhD project: Online and blended learning in Precision Medicine

Improving our understanding of teaching and learning methods acceptable and applicable for frontline healthcare professionals.

[2020](#) [2021](#) [2022](#) [2023](#) [2024](#) [Research](#)

Healthcare professionals are required to complete CPD (continuing professional development) but this too often becomes a tick box exercise. Education offerings for active healthcare professionals must be practical to individual needs and offer different teaching methods, whereby learning becomes a fluent, adaptable and continually moving entity tied to the needs of each individual health professional. This project will apply empirical methods to develop a best practice approach for education needs assessment to design, plan and implement a blended learning training programme to deliver a new topic, Precision Medicine, to frontline healthcare professionals.

## Aims

PhD Thesis: Implementing evidence based education to design and implement online and blended learning in Precision Medicine in the context of continuing professional development (CPD)

The results of this research will inform the design, planning and implementation of a national online and blended training programme in Precision Medicine across Switzerland.

## Financing

This research is part of the FRONTLINERS project in Precision Medicine funded by Health2030 described [here](#).

## Project Team

PhD Candidate: Ms. Sharon Mitchell M.Sc, IML, University of Bern

PhD supervisor: Prof. Dr. phil. Sissel Guttormsen, IML, medical faculty, University of Bern

PhD-Co-Supervisor: Prof. Dr. med. Idris Guessous, Division and Department of Primary Care Medicine, Geneva University Hospitals and Faculty of Medicine, Geneva

Co Referee: Professor Janusz Janczukowicz MD, PhD, MMedEd, Medical University of Lodz, Poland

## Team IML

Dr. phil. Felix Schmitz, Head of Research group in ASCII, IML, medical faculty, University of Bern

Daniela Schmid, UX expert at ASCII, IML, medical faculty, University of Bern

**Overall Project PI**

Prof. Dr. med. Idris Guessous, Division and Department of Primary Care Medicine, Geneva University Hospitals and Faculty of Medicine, Geneva (PI)

Prof. Dr. Dr. med. Gérard Weber, Department of Medicine, University Hospital CHUV, Lausanne (Co-PI)

Prof. Dr. med. Jaques Cornuz, Unisanté, Faculty of biology and medicine, University of Lausanne, Rue du Bugnon 44, 1011 Lausanne (Co-PI)

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

**Project information****Running time:** 2020 - 2024**Sharon Mitchell**

PhD student

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# PhD project: Continuing Professional Development conferences

"Improving the outcome of conferences on Continuing Professional Development (CPD) for healthcare professionals."



2020    2021    2022    2023    Research

There are four prominent challenges encountered during conferences for CPD which include:

Firstly, the success of conferences is often evaluated with traditional metrics e.g. participant satisfaction indicators. Secondly, conference attendees are often seen as a homogenous group. Thirdly, it is often dismissed that novice members attend conferences as a way of integrating into the community of practice. Lastly, visiting a conference is an established way of disseminating information, however, taking the knowledge from conferences and translating it into practice is difficult.

## Objective

The overarching aim of this PhD is to investigate how to evaluate and improve large-scale health professional conferences, in order to support learning and induce physician practice change.

## Project team

PhD supervisor: Prof. Dr. Dr. med Sören Huwendiek, MME, PhD student: Sai Sreenidhi Ram

Second supervisor: Prof. Dr. Kevin Eva, Centre for Health Education Scholarship, Vancouver Canada

Further Supervisor: Prof. Dr. med. Daiana Stolz, Universitätsspital Basel

## Financing

European Respiratory Society (ERS)

## Team IML

Sören Huwendiek, Sai Sreenidhi Ram

**Project information**

Running time: 2020 – 2023

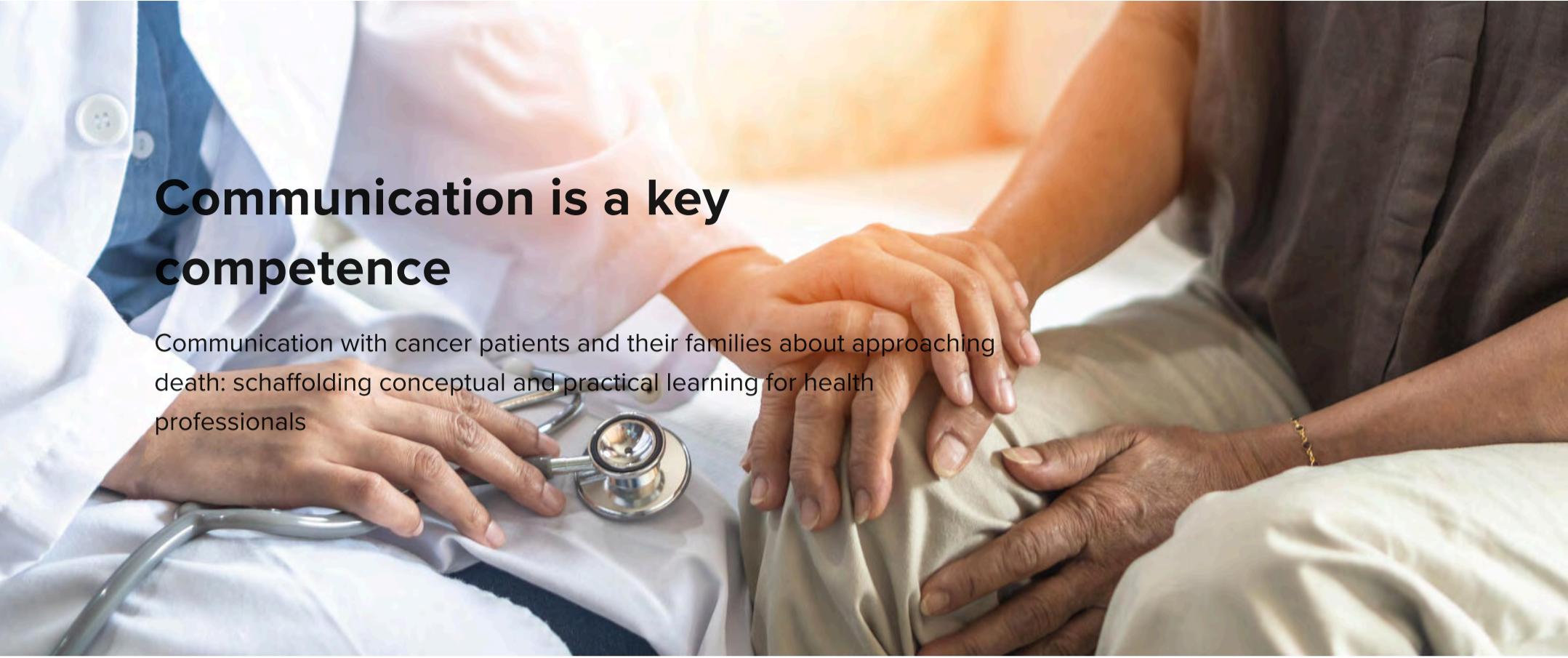
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**Sai Sreenidhi Ram**

PhD student

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# Communication is a key competence

Communication with cancer patients and their families about approaching death: scaffolding conceptual and practical learning for health professionals

[2019](#) [2020](#) [2021](#) [2022](#) [2023](#) [2024](#) [Research](#)

Despite extraordinary scientific breakthroughs, cancer remains the top two causes of death in Switzerland. This makes ‘communication about approaching death’ a main communication task for oncology health professionals. Our project aims at supporting oncology health professionals in performing these conversations with confidence and positive impact for all involved. Evidence shows that communication skills can be learned and that they have the potential to influence how people die, how families adjust to bereavement, and how health professionals cope with death in their work.

## Objective

Based on state of the art of research, we will develop a new learning module on the [DocCom.Deutsch](#) learning platform, addressing the issue of communicating approaching death. We will deliver a state-of-the art communication guide for oncology health professionals through an eLearning blended approach, and test the efficiency of learning and employing this approach through research.

## Project team

Prof. Dr. phil. Sissel Guttormsen, IML, medical faculty, University of Bern (Main applicant)

Prof. Dr. med. Steffen Eychmüller, Universitäres zentrum für Palliative Care, Inselspital Bern (Co-applicant)

Dr. Sofia Zambrano, Universitäres Zentrum für Palliative Care, Inselspital Bern (Co-applicant)

Dr. med. Kai Schnabel, MME, IML, medical faculty, University of Bern (Co-applicant)

## Financing

[Stiftung Krebsforschung Schweiz](#)

## Team IML

Sissel Guttormsen, Kai Schnabel, Felix Schmitz, Beate Brem

**Project information****Running time:** 2019 - 2023

eLearning «Über das Sterben sprechen» [Talking about dying]  
online (in DE)  
since 11/21  
(login required)

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**Prof. Dr. phil. Sissel Guttormsen Schär**  
Director IML

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# Gender gap phenomenon

Gender differences in the career motivations of health professionals.



2020 2021 2022 2023 2024 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

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

Institute of Psychology: Prof. phil. Achim Elfering, Ellen Surdel (Student)

## Publications

### 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).

Publication planned

**Project information****Running time:** since 2020**Prof. Dr. phil. Sissel Guttormsen Schär**

Director IML

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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

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

## Financing

health2030

## Project team

### Executive board

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)

### 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 Ballavoine, Médecine et Hygiène journal, Planète Santé	Lead branding <u>development</u> Develop Frontliners website	Communications Advisor, 2022
Dr. Evrin Jaccard, Internal medicine unit, Hirslanden, Lausanne	Co-lead on research projects. Liaison 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**«FRONTLINERS: Evidence based blended learning on Precision Medicine»**[Read story](#) (including previous and planned publications)**Prof. Dr. phil. Sissel Guttormsen Schär**  
Director IML+41 31 684 62 01[sissel.guttormsen \(at\) unibe.ch](mailto:sissel.guttormsen@unibe.ch)**Sharon Mitchell**

Scientific collaborator

sharon.mitchell (at) unibe.ch

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# Self-Directed Learning (SDL) in Clinical Work-Life

How can specialists be supported in highly individualized learning processes with the help of modern tools?

2018   2019   2020   2021   2022   2023   2024   Research   Education

To guarantee high-quality services, health professionals are required to successfully maintain their extensive knowledge base. Health professionals are forced to consistently stay up-to-date in their field in which new knowledge is evolving continuously. There is a strong need for effective support during their lifelong self-directed, learning processes.

## Objective

We investigate the SDL processes from different perspectives:

- i) Elements of the learning process,
- ii) the view of work and organisation psychology (models and effects on individuals and systems),
- iii) needs and experiences of health professionals in their daily lives,
- iv) elaborating technical tools supporting the learning process, and needed features and functionalities.

## Partner

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

Dr. phil. Jodie Freeman, Institute of Complementary and Integrative Medicine, University of Bern

Prof. phil. Achim Elfering, and Linda Christa, both Institute of Psychology, department of work and organisation psychology, University of Bern

## Team IML

Prof. Dr. phil. Sissel Guttormsen

Dr. phil. Felix Schmitz

Dr. sc. ETH Philippe Zimmermann

## Publications

Planned

**Project information****Running time:** since 2018**Subprojects (Link)**

«Wissensaneignung von  
Hausärzt:innen in der COVID-19  
Pandemie.»

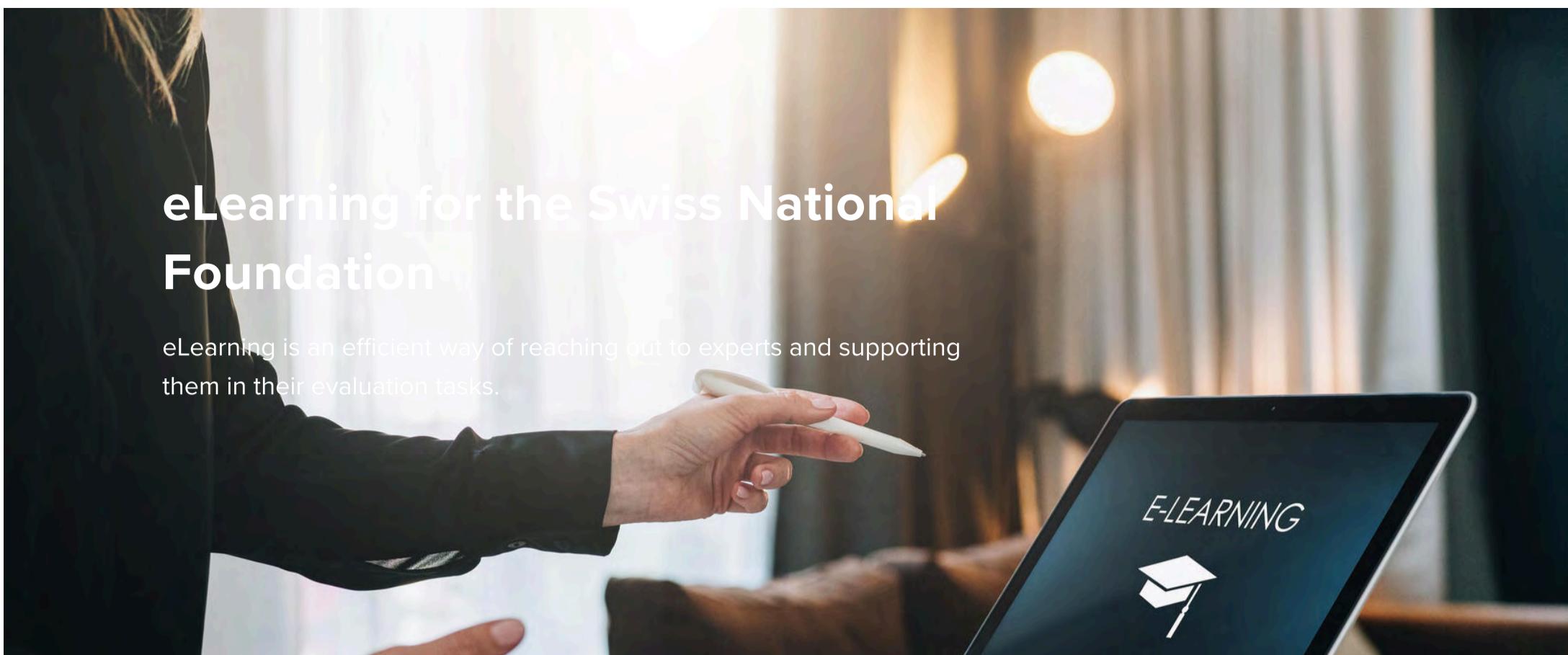


**Prof. Dr. phil. Sissel Guttormsen Schär**  
Director IML

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# eLearning for the Swiss National Foundation

eLearning is an efficient way of reaching out to experts and supporting them in their evaluation tasks.



**2022** **2023** **Service**

A training initiative at the SNSF aims at developing an online learning resource for researchers, which participate in SNSF evaluation panels. Evaluators shall be supported in learning the most important aspects and best practices of research evaluation and funding. In context of the implementation of a first on-line module, the ground will be laid for future development of further modules in an on-line eLearning framework.

## Aims

Selecting a learning management framework fitting the target group, cooperating with content experts on developing and optimising the content for on-line delivery, optimising graphical illustrations and evaluating the results with the target users, project management.

## Partner

Swiss National Science Foundation (SNSF)

## Team

Sissel Guttormsen, Philippe Zimmermann, Priska Steiger with team IML

**Project information**

Project period: since 2022

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# E-Learning-Modul in «Scientific Literature Searching»

Beratung zur Entwicklung eines E-Learning-Moduls in «Scientific Literature Searching» (Bibliothek Medizin Bern).

2021 2022 2023 Service

Das wissenschaftliche Team der UB setzt sich als Ziel, möglichst interaktive, lehrreiche und ansprechende E-Learning Angebote zu entwickeln, die den Bedürfnissen der Benutzenden gerecht werden. In diesem Projekt und durch die Zusammenarbeit zwischen der UB und dem IML bezwecken wir, mit einem ersten Modul zu «Scientific Literature Searching» den Grundstein für gute eLearning Angebote rund um wissenschaftliches Arbeiten für Studierende zu legen.

Die Lehrangebote dienen zur Vorbereitung für das Verfassen einer Masterarbeit oder später für eine Publikation. Je nach Thema der Masterarbeit und/oder Publikation (Experimentelle Laborarbeit, klinische Studie, Guideline, Scoping Review, Systematic Review, Vergleichsstudie) stellen sich andere Anforderungen an die nötigen Kompetenzen in der Literaturrecherche. Die Vorteile des E-Learning-Kurses liegen einerseits in seinem modularen Aufbau, der den unterschiedlichen Bedürfnissen an Kenntnistiefe gerecht wird. Anderseits kann der gesamte Kurs oder können die einzelnen Module davon im Selbststudium gemacht werden, oder im Kombination mit Präsenzlehre eingesetzt werden (z.B. als Vorbereitung).

## Ziele

In diesem Projekt bezwecken wir mit einem ersten Modul zu «Scientific Literature Searching», den Grundstein für gute eLearning Angebote rund um wissenschaftliches Arbeiten für Studierende zu legen.

## Zielgruppe

Studierende und andere junge Forschende / PhD Kandidierende

## Auftraggebende

Universitätsbibliothek Medizin, der Universität Bern

## Team

IML: Prof. Dr. phil. Sissel Guttormsen, Dr. med. Ulrich Woermann, MME

Project partner: Dr. phil. Michelle Schaffer mit wissenschaftlichen Mitarbeitenden der UB-Medizin

**Projektinformation**

Laufzeit: 2021 - 2023

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# eLearning und Beratung für die Ärztekammer Niedersachsen

Beratung, Evaluation und Einbindung von eLearning für die Ärztekammer Niedersachsen (D).



**2021** **2022** **2023** **Service** **Evaluation**

Die Ärztekammer Niedersachsen (ÄKN) in Deutschland schreibt die Medizinische Lehre in der neuen Weiterbildungsordnung fest. Dies beinhaltet auch verpflichtende Vorgaben für die Qualifizierung von Ärztinnen und Ärzten, welche zur Durchführung von Weiterbildungen ermächtigt sind. Die Weiterbildung soll von hoher didaktischer Qualität sein, um die Motivation und Akzeptanz der Teilnehmerinnen und Teilnehmer zu sichern. Eine besondere Herausforderung stellt die grosse Anzahl Personen (ca. 4000) und deren Heterogenität dar. Der Heterogenität soll mit einem breiten Angebot an e-learning Modulen und verpflichtenden didaktischen Trainings Rechnung getragen werden.

## Ziele

Das neue Weiterbildungsprogramm der ÄKN wird neu entwickelt, eingeführt und evaluiert. Neben Beratung und Evaluation werden auch Lernmedien aus dem IML Fundus zur Verfügung gestellt. Das Programm soll im Sinne eines lernenden Systems weiterhin fortlaufend evaluiert und optimiert werden. Ein IML-Team unterstützt die ÄKN dabei, diesen Ziele zu erreichen.

## Auftraggebende

Ärztekammer Niedersachsen (ÄKN) in Deutschland

## Partner

Prof. Hans-Jürgen Christen, Dr. med. Christina Quandt

## Team

Sissel Guttormsen, Christoph Berendonk, Felicitas Wagner mit Team IML

**Projektinformation**

Laufzeit: 2021 - 2023

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# Wissensaneignung von Hausärzt:innen in der COVID-19 Pandemie

Die COVID-19 Pandemie hat viele Berufsgruppen vor Herausforderungen gestellt.

2022 2023 Research

Hausärzt:innen waren davon besonders betroffen, weil sie einerseits für eine optimale Versorgung fortlaufend neues Wissen über diese Krankheit aktualisieren mussten. Andererseits waren sie mit der Herausforderung konfrontiert, dass etablierte Informationszirkel und Weiterbildungsveranstaltungen ins Internet verschoben wurden. In dieser Masterarbeit (Psychologie) wurde die Frage behandelt, wie Schweizer Hausärzt:innen diesen Herausforderungen begegnet sind.

## Ziele

Das konkrete Ziel der Mastarbeit lag darin, herauszufinden, wie sich Hausärzt:innen neues Fachwissen aneignen und welche Auswirkungen die COVID-19 Pandemie auf ihr «selbstgesteuerte Lernen» (SGL) hatte. SGL grenzt sich von formellen Lernformen wie strukturierten Fort- und Weiterbildungen ab und inkludiert Prozesse, die durch die Lernenden selbst initiiert und gemanagt werden.

Die Masterandin hat 16 Hausärzt:innen anhand eines auf Basis der Literatur entwickelten, halbstrukturierten Interviewleitfadens befragt. Die Interviews wurden transkribiert und per strukturierender, qualitativen Inhaltsanalyse nach Kuckartz von ihr ausgewertet.

Die Ergebnisse zeigen, dass die Befragten aufgrund der Pandemie vermehrt in der Klinik und von Zuhause aus Wissen selbstständig angeeignet haben – und dies sei mitunter deutlich intensiver und häufiger als zuvor der Fall gewesen. Weiter wurde berichtet, dass eine Digitalisierung des Lernprozesses stattfand; diese wiederum brachte Vor- aber auch Nachteile mit sich. Besonders problematisch wurde die teilweise komplexe Bedienbarkeit digitaler Lehrmittel wahrgenommen, die insbesondere aufgrund kritischen Zeitmangels ins Gewicht fallen könne. Förderlich sei an der Stelle aber immer eine hohe Eigenmotivation zum Wohle der Patient:innen.

## Auftraggebende

Arbeits- und Organisationspsychologie

**Partner**

Noa Miranda Linder (Masterandin), Achim Elfering (Betreuer), Benny Wohlfarth

**Team IML**

Sissel Guttormsen, Felix Schmitz (Betreuer:innen)

**Publikation**Masterarbeit

Noa Miranda Linder (2022).

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

Hauptbetreuer:innen: Prof. Sissel Guttormsen, Dr. Felix Schmitz, (IML), Co-Betreuer: Prof. Achim Elfering (Institut für Psychologie, Universität Bern).

Publikation in progress

**Projektinformation**

Laufzeit: 2022-2023

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**Contact****Dr. phil. Felix Michael Schmitz**

Head of Group "Research"

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# Systematic approach to reviews, with a particular focus on Scoping Reviews

By the example of implementing a systematic scoping review to develop a taxonomy of teaching methods, on 10th November 2022, with a small team of international experts, we delivered an interactive workshop on Secondary Research.



2022 2023 Research

The objective of the workshop was to bring together international experts from various institutions around Europe, with a particular focus and expertise on Scoping Reviews. As an applied frame of the project and the Workshop we used the ongoing research on a taxonomy of teaching methods.

## Aims

The workshop had specific intentions to deliver learning outcomes to the invited participants as follows;

- Explain the principles of scoping reviews and appropriate choice of review methodology
- Understand the advantages and challenges of international collaborations in research for young researchers
- Contribute to discussions of teaching methods, and critically evaluate synthesis approach
- Appraise the role of consensus in scientific research, and when it is appropriate to use consensus methodology

## Financing

This project was supported by the «Mittelbauvereinigung der Universität Bern (MVUB)».

## Partners

Prof. JANUSZ JANCZUKOWICZ Head of Centre Medical Education, Vice Dean for Development of Education at the Medical University of Lodz, Poland

Dr CAROLIN SEHLBACH, PhD in Med Ed., School of health professions education (SHE) University of Maastricht, The Netherlands

## Co-worker

Sharon Mitschell (PhD Candidate at the IML)

Prof. Sissel Guttormsen (Director IML)

## Target group

Researchers applying Systematic Scoping reviews as a method; Medical Educators in general.

## Publications

Submitted: A taxonomy of teaching methods and their use in health professions education: A Scoping Review Protocol. Authors: Sharon Mitchell, Carolin Sehlbach, Gregor Franssen, Janusz Janczukowicz, Sissel Guttormsen

**Project information**

Running time: 2022 - 2023

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**Sharon Mitchell**

PhD student

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# Berner longitudinales Curriculum Virtuelle Patient:innen Notfallmedizin (BelViP)

Unterstützung der Studierenden zum Erlernen der selbständigen Behandlung von pädiatrischen und erwachsenen Notfallpatienten durch Einsatz von Virtuellen Patient:innen.

**2022** **2023** **2024** **Research** **Education**

Im Rahmen dieses Projektes werden insgesamt 13 pädiatrische und 13 adulte Virtuelle Notfall-Patient:innen entsprechend den EPA 6-Leitsymptomen (Behandlung eines Notfallpatienten) entsprechend dem Lernzielrahmenwerk PROFILES erstellt, begutachtet, pilotiert und fest mit dem übrigen Medizinstudium im Sinne von blended learning verankert (Nachbereitung Vorlesungen, begleitend zu Blockpraktika mit Online-Besprechung, begleitend zum Wahlstudienjahr, als Vorbereitung von Simulationen). Der Erfolg des Einsatzes wird durch Begleitstudien evaluiert.

## Ziele

Ziel ist die Unterstützung der Studierenden beim Erlernen der selbständigen Behandlung von pädiatrischen und erwachsenen Notfallpatient:innen durch den blended learning Einsatz von Virtuellen Patient:innen.

## Auftraggebende

Medizinische Fakultät Bern

## Partner:innen

Dr. med. Isabelle Steiner, Chefärztin, Co-Leiterin Notfallzentrum für Kinder und Jugendliche

Prof. Dr. med. Thomas Sauter, Leitender Arzt Notfallmedizin

## Finanzierung

Finanziert durch die Medizinische Fakultät, Beschluss Ausschuss Lehre

## Team

IML:

Prof. Dr. Dr. med. Sören Huwendiek (Abteilungsleiter AAE)

Dr. phil. Felicitas Wagner (Gruppenleiterin Evaluation AAE)

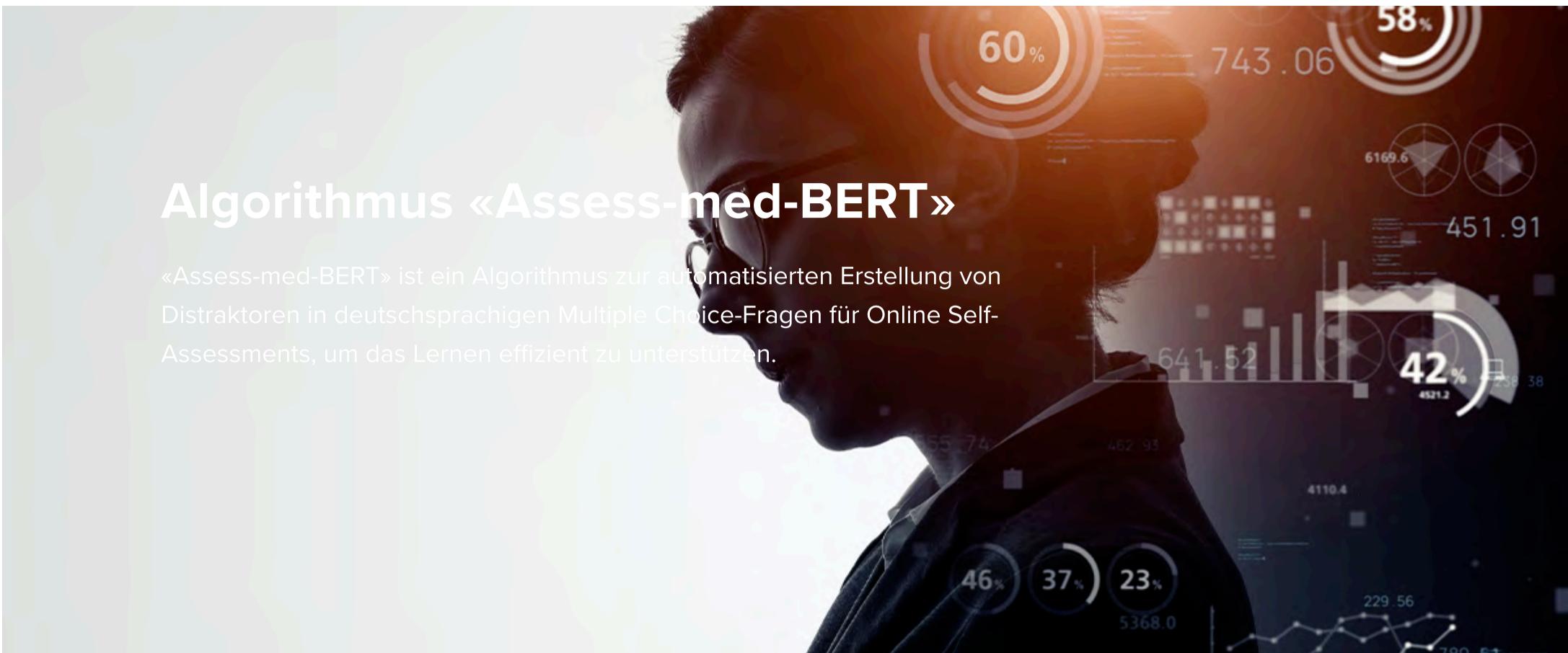
**Projektinformation**

Laufzeit: 2022 – 2024

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# Algorithmus «Assess-med-BERT»

«Assess-med-BERT» ist ein Algorithmus zur automatisierten Erstellung von Distraktoren in deutschsprachigen Multiple Choice-Fragen für Online Self-Assessments, um das Lernen effizient zu unterstützen.



2022 2023 2024 Research Education

Fachübergreifend zeigt sich, dass es zu wenig Übungsaufgaben (i.S. von Self-Assessments) für Lernende gibt, weil die Erstellung viel Zeit benötigt. Die vorhandene Forschung zur automatisierten Generierung von Übungsaufgaben bezieht sich weitgehend auf englischsprachige Datengrundlagen, welche nicht auf die deutsche Sprache übertragen werden können. Diese Lücke soll mit dem vorliegenden Projekt geschlossen werden. Das Projekt verfolgt das Ziel, das Lernen am Beispiel des medizinischen Kontexts im deutschsprachigen Raum zu verbessern, indem Lehrende effizienter Übungsfragen generieren (lassen) können, wodurch sich Lernende (sowohl Studierende als auch Weiterzubildende) durch die Verwendung dieser generierten Übungsaufgaben besser neues Wissen aneignen können.

Im vorliegenden Forschungsprojekt soll ein Modell auf Grundlage von künstlicher Intelligenz und NLP (Natural Language Processing) entwickelt werden, welches es Akteuren im Bildungsbereich ermöglicht, Lernmöglichkeiten (Self-Assessments) mit deutlich geringerem Aufwand als bisher zur Verfügung zu stellen.

## Ziele

Das vorliegende Projekt soll Lernmöglichkeiten schaffen, die von Lehrenden ein Minimum an Ressourcen benötigen und gleichzeitig den Lernprozess über Feedback und Reflexion für die Lernenden transparenter, zielgerichteter, effizienter und effektiver machen. Durch das teilautomatisierte Erstellen von MCQs für Self-Assessments können gezielt Fragen in den Bereichen generiert werden, in denen Studierende grössere Probleme haben oder in denen es hilfreich wäre, noch mehr Übungsaufgaben zur Vertiefung zu erhalten. Damit unterstützt dieses Projekt das Lernen der Studierenden und bietet die Grundlage, um Studierenden zukünftig anhand ihrer Leistung in einem Self-Assessment auch weitere Self-Assessments oder Repetitionen vorzuschlagen, i.S. des adaptiven Lernens.

## Auftraggebende

BeLearn

## Partner:innen

Dr. Stefan Pichelmann

Universität Fribourg, Philosophische Fakultät, Dep. für Psychologie, Rue P.A. de Faucigny 2, 1700 Fribourg

Dr. Felicitas-Maria Lahner

Berner Fachhochschule, Gesundheit, Fachbereich Pflege

Murtenstrasse 10, 3008 Bern

Prof. Dr. Stefan Troche

Universität Bern, Institut für Psychologie, Fabrikstrasse 8,

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PD Dr. Katja Schlegel

Universität Bern, Institut für Psychologie, Fabrikstrasse 8

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Dr. Natalie Borter

Universität Bern, Institut für Psychologie, Fabrikstrasse 8

3012 Bern

## **Finanzierung**

BeLearn

## **Team**

IML: Dr. Rabea Krings (Projektleiterin), Dr. Dr. med. Eva Hennel, Prof. Dr. Dr. med. Sören Huwendiek



**Projektinformation**

Laufzeit: 2022 - 2024

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# «did-act» on clinical decision-making, EU project

An adaptive curriculum for clinical reasoning for students and instructors is to be developed, implemented and disseminated in order to better prepare future doctors and to avoid mistakes.

**2020** **2021** **2022** **2023** **Assessment** **Research**

Clinical decision making (also referred to as clinical reasoning) is a skill that healthcare students must learn during their studies and then further develop in clinical practice. This process involves the use of clinical knowledge to gather and integrate information from various sources to ultimately lead to a diagnosis and a management plan for patients.

## Objective

- design, develop, evaluate and disseminate a curriculum for clinical decision-making
- develop a train-the-trainer course for lecturers.
- Optimal learning should be achieved through a combination of online and classroom teaching. In order to facilitate the dissemination and use of the new curriculum, it can be adapted to existing curricula, which should make it easier for both curriculum planners and lecturers to gradually integrate it.

## Financing

Co-financed by the EU

## Project Team

### Project team IML:

Sören Huwendiek & Felicitas Wagner

**Project coordinator:** University of Augsburg, Project manager: PD, Dr. med. Inga Hege.

### Project partners:

- Jagiellonian University, Krakow:  
Andrzej A. Kononowicz, PhD; Małgorzata Sudacka, MD; Magdalena Szopa, PhD
- University of Bern:  
Sören Huwendiek, Assoc. prof., MD, PhD, MME; Felicitas Wagner, PhD; Isabelle Steiner, MD
- Faculty of Medicine, University of Maribor in Slovenia:  
Monika Sobocan, MD, Prof. Zalika Klemenc-Ketis, MD, Prof. Sebastjan Bevc, MD, PhD; Prof. Breda Pecovnik Balon, MD, PhD; Prof. Breda Pecovnik Balon, MD, PhD

- Instruct ([www.instruct.eu](http://www.instruct.eu)):  
Martin Adler is CEO; Carina Pfeifer
- Örebro University:  
Associate profs: Samuel Edelbring; Kristin Ewins; Wieglob Edström; Elisabet Welin, Prof.
- Digital Education Holdings Ltd., Malta:  
Nils Thiessen, MD; Jasmin Düsterhöft, MD; Federico Arevalo, MD

**Project information****Running time:** 2020 - 2023**Links**"did-act" website

# MSFtoGo - das intelligente Multisource Feedback Tool

Es soll eine App entwickelt werden, um die Durchführung von Multisource-Feedback zu vereinfachen.

2021 2022 2023 Research Education

Die App umfasst z.B. das Versenden der Feedbackanfragen an ausgewählte Personen, Terminerinnerungen, die Darstellung des Feedback, Resultate und Hinweise zur Kommunikation im Feedbackgespräch.

## Ziele

Die App kann die technische Durchführung von MSF vereinfachen und ist inzwischen an mehreren Standorten im Einsatz.

## Auftraggebende

Institut für Medizinische Lehre (IML)

## Partner:innen

Dr. med. Lukas J. Kandler (Projektleiter)  
Oberarzt Anästhesiologie Universitäts Spital Zürich  
Co-Founder & Chief Visual Director precisionED AG

## Finanzierung

Unterstützt durch die SIWF Projektförderung 2022

## Team IML

Mitantragstellende (inhaltliche Beratung zum MSF):  
Dr. Dr. med. Eva Hennel  
Prof. Dr. Dr. med. Sören Huwendiek

**Projektinformation**

Laufzeit: 2021 – 2023

Weitere Infos unter:

<https://www.prepared.app/360>

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# CRASHPAED – Praxisnahes Lernen an interaktiven Fällen

CrashPaed ist eine Webapp, in welcher Fälle aus der Kinder- und Jugendmedizin schrittweise vom Symptom über die Diagnostik bis hin zur Therapie interaktiv aufgearbeitet werden.

**2021** **2022** **2023** **Research** **Education**

Der primäre Fokus liegt auf häufigen Fällen aus dem Klinikalltag und dem Notfall. Junge Assistenzärzte sind durch CrashPaed gut gerüstet Patienten selbstständig von der Diagnostik bis zur Therapie zu begleiten. Im Sinne eines vertieften Lernens werden während der Fallbesprechung Fragen gestellt und Feedback gegeben, welche zu den weiteren Abklärungs- und Behandlungsschritten hinführen. Die Verlinkung mit aktuellen klinikinternen, nationalen und internationalen Diagnose- und Therapierichtlinien sowie Algorithmen gewährleistet eine Evidenz-basierte Herangehensweise an die anstehenden Herausforderungen im klinischen Alltag.

## Ziele

CrashPaed lässt junge Assistenzärztinnen und -ärzte in Weiterbildung schneller im klinischen Alltag ankommen. An Fallbeispielen wird das notwendige Entscheidungswissen, um Patient:innen optimal zu behandeln, interaktiv vermittelt. Etablierte Ärztinnen und Ärzte nutzen die spielerische Lernumgebung von CrashPaed zur Wissensauffrischung und haben gleichzeitig Zugang zu aktuellen Behandlungsstandards.

## Auftraggebende

SIWF

## Partner:innen

PD Dr. Christiane Sokollik Medizin, Universitätskinderklinik Bern (Hauptantragstellerin)

Prof. Maja Steinlin Medizin, Universitätskinderklinik Bern (Hauptantragstellerin)

Dr. Andreas Bartenstein Kinderchirurgie, Universitätskinderklinik Bern

Dr. Michelle Seiler Notfallstation, Universitäts- Kinderspital Zürich – Eleonorenstiftung

Dr. Eva-Maria Jordi Ritz , MME und Dr. Michel Ramser Notfallstation, Universitäts-Kinderspital beider Basel

Dr. Anna Wefers Praxispädiatrie Gruppenpraxis Visp

Apps with love AG Landoltstrasse 63 3007 Bern

## **Finanzierung**

SIWF

## **Team**

IML: Prof. Dr. Dr. med. Sören Huwendiek

**Projektinformation**

Laufzeit: 2021 – 2023

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**Prof. Dr. Dr. med. et MME Sören Huwendiek**

Head of AAE Department

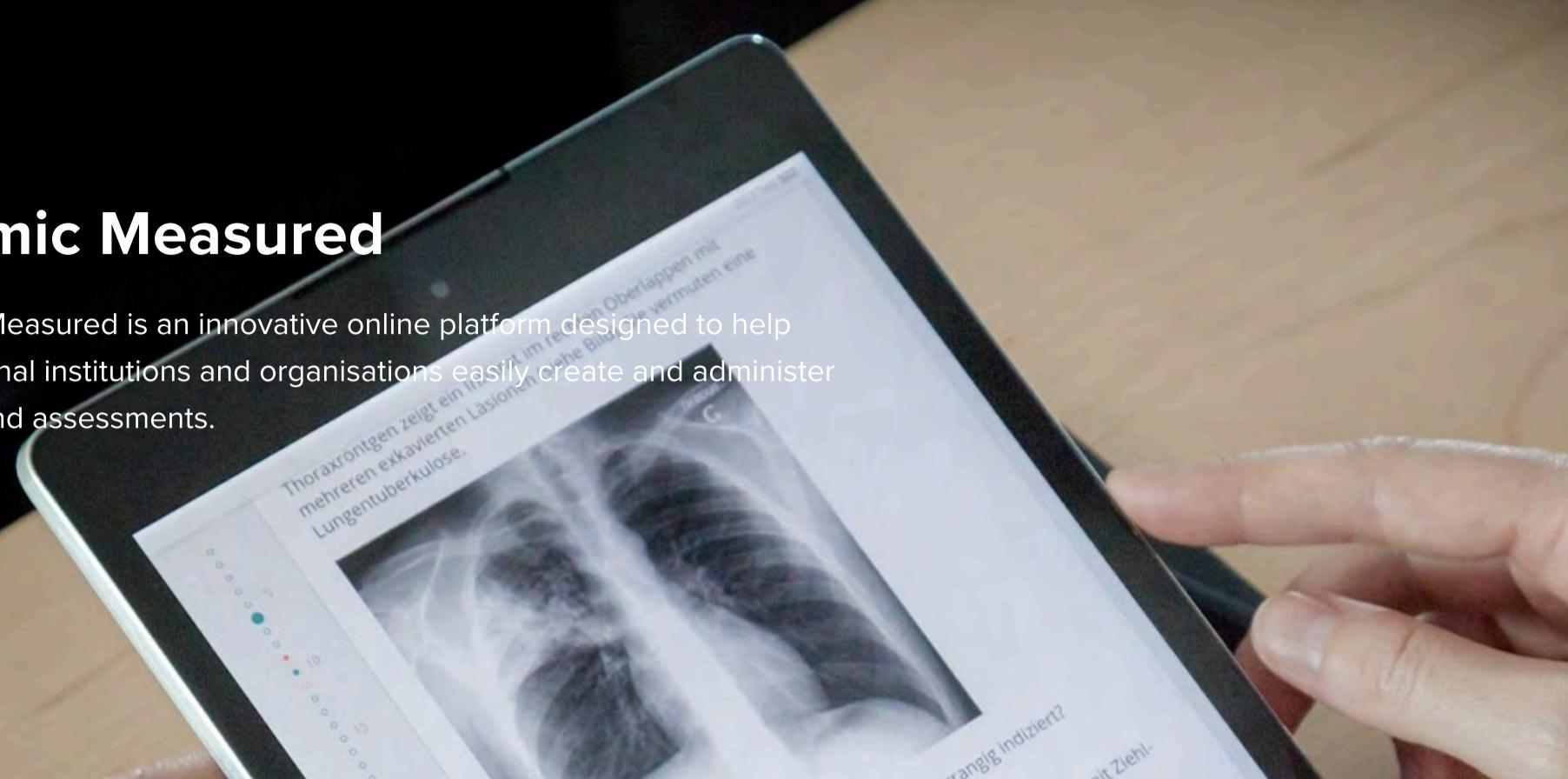
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# Examic Measured

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](#) [Service](#) [Examic](#)

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

The screenshot shows the SCRUDU software interface. At the top, there are tabs for 'PRÜFUNGSFÜHRER', 'AUSTRAGUNGSHALTUNG', and 'PRÜFUNGSERHALTUNG'. The 'PRÜFUNGSFÜHRER' tab is active, displaying a table with columns for 'PRÜFUNGSTYP', 'PRÜFER', 'ARTIKELNR.', 'ARTIKELNAME', 'ARTIKELART', and 'ARTIKELZUSTAND'. Below this is a search bar with placeholder text 'Prüf... Prüfer...'. To the right, there's a detailed view of a project with a thumbnail image of an eye, a title 'Projekt 1', and several status indicators.

**Examic Measured**

[LINK](#)

A portrait photograph of Dr. sc. ETH Philippe Zimmermann, a man with short brown hair, wearing a dark blue button-down shirt, smiling at the camera.

**Dr. sc. ETH Philippe Zimmermann**  
Head of ASCII Department  
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philippe.zimmermann (at) unibe.ch

# 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](#) [Service](#) [Examic](#)

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

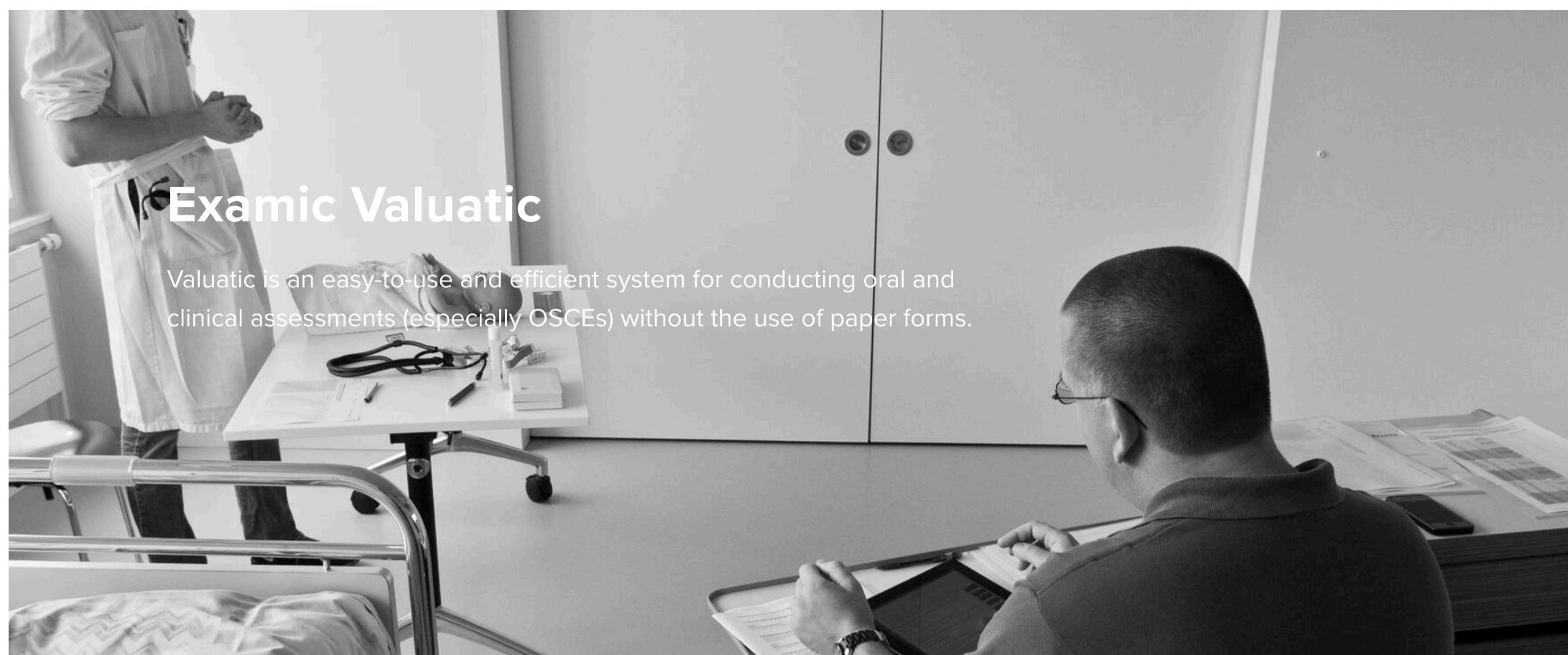
**Project information**

Running time: 2008 - 2024

**Links**[EOSCE](#)[Examic Assessment Suite](#)[Story «10 years of clinical skills exams with Examic EOSCE»](#)**Dr. sc. ETH Philippe Zimmermann**

Head of ASCII Department

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## 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](#) [Service](#) [Examic](#)

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/>

Valuatic Studio

Pain in right leg

Save Form PDF...

Content

Exam

Devices

Results

Export

Settings

Edit Document

1. Pain:

- asks about
- ✓ Multi Select Answer : location - character - radiation -...
- Single Select Answer : Yes - +/- - No

2. Modifying factors:

- asks about
- ✓ Multi Select Answer : relieving factors -...
- Single Select Answer : yes - 1/- - no

3. Asks about precipitating event such as trauma or...

- Single Select Answer : yes - no

4. Asks about pain worsening with Valsalva.

- Single Select Answer : yes - no

Multi Select Answer    Modifiers

Content

Options

Label	Points
relieving factors	1
aggravating factors	1

Properties

Optional

On

Min. Selection Needed

Max. Selection Allowed

Display

**Project information**

Running time: since 2018

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[Link](#)

Further Information

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

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**Dr. sc. ETH Philippe Zimmermann**

Head of ASCII Department

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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](#) [Education](#)

To enable continued use of these very popular learning programs in the future, a transition from both a technological and creative perspective is essential.

## Objective

Our online learning programs need to comply with the latest standards and need to be seamlessly usable with the whole range of modern devices. New features like a comprehensive search function or deep linking improve the user experience.

Through the development of an author system for learning content also the creation of complex didactic scenarios is supported.

The following learning modules were realized with MedSurf:

- [MorphoMed](#) for Anatomy, Histology and Pathology
- [RadioSurf](#) for radiology of the chest, the skeleton and the head
- [ChiroSurf](#) for surgery
- [DentoSurf](#) for dental medicine

More learning modules are in preparation. A list of all our online learning programs can be found [here](#).

## Ordering customer

[Faculty of Medicine, Bern](#)

## Team

**Institute of Anatomy, University of Bern**

PD Dr. med. Gudrun Herrmann

## IML

Dr. med. Ulrich Woermann, MME

Dr. med. Nick Lüthi, MME

Andrea Gottsponer

Thomas Guthruf

Daniela Schmid

**Project information**

Running time: since 2016

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# DocCom.Deutsch: Webbasierte Module 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](#) [Service](#) [Research](#) [Education](#) [Usability](#)

## Zielsetzung

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

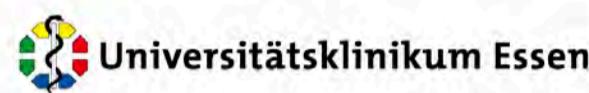
## Zielgruppe

Aus- und Weiterbildende in den Gesundheitsberufen

## Team IML

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

## Partner, welche die Lernplattform bereits benutzen



MARTIN-LUTHER-UNIVERSITÄT  
HALLE-WITTENBERG



Universität  
Augsburg  
University

## 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](#)

# Communication courses for Sanacare group practices

Communication courses for the medical staff of the 13 Sanacare group practices. Including role play among themselves and with simulated staff.



**2020** **2021** **2022** **2023** Service Development

Communication courses on the following topics:

- Motivational Interviewing
- Giving feedback
- Breaking bad news
- Shared decision making
- Blended learning concept with pre-course preparation using [DocCom.Deutsch](#)

This is envisaged as a pilot course.

## Objective

- Development of 4 half-day courses on the above topics
- Presentation of all courses (52 dates)
- Standardisation of courses for use by other interested parties.

## Ordering customer

Sanacare

## Financing

Sanacare

## Team IML

Ulrich Woermann, Kai Schnabel, Beate Brem, Daniel Bauer, Adrian Michel

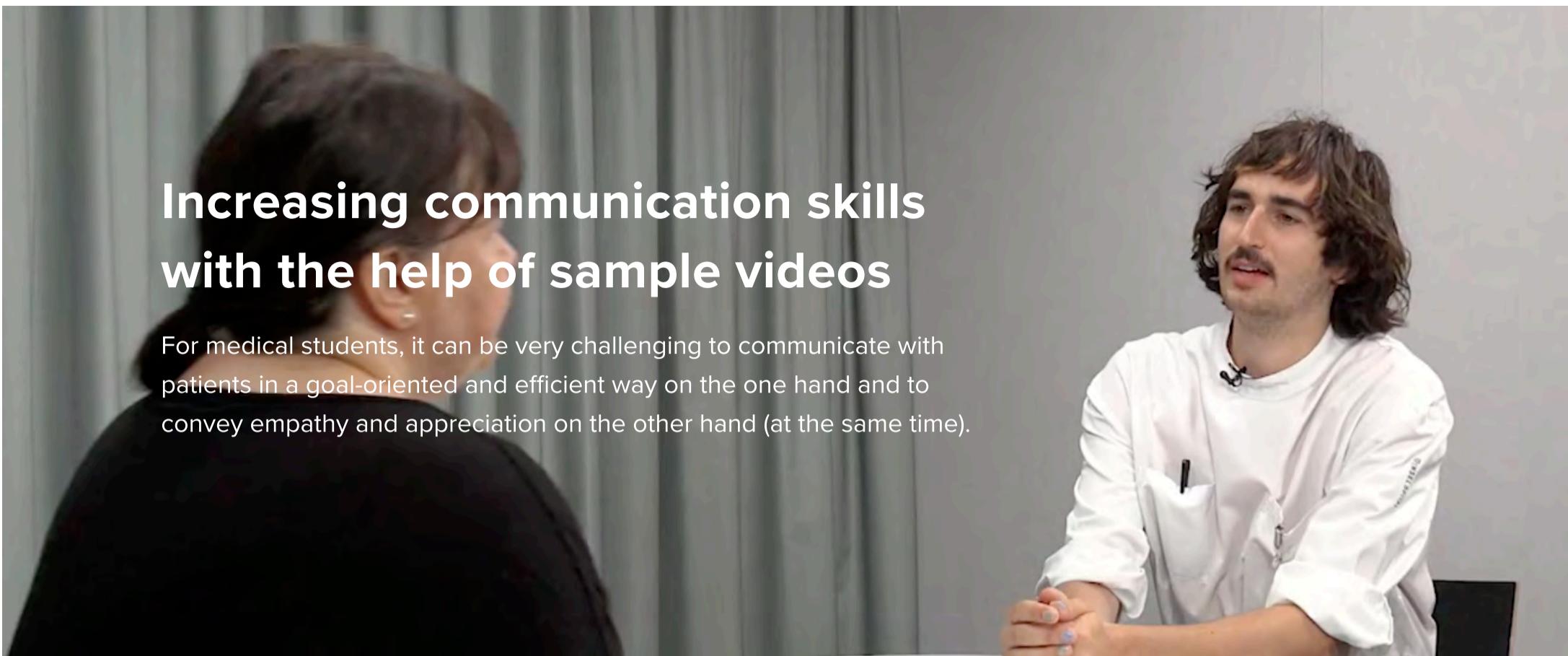
**Project information****Running time:** 01/2020 – 12/2023**Dr. med. et MME Kai Schnabel**

Head of AUM Department

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# Increasing communication skills with the help of sample videos

For medical students, it can be very challenging to communicate with patients in a goal-oriented and efficient way on the one hand and to convey empathy and appreciation on the other hand (at the same time).



**2022** **2023** **2024** **Education**

Since the students only very rarely receive feedback on their communication behaviour and they also observe such suboptimal behaviour from their superiors or role models, corresponding patterns are too rarely broken. In this way, corresponding misconduct can be passed on into the further education period (and beyond).

## Aims

The project «Improving communication skills» aims to sensitise medical students to typical mistakes in patient:in conversations by means of example videos. In these examples, typical mistakes are contrasted with exemplary communication behaviour. The project is intended to give medical students the opportunity to recognise faulty communication behaviour early in their training - and to recognise which alternative forms of behaviour can be important for building a good doctor-patient relationship.

## Team

Nick Lüthi, Felix Schmitz, Ulrich Woermann

**Project information**

Project period: 2021-2024

**Dr. med. et MME Nick Lüthi**

Team leader of learning media

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# Rassismus in der Medizin – Perspektiven für die medizinische Ausbildung

Beitrag der GMA zur Sensibilisierung von Studierenden, Lehrenden und weiteren in der medizinischen Lehre tätigen Personen zum Thema rassistische Diskriminierung im Gesundheitswesen.

2021 2022 2023 2024 Research

Die Genfer Deklaration des Weltärztektes fordert von ärztlichen Fachpersonen sich «bei der Erfüllung ihrer ärztlichen Pflichten ihren Patient:innen gegenüber nicht durch Alter, Krankheit oder Behinderung, Glaube, ethnische Herkunft, Geschlecht, Staatsangehörigkeit, politische Zugehörigkeit [...], sexuelle Orientierung, soziale Stellung oder durch andere Faktoren» beeinflussen zu lassen. In der Realität berichten jedoch Patient:innen, Lehrende und Medizinstudierende im deutschsprachigen Raum von Diskriminierungserfahrungen. So zeigen z.B. Studien aus Deutschland, dass rund die Hälfte der Akteur\*innen Diskriminierung im Gesundheitswesen beobachtet oder selbst erfahren hat. Mit dem Mandat des Vorstandes der Gesellschaft für Medizinische Ausbildung (GMA) wird vor diesem Hintergrund ein Positionspapier zum Thema Rassismus in der Medizinischen Ausbildung erarbeitet.

## Ziele

Mit diesem Positionspapier möchten die Ausschüsse «Kulturelle Kompetenz und Global Health» und «Gender, Diversity und Karriereentwicklung in der medizinischen Aus- und Weiterbildung» der GMA einen Beitrag leisten zur Sensibilisierung von Studierenden, Lehrenden und weiteren in der medizinischen Lehre tätigen Personen zum Thema rassistische Diskriminierung im Gesundheitswesen. Dabei soll unter anderem auf die Bedeutung von Lehrangeboten zur Vermittlung von Rassismus kritischen Kompetenzen in der medizinischen Ausbildung hingewiesen und deren Entwicklung mit ausgearbeiteten Empfehlungen unterstützt werden. Um eine vertiefte Auseinandersetzung mit Rassismus auf diversen Wirkebenen anzuregen und deren Fortbestand in der Ausbildung zu minimieren, werden theoretische Hintergründe beschrieben, Definitionen hergeleitet und eine Erhebung der aktuellen Integration von Lehrangeboten im Studium der Humanmedizin in den deutschsprachigen Ländern durchgeführt und Empfehlungen zur Entwicklung von Lehrangeboten als auch zur Qualifikation der Lehrpersonen dargestellt.

## Auftraggebende

Gesellschaft für Medizinische Ausbildung (GMA)

## Partner:innen

GMA Ausschüsse «Kulturelle Kompetenz und Global Health» und «Gender, Diversity und Karriereentwicklung in der medizinischen Aus- und Weiterbildung»

## Team IML

Daniel Bauer, Felix Schmitz

**Projektinformation**

Laufzeit: 2021-2024

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**Dr. phil. Felix Michael Schmitz**  
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# «BeFit» Project

Evaluation of the «BeFit» Project.

[2020](#) [2021](#) [2022](#) [2023](#) [2024](#) [2025](#) [Service](#) [Evaluation](#)

The «BeFit» project aims to improve the physical activity of ankylosing spondylitis sufferers via the promotion of a specific training concept, thereby improving their quality of life. It also seeks to implement this concept throughout Switzerland.

## Aims

The aim of the evaluation is to follow the BeFit project throughout its entire duration and to assess its results and effects.

## Client

Health Promotion Switzerland (GFCH)

## Co-workers

Felicitas Wagner, Barbara Zurbuchen, Corinne Dreifuss, Sören Huwendiek

**Project information****Running time:** 02/2020 - 04/2025**Dr. phil. Felicitas Lony Wagner**

Scientific collaborator

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# Evaluation von Praxisassistenzen

Überarbeitung der Erhebungsinstrumente für die Evaluation von Praxisassistenzen.

**2023** **2024** **Evaluation**

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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 – 01/2024

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**Dr. phil. Felicitas Lony Wagner**

Scientific collaborator

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# IML has joined the IMEX Program

IMEX, as the name suggests, aims to facilitate international exchanges and collaborations among medical educators.



## International Medical Educators eXchange

**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, Prof. Dr. Dr. med. et MME Sören Huwendiek, 23.04.2024

**2023** **2024** **Research**

The IMEX, International Medical Educators eXchange, programme started in 2006 as an initiative from a small group of experts in medical education: including Karen Mann from Halifax, Linda Snell from Montreal and Olle ten Cate from Utrecht, Peter McCrorie from London and Yvonne Steinert from Montreal. This group also worked on a paper describing the programme that later appeared in *Medical Teacher* (1). This initiative between medical schools in Europe and Canada was extended to the USA and Asia in 2018. The Institute for Medical Education, Medical Faculty in Bern, joined the network in 2023.

The network aims at providing an international orientation on medical education for senior faculty members in medical schools (2). The IML shares the visions of the program and are looking forward to contributing to the program aims: IMEX, as the name suggests, aims to facilitate international exchanges and collaborations among medical educators. The program focus on sharing best practices in medical education, fostering research collaborations, and promoting a global perspective in medical training.

### The partners of the program (as of 2023)

- University Medical Center Utrecht - the Netherlands

Organizing unit: Center for Education, UMC Utrecht

IMEX board (chair): Professor Manon Kluijtmans, Center for Education at UMC Utrecht.

- Karolinska Institutet - Sweden

Organizing unit: Division of Medical Education

IMEX board: Anders Sonden MD PhD, Karolinska Institutet.

- MedStar Georgetown University & USUSH, USA

Organizing Unit: MedStar Georgetown University, Washington DC, USA, in collaboration with the Uniformed Services University of the Health Sciences (USUSH) Bethesda MD, USA

IMEX board: Professor Carrie Chen, Associate Dean of Assessment and Educational Scholarship at Georgetown University School of Medicine and Professor Steven Durning, Director, Center for Health Professions Education (CHPE), Uniformed Services University of the Health Sciences

- DUKE-NUS Medical School - Singapore

Organizing Unit: Office of Academic and Clinical Development, Duke-NUS Medical School, Singapore

- IMEX board: Dr. Scott Compton, PhD, Associate Dean Medical Education, Research and Evaluation.
- **INSTITUTE FOR MEDICAL EDUCATION (IML), MEDICAL FACULTY UNIVERSITY OF BERN; SWITZERLAND**  
Organising Unit: Institute for Medical Education.  
IMEX Board: Professor Sissel Guttormsen, director of the IML, and Professor Sören Huwendiek, Head of the Department of Assessment and Evaluation at the IML.

## Program implementation

*Twice a year, one of the participating schools organizes a week of faculty development activities for experienced medical educators from each school, including group discussions, short presentations, observations and active engagement in local education, one-on-one meetings with local faculty members, and many opportunities for in-depth discussion. (1)*

The idea of the program is that intensive exchange between the partners foster new ideas, innovation and support curriculum developments and fruitful continuous development of medical education. Each member institution recruits competent and ambitious medical educators at their sites, typically 2 – 3, who are participating at the visits at all partner sites. Their program is completed when minimally three, maximally five consecutive sites visits have been completed. Experience shows that:

*IMEX has established itself as an important additional faculty development opportunity for those medical educators who wish to develop and pursue a career in education. (1)*

## The IMLs vision by participating in the program

We are convinced that the IML, as also our Medical Faculty, profit from international collaboration and exchange in medical education. The challenges in medical education, are recognised to be similar across institutions and countries (3). Yet the solutions to support high quality medical education are manifold, and therefore, international exchange among experts in this field is so important.

The IML has 50 years of experience in promoting high quality medical education, covering several areas as assessment, learning and teaching, professional development, and digitalisation. We have much to share, and we also want to continuously learn. In Switzerland, and in Bern, the IML is embedded in a context of (interprofessional) medical education with many partners that also can profit from exchange within the IMEX Program. It is our intention to make the program also into a benefit for our close partners.

Our first program visitors to join the tour will be Sören Huwendiek and Christoph Berendonk, both from the IML. If this mission catches your interest, maybe you are next?

## References

1. Olle ten Cate, Karen Mann, Peter McCrorie, Sari Ponzer, Linda Snell & Yvonne Steinert (2014). Faculty development through international exchange: The IMEX initiative, *Medical Teacher*, 36:7, 591-595, DOI: 10.3109/0142159X.2014.899685
2. <https://www.umcutrecht.nl/nl/opleidingen/opleidingenoverzicht/imex-international-medical-educators-exchange-programme>
3. Mennin, S. Ten Global Challenges in Medical Education: Wicked Issues and Options for Action. *Med.Sci.Educ.* 31 (Suppl 1), 17–20 (2021). <https://doi.org/10.1007/s40670-021-01404-w>



**Prof. Dr. phil. Sissel Guttormsen Schär**

Director IML

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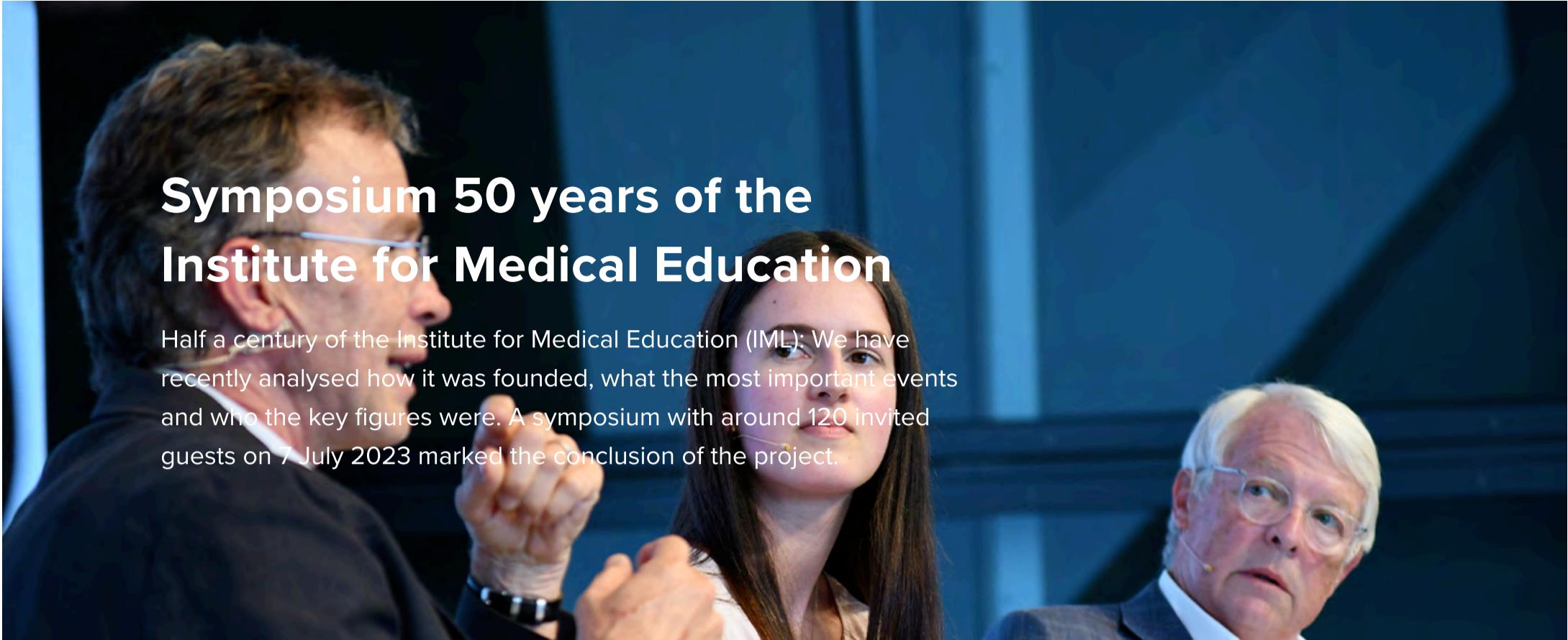
**Prof. Dr. Dr. med. et MME Sören Huwendiek**

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# Symposium 50 years of the Institute for Medical Education

Half a century of the Institute for Medical Education (IML): We have recently analysed how it was founded, what the most important events and who the key figures were. A symposium with around 120 invited guests on 7 July 2023 marked the conclusion of the project.

**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, Elisabeth Pacher Wiedmer, 23.04.2024

2023 Event

At the symposium, experts discussed developments, opportunities and challenges in medical training, provided insights and outlooks from Switzerland and abroad and ventured a look into the future of medical studies. After the opening by the IML Director and a welcome address by the Dean of the Faculty of Medicine Bern, Prof. Claudio Bassetti, the speakers Prof. Steffen Eychmüller, Prof. Henri Bounameaux and Lenja Flütsch provided spotlights from the areas of teaching staff, national organisation and students.

The symposium took place in a historic setting, namely the former vonRoll factory (now vonRoll University). Like the IML, the building has undergone a major transformation: From a foundry where printing discs were produced - to a hub for knowledge. Director Prof Sissel Guttormsen, who hosted the symposium together with Dr. Felix Schmitz, Head of Group Research at the ASCII department, sums it up in a nutshell:

“

With a multi-track historical reappraisal, we have succeeded in understanding and presenting the institute as a continuum between its beginnings and today's IML.

— Sissel Guttormsen

## Opening and spotlight



Greeting message via video by Prof Claudio Bassetti, Dean of the Faculty of Medicine Bern, Images © 2023, IML

## Symposium 50 Years IML



Opening by the conference president and IML director Prof Sissel Guttormsen

# Program



13.30 Spotlight

14.30 Experience parcours

16.00 Panel discussion

16.30 Conclusion

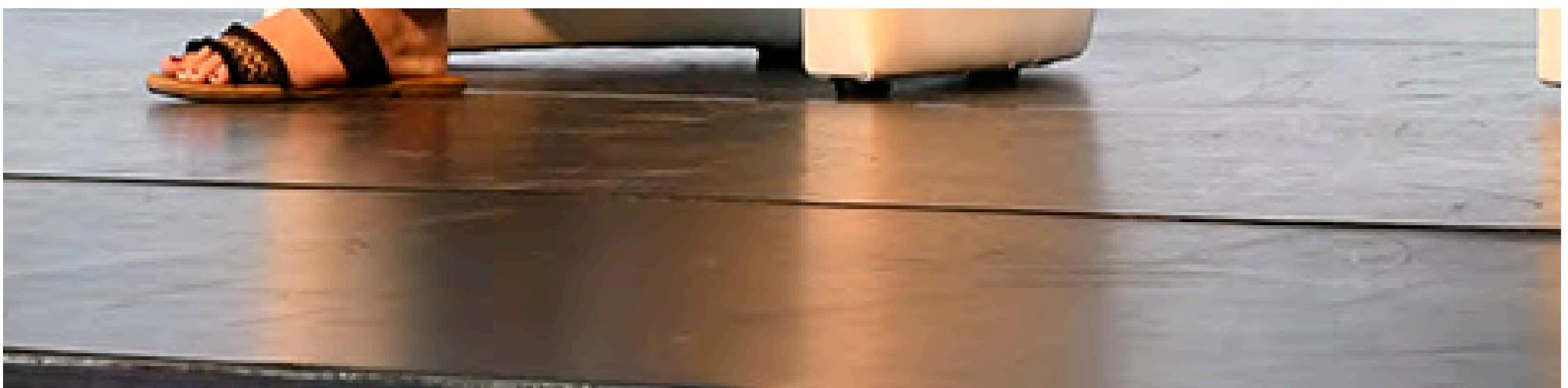
Symposium 50 Year



Co-moderation Spotlight with Dr. Felix Schmitz (left)

the goals of medical education? What are the recent relevant developments that you see - and which challenges do you see - and which experiences do you have with future healthcare education?





Oncology and Head of the University Centre for Palliative Care, Inselspital, Lenja Flütsch, Medical Student, Bern et al.





Procedure of the experience course; information from PD Dr. Christoph Berendonk

## Practical Experience

A practical parcous with 9 stations gave visitors and IML employees an insight into current and past IML activities:

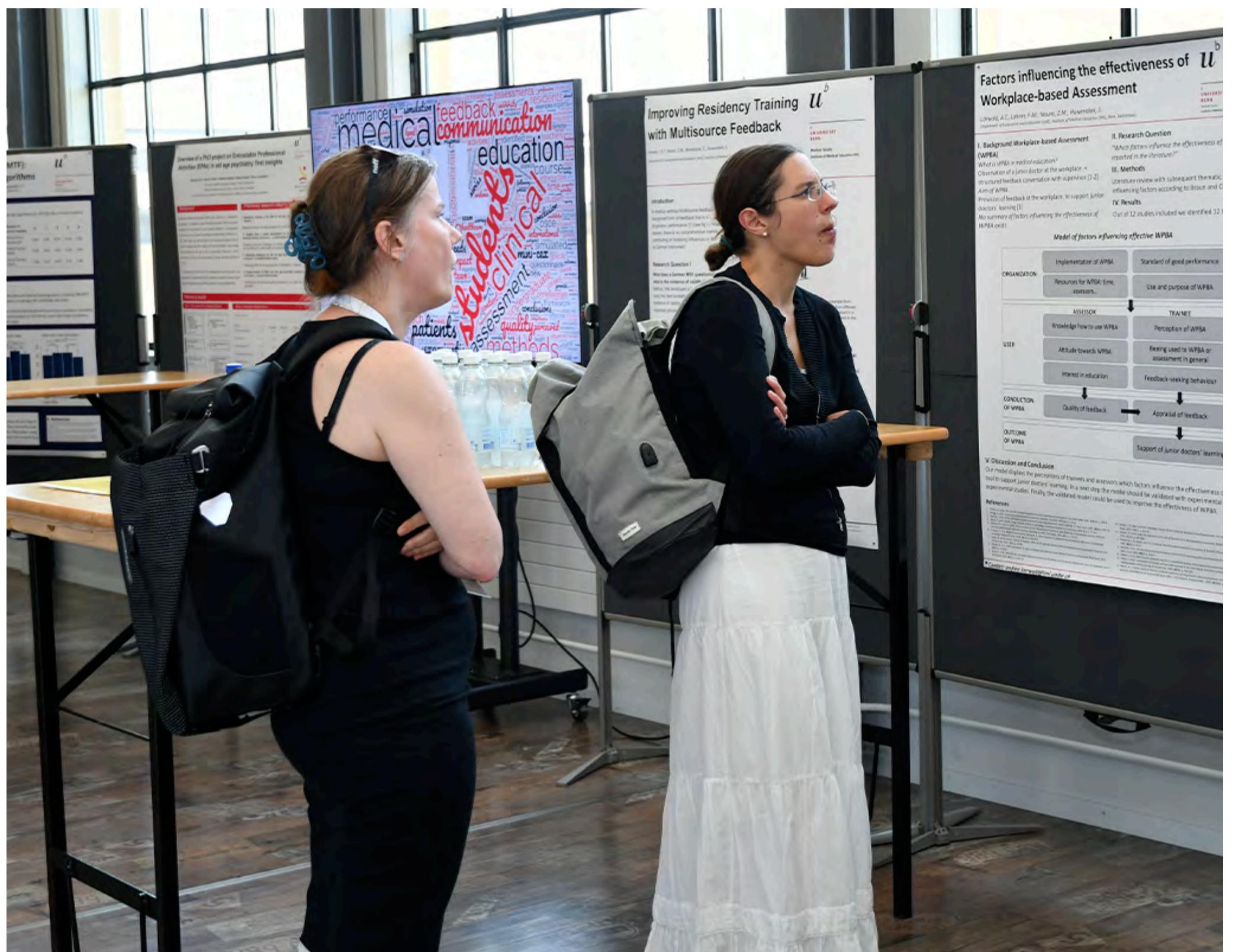
- **The beginnings:** A "live" reading with excerpts from the memoirs of IAE director and founder of the institute (forerunner of today's IML) Prof Hannes Pauli (poster biography), revived the early days of the institute and study planning (poster STPL). (see info box on the right/link podcasts to the reading)
- **Media history:** From the slide carousel to web-based learning programmes showed the development of learning media from the origins of the Visaudio set with teaching videos or slides with sound to the first e-learning programmes with laser discs, to today's modern e-learning programmes.
- **Learning media:** The remarkable technological evolution of electronic learning media over the past decades was illustrated and shown by means of in-house productions ([MedSurf](#) in DE)
- **Simulation OSCE:** A concrete case with a simulation patient in combination with moulages, so-called artificial wounds, showed the use and importance of simulation in medical studies
- **Medical didactics:** Insights into innovative teaching methods were provided by the part-time medical didactics MAS programme MME Bern

- **eAssessment:** At this station, visitors will find out how IML eAssessment tools simplify the examination process for students and lecturers and what role intuitive operation ("usability") plays
- **A research exhibition** showed selected PhD research papers in the form of posters and IML research topics from the last decades
- **Moulages:** We vividly demonstrated the role that moulages can play in simulations and the added value they offer.
- **Usability:** What do we actually mean by "usability" and "user experience"? How can you develop a product that is intuitive to use? Overview of stations



Media history and slide carousel





Research exhibition



MME Bern



Simulation OSCE: Introduction and preparation



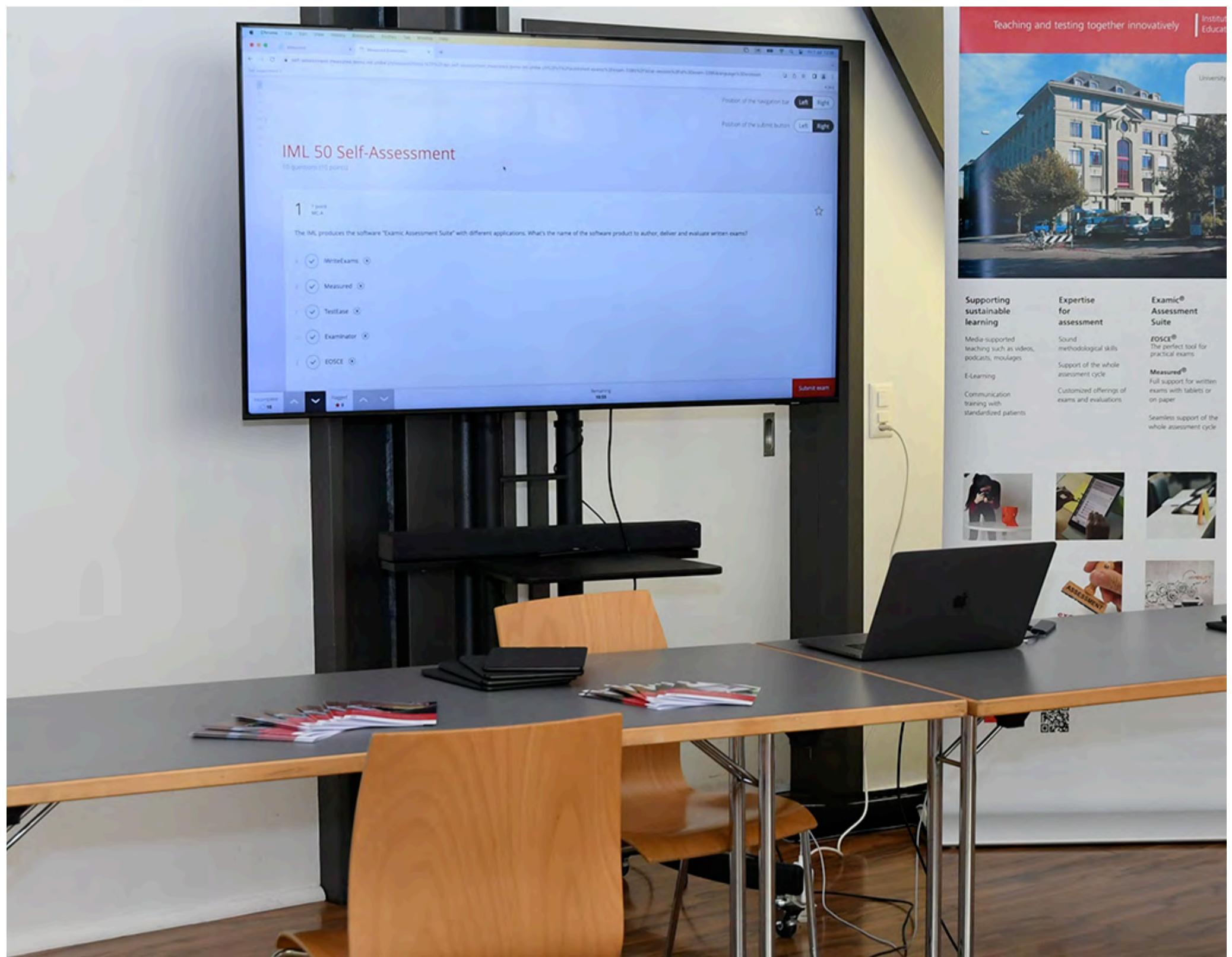
Simulation and OSCE "live"



Moulages made by IML



"Moulage kitchen"



Self-assessment with measured



Usability station



History station: The beginnings of the Institute from the perspective of its founder Prof Hannes Pauli



Prof Hubert Steinke (right), Institute for the History of Medicine, visits the History IML station



Reading from the memoirs of Prof Hannes Pauli by Dr. Felix Schmitz, IML



Dori Schär (right), life partner of Prof Hannes Pauli

## Panel discussion and conclusion

At the concluding panel discussion, external speakers Prof Anne Herrmann-Werner, Dr. Monika Brodmann Maeder (via Zoom), Dr. Silke Biller and Dr. David Gachoud described their view of the IML from the outside. The heads of department, Prof. Sören Huwendiek and Dr Kai Schnabel, moderated this part of the programme. The questions from the audience showed that the importance of medical teaching has increased rather than decreased. The symposium was evaluated and given a very positive overall assessment.

Prof Guttormsen concluded by summarising some of the **key points of the symposium**:

- Medical teaching is constantly evolving, and developments in content and technology never stand still. The IML's task will always be to adapt to the state of development and to offer suitable, innovative and feasible solutions for teaching at all times.
- Medical teaching should not forget the most important tasks of medical professionals, namely to prevent, cure and alleviate illness (as emphasised by Prof. Bounameaux). Medical didactic quality and innovation always aim to optimise patient care.
- For teaching staff, appreciation in terms of individual initiatives - effort and commitment - in teaching is rarely provided by the organisation. However, it should be the task of the organisation (faculty, institute or clinic) to create appreciation in the form of incentives, visibility and time.

- Students represent the future of the healthcare landscape. Motivating and listening to them is not only important, but also useful. Students sense new developments early on and want to be optimally prepared for their task.
- Last but not least, services, development and research in medical teaching depend on cooperation at all levels. We would like to thank our employees, partners, clients and colleagues for their excellent cooperation!



Co-moderated by Kai Schnabel (right) and Sören Huwendiek (IML) (left)

- What are the chances
- What is your message





Anne Herrmann-Werner, Chair for Medical Education, Clinical Teacher, University of Tübingen, Germany



Gachoud, Monika Brodmann Maeder, President executive board, Swiss Institute for Postgraduate and Continuing



Silke Biller, Head of the Student Deanery, Faculty of Medicine, Basel

# Symposium 50 Years IML



Clinical Teacher, Member of the Working Group Clinical Knowledge of the Federal Licensing Exam in Human Medicine





Summary of the most important votes and conclusion by the conference president Sissel Guttormsen

## The IML 50 project - aim and ambition

The IML50 project was launched in November 2019 in view of the Institute's milestone anniversary in the 2021/22 academic year. It is a special responsibility to remember the history of medical education in Bern and in its national perspective. We looked back at the beginnings and the history of the Institute for Medical Education (IML). Who were the driving forces? What challenges had to be overcome? Is the IML equipped for the challenges of the future?

To this end, we analysed minutes and work reports, researched the history of our origins in the early 1970s and the (university) political entanglements of the time, and digitised hundreds of slides from our collection to make them accessible to posterity. Our findings are recorded in a commemorative publication. You will find selected articles on our fields of activity over five decades; historically embedded in milestones and in key statements by key people. We were supported in our search for clues by contemporary witnesses from the founding period, among others, whom we were able to interview. These interviews are very valuable, as the direct impressions of the historical figures convey the IML story in great detail. Parts of these interviews are integrated into the commemorative publication and can be experienced audiovisually with a QR code or directly via a link on our website. Our sincere thanks go to all those involved for their commitment and benevolent support.

## Impressions from the history of the institute



Educational film under the direction of Prof. Hannes Pauli, © 1970 Schweizer Radio und Fernsehen, licensed by Tele



Video recordings with Prof Marco Mummenthaler, Christof Dätwyler, Susi Bürki



Video editing suite

# Von der Auto-Vision zur Audiovision



X-ray learning station in the learning centre



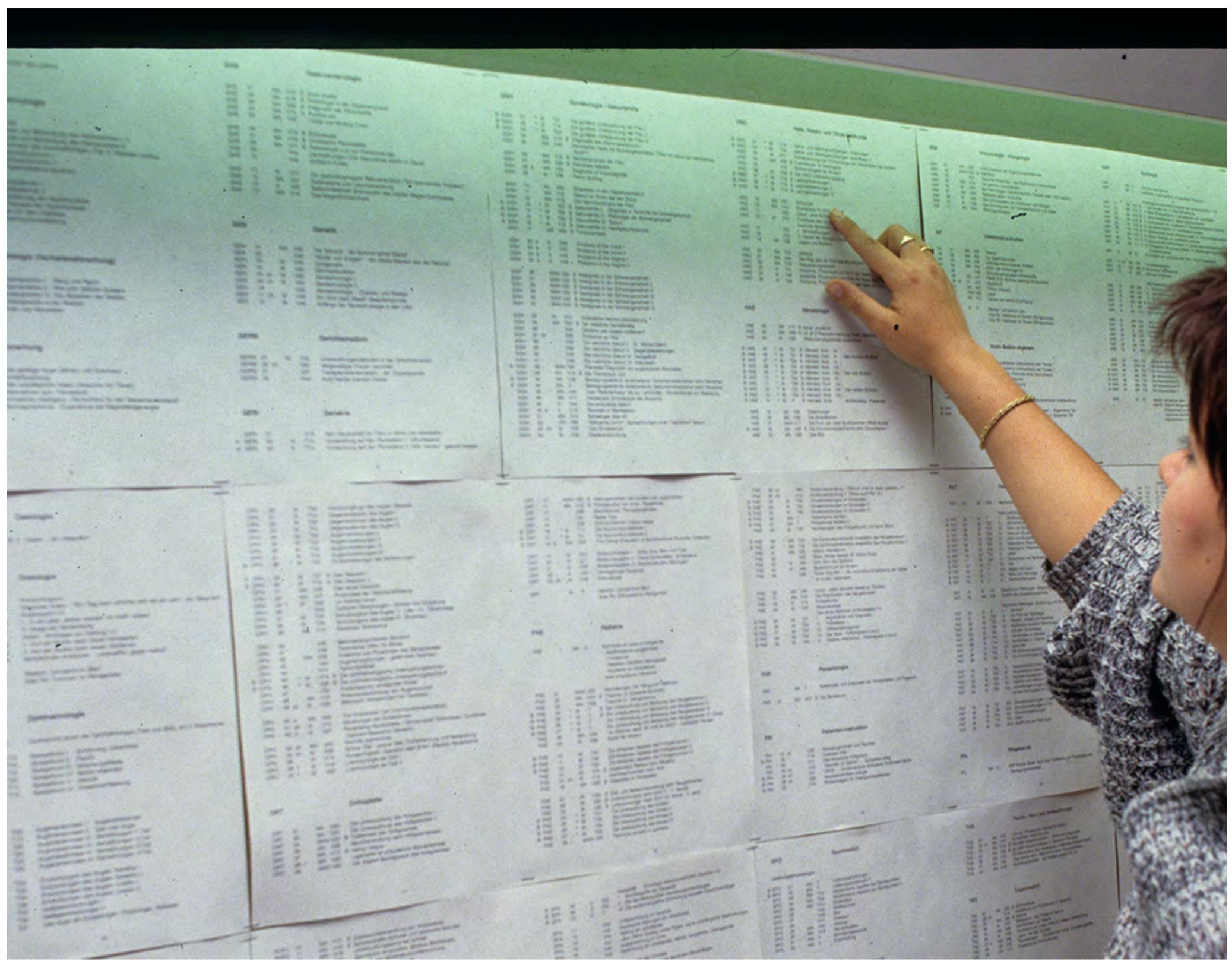
Video booth in the learning centre



blood and bone marrow smears with video camera and frame grabber for Hemosurf, ca. 2002 (U. Woermann, M.



Inn and Thomas Oehler (back), recording heart sounds and noises with cardiosimulator for cardiac auscultation le



List of learning media available in the learning centre



Box with slide carousel and audio cassettes



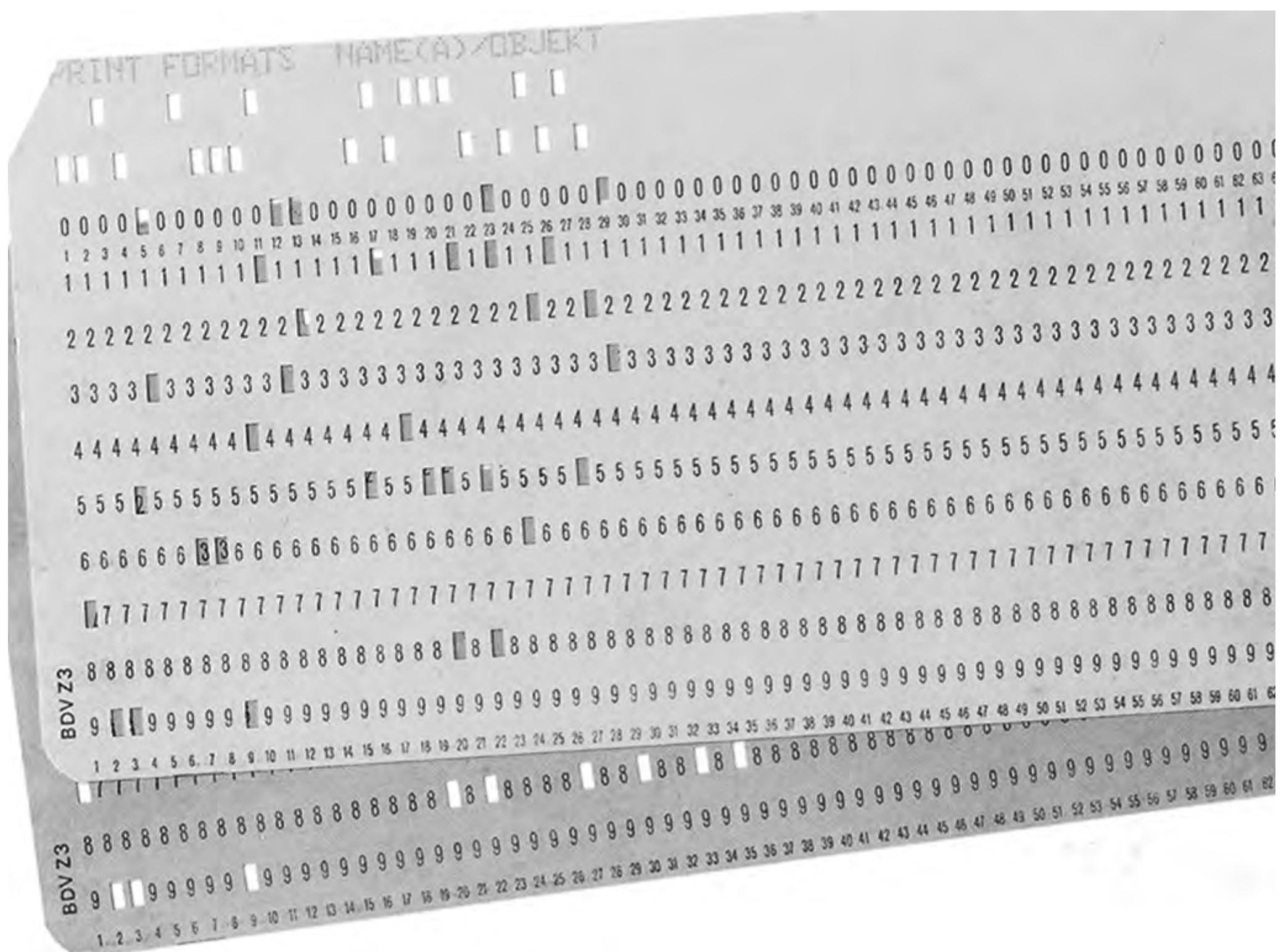
Boxes with audio-visual displays (T) and videos (V), self-service in the learning centre



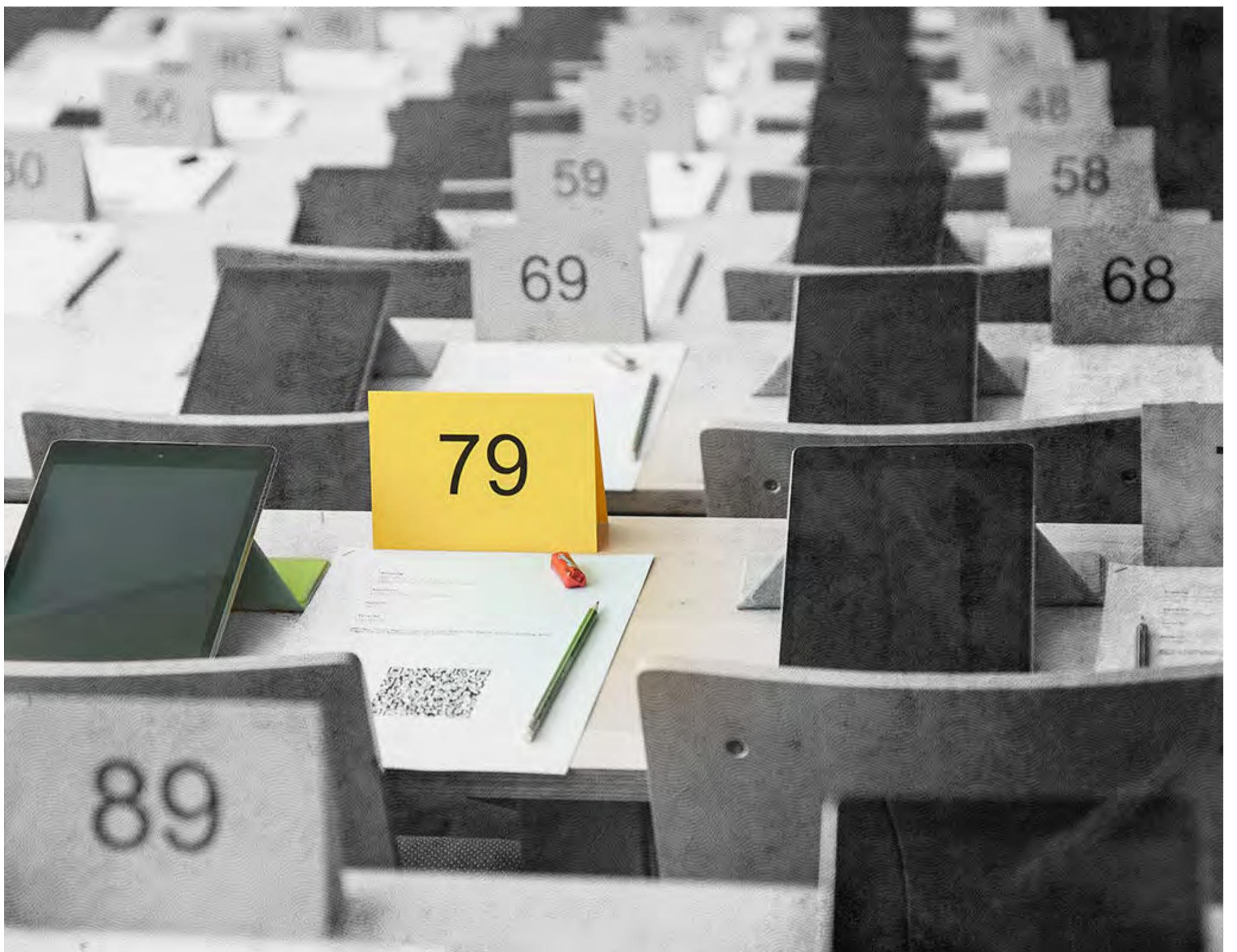
Individual learning bunks in the learning centre



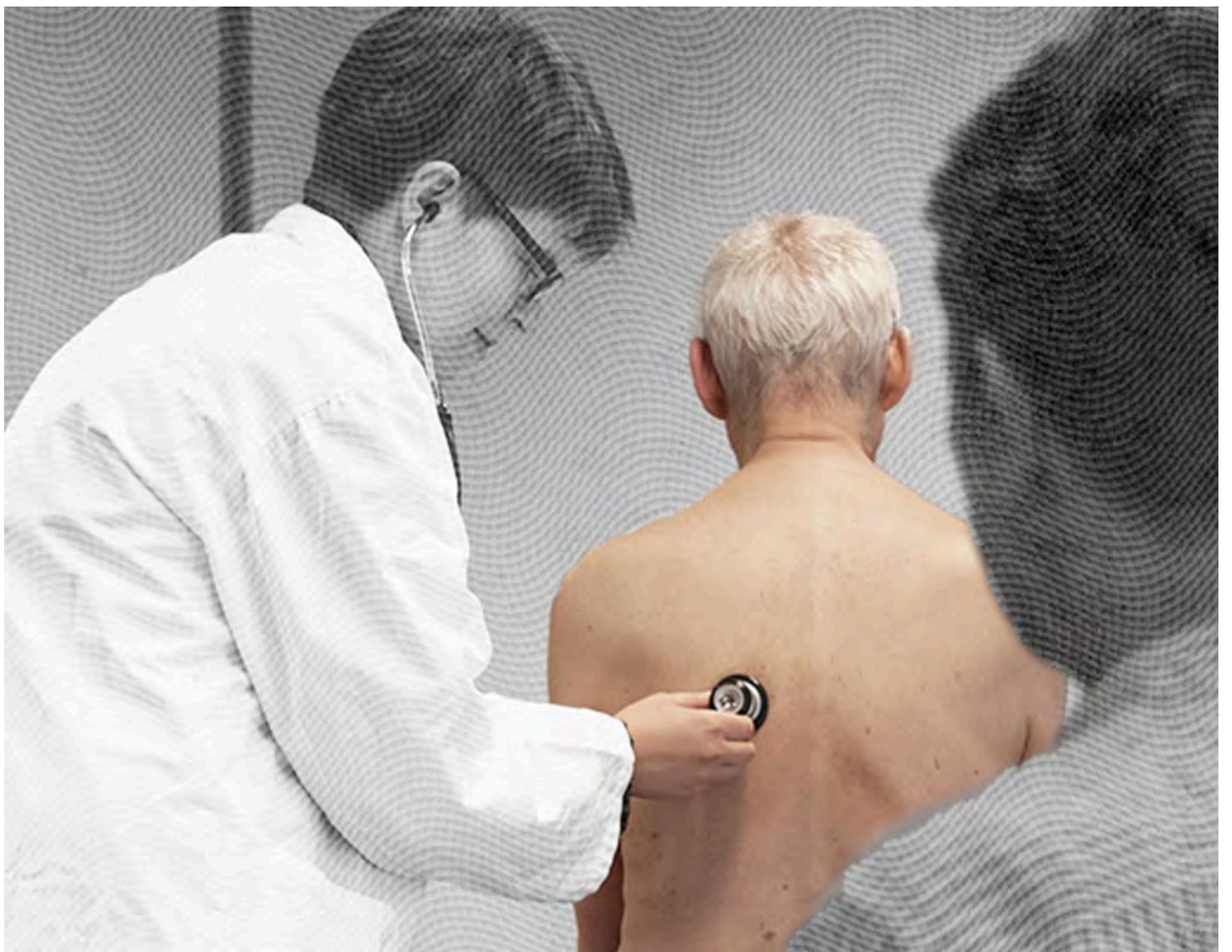
First computer learning station



Example of punch cards for exam



Exam with tablets



Example of practical assessment



Example of a learning situation in the BiSS (Bern Interdisciplinary Skills and Simulation Centre at UniZiegler)

## IML-Direktor:innen seit 1971



Prof. Hannes G. Pauli\*1924-†2003  
Direktor des Instituts für Ausbildungs-  
und Examensforschung (IAE)  
von 1971 bis 1989



Prof. Ralph Bloch  
Direktor des IAWF von 1991 bis 2004



Prof. Sissel Guttormsen  
Direktorin IML seit 2005



#### Interviews with contemporary witnesses

Prof. Sissel Guttormsen, Director IML (in DE)

All interviews from the commemorative publication (in DE & EN)

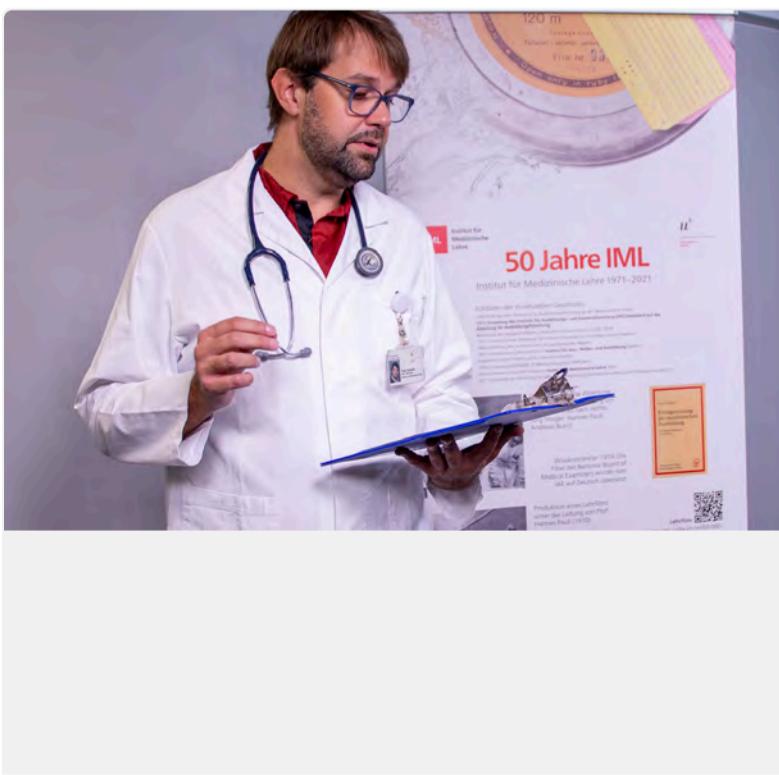
#### In memory



**Prof. Dr. med. Hannes Pauli (1924-2003)**

© 1970 Schweizer Radio und Fernsehen, lizenziert durch Telepool GmbH Zürich

#### Reading from his memoirs



**Podcasts (in DE)**

Podcast 1:

The IAE Institute and the first Swiss-wide multiple choice exams

Podcast 2:

History of study planning

It reads:

Dr phil. Felix Schmitz, IML

© 2023, IML

**Links**

Commemorative publication (PDF)

Microsite IML 50

Interview Prof. Sissel

Gutormsen (Uniaktuell, 7/2023)

# FRONTLINERS: Evidence based blended learning for Precision Medicine

Teaching precision medicine to primary care professionals: General Practitioners, Pharmacists, Advance practice nurses



**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, Sharon Mitchell, 23.04.2024

2023 2024 2025 Research

## PROJECT BACKGROUND

The objective of the Frontliners initiative is to implement an evidence-based training programme in precision medicine targeting frontline healthcare professionals. The design phase of this training is built upon three focus areas including content development, research and communications (figure 1). Since 2019, the project team have continued to build each of these focus areas with an end goal of implementing an online evidence-based training programme, presenting quality interactive modules on key topics in precision medicine, which can be combined with onsite training.



Figure 1: Strategic focus areas

## Financing

We are very grateful to the funder ‘health2030’ for supporting this innovative initiative and supporting Frontliners for the duration of the time needed to reach our intended aims.

## FOCUS AREA 1 – content development of a state-of-the-art training programme

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. Topics were carefully selected and informed from the targeted needs assessment research study. Each module was built upon the foundations of learning theory, conceptual frameworks, and evidence-informed education.

<https://frontliners.openolat.com/dmz/>

The production of educational content requires sound educational design based on evidence. The approach taken by the project team to deliver quality education has required a step-by-step approach to curriculum design including Needs assessment – Content development – Organisation and implementation – Monitoring and Evaluation [1, 2].

1. Prideaux D: *Curriculum design*. *Bmj* 2003, 326(7383):268-270.
2. Thomas PA, Kern DE, Hughes MT, Chen BY: *Curriculum development for medical education: a six-step approach*: JHU Press; 2016.

## FOCUS AREA 2 – evidence-based education for evidence-based practice

This project applies a scientific empirical approach for education needs assessment to design, plan and implement a blended learning programme to deliver Precision Medicine, to frontline healthcare professionals. The accompanying research track with a PhD in Medical Education investigated learning needs, applied teaching and learning and effectiveness of an online intervention in acquiring new knowledge and skills, key theoretical and applied research issues., This research protocol has enriched and strengthened the developed product

## FOCUS AREA 3 – communication, dissemination and research output

Central to the development of FRONTLINERS is the aim to meet the needs of the target group, and to tailor the communication and a dissemination strategy accordingly. Through the dissemination of the Platform, we will rely on easy access to the online resources, for learner as well as for trainers. Various dissemination processes are to be implemented. The evidence based principles and new insights will be made accessible through publications, conference presentations and outreach activities

## Key Deliverables, as of spring 2024

### 1. Content development of a state-of-the-art training programme

The institute for Medical Education (IML) is hosting the platform and responsible for the management of access and maintenance of current and future users. All Frontliners modules are hosted on Open Olat and have been organised and presented within an easy to use, digital, self-paced learning environment. Learners with access to the platform will have the possibility to progress through their learning independently, with opportunity to reflect on their learning, complete assessments of their learning and receive feedback.

Each learning module includes an interactive learning experience that includes;

- Didactically presented content on the specific topic.
- Patient case videos

- Illustrations
- Assessment items and feedback opportunities
- Learning tasks

## 2. Evidence-based education for evidence-based practice

While the key focus area has been development of online modules in Precision Medicine, the team has also successfully implemented a face to face learning with online course modules in a blended learning approach.

The blended learning concepts build on a combination of the online modules and onsite training to facilitate learners acquisition of new knowledge and skills. We designed and delivered two onsite trainings in a blended learning approach, during 2022 and 2023. The possibility to balance online learning with onsite practice (figure 2), is an asset of this production.

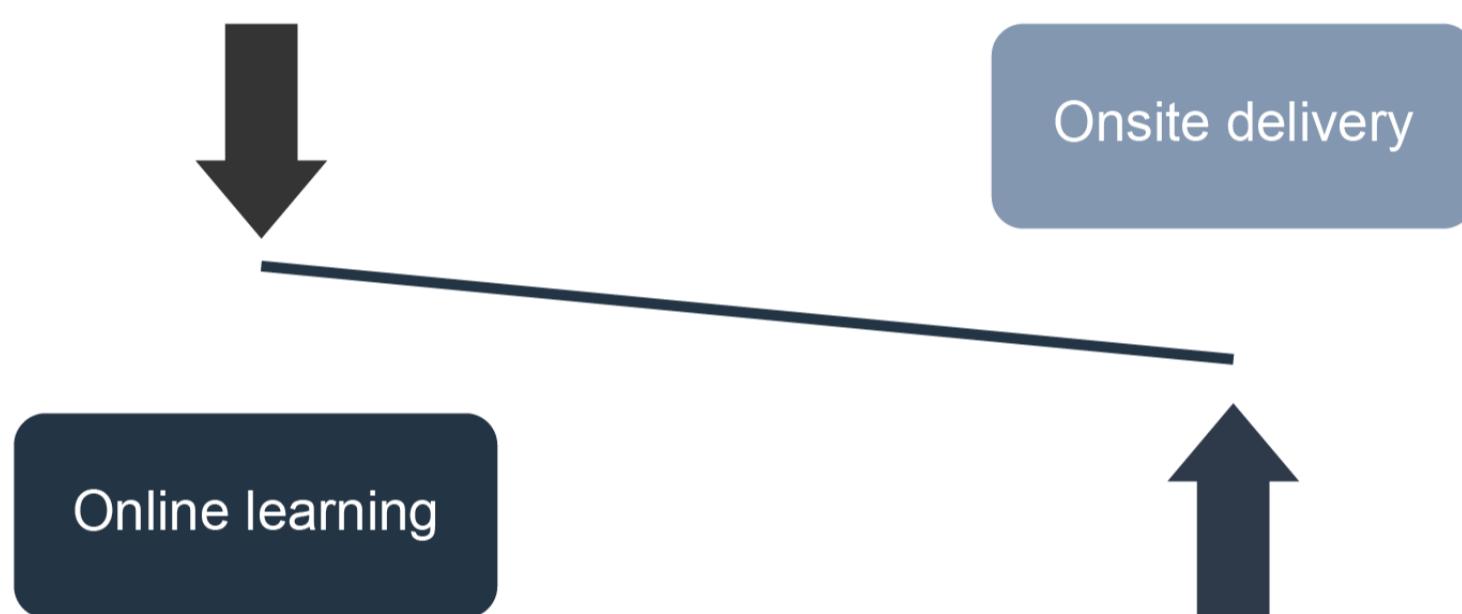


Figure 2: Balancing online learning with onsite delivery

## 3. Knowledge dissemination, research and outreach activities

This project intended to apply an evidence-based approach for education from the start. This implies that decisions for implementation and development are based on proven didactic principles, and newest insights for online learning design. All the steps are accompanied with applied research, when needs for clarifications have been identified. By way of example, we identified that a needs assessment for this development was necessary. This has been implemented in two sub-studies reported below. Further, it is important to thoroughly test the effectiveness of the learning activities with the online platform, which also resulted in a study. Further studies, relevant in this context are reported below.

### Journal articles:

- Mitchell, S., Evrim , J., Schmitz, F. M., Von Kanel, E., Collombet, P., Cornuz, J., Weber, G., Guessous, I., Guttormsen, S. (2022). Investigating acceptability of a training programme in Precision Medicine for frontline healthcare professionals: A mixed Method study. BMC Medical Education (2022, 22:556). <https://doi.org/10.1186/s12909-022-03613-2>

- Mitchell S, Sehlbach C, Franssen GHL, Janczukowicz J, Guttormsen S. (2024) Taxonomy of teaching methods and their use in health professions education: a scoping review protocol BMJ Open 2024;14:e077282. doi: 10.1136/bmjopen-2023-077282
- Mitchell, S., Jaccard, E., Cardineaux, R., Collombet, P., Cornuz, J., Waeber, G., Guessous, I., Guttormsen, S. (2020), Implementing an Online Training Programme in Precision Medicine for Primary Care Professionals: a Multi-Method Approach. Short paper in the Proceedings of 17th IADIS international conference on Cognition and Exploratory Learning in Digital Age (CELDA), 18. – 20.11.2020, Lisbon, Portugal.

The following publications are in preparation:

- Mitchell, S, Schmitz, F.M, Pless, A et al. Exposing the knowledge gap in precision medicine among primary care professionals: results of a survey study. [in preparation]
- Mitchell, S, Schmitz, F.M, Buzzi, AL. A new online module on genomic testing improves students' and general practitioners' skills performance in simulated patient encounters: Results from a Pre-test post-test trial [in preparation]
- Sharon Mitchell, Evrim Jaccard, Felix Schmitz, Jolanda Elmers, Gérard Waeber, Idris Guessous, Sissel Guttormsen. Effectiveness of educational interventions on genetics / genomics for primary care professionals. A systematic Review [in preparation]

#### *Outreach and conference contributions*

- Mitchell, Sharon; Guttormsen, Sissel (25 March 2023). Genomic Testing, a blended learning approach. In: Swimsa SMSC 2023 congress on Precision Medicine Bern, Switzerland , 25 March 2023.
- Schmitz, Felix Michael; Mitchell, Sharon; Hitzblech, Tanja; Buzzi, Ann-Lea; Guttormsen, Sissel (September 2023). Zur Abklärung und Kommunikation genetischer Risiken und Testverfahren unter Berücksichtigung gemeinsamer Entscheidungsfindung: Resultate einer Prä-Post-Studie zur Wirksamkeit eines Online-Lernangebots. In: Jahrestagung der Gesellschaft für Medizinische Ausbildung (GMA): German Medical Science GMS Publishing House. Düsseldorf, Germany 14 September – 16 September 2023
- Mitchell, Sharon; Sehlbach, C.; Janczukowicz, J.; Guttormsen, Sissel (31 August 2022). A classification structure for teaching methods and their use in health education: A scoping review. In: AMEE 2022. Lyon, France . 27. - 31.08.2022
- Mitchell, Sharon; Jaccard, E.; Schmitz, Felix Michael; Guessous, I; Guttormsen, Sissel (2022). Entering an era of Precision Medicine: A needs assessment guiding design of a targeted training programme in CPD. In: AMEE Abstract Book 2022. Lyon, France.
- Mitchell, Sharon; Jaccard, Evrim; Schmitz, Felix; Collombet, Prune; Guessous, Idris; Guttormsen, Sissel (2021). Using Needs Assessment to design a new training programme for frontline healthcare professionals: Part 1 - A Focus Group Study. In: AMEE 2021. virtual conference, Dundee, UK. 27-30 August 2021. 27. - 31.08.2022
- Mitchell, Sharon; Jaccard, Evrim; Cardineaux, Regula; Collombet, Prune; Cornuz, Jacques; Waeber, Gérard; Guessous, Idris; Guttormsen, Sissel (2020). Implementing an Online Training Programme in Precision Medicine for Primary Care Professionals: a Multi-Method Approach. In: Sampson, Demetrios G.; Ifenthaler, Dirk; Isaías, Pedro (eds.) Proceedings of 17th International Conference on Cognition and Exploratory Learning in the Digital Age (pp. 359-364). Lisbon, Portugal: IADIS Press, Online November 2020

## Project Team

The interdisciplinary approach within this project has been a key to success. The principle of the development was the seamless cooperation between content experts, medical educators, infrastructure experts and management. To deliver such a project with the intended high quality, and fit for purpose, is indeed a grand project.

### *Executive board*

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)

### *Team IML, focus medical education*

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



[Catalog](#)[Courses](#)[Authoring](#)[Question bank](#)[Precision Me...](#) 

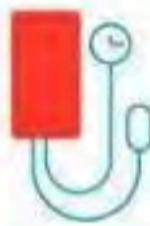
# Precision medicine for primary care professionals

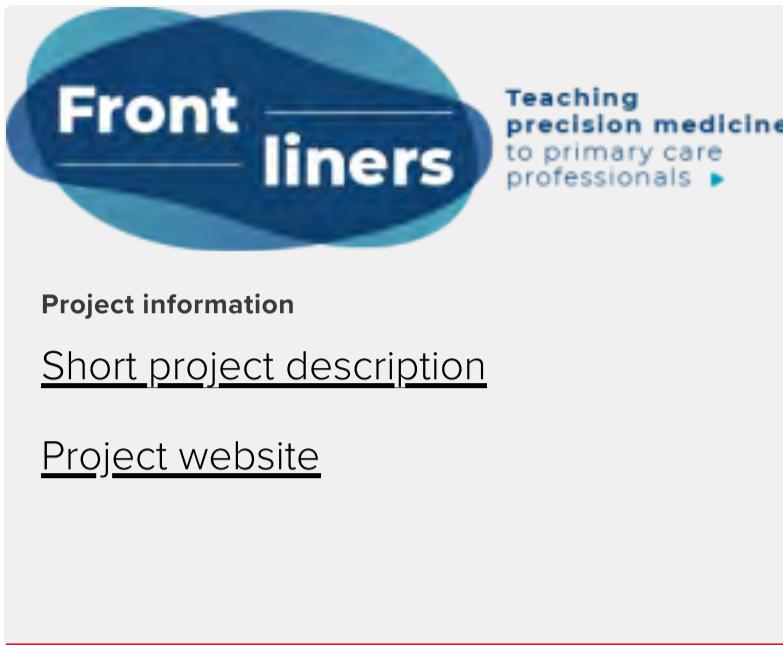
 [Search](#)[Explore all 5 courses](#) [Overview](#)

## Learning content

[Introduction](#)[Shared Decision Making](#)[Genomic Testing](#)[PM in Primary Care](#)[Pharmaco-Genetics](#)

## Information

[Frontliners](#)[About Frontliners](#)**PHARMACO GENETICS****PHENOTYPING COCKTAIL****CLINICAL MARKER MONITORING****PERSONALIZED THERAPY****THERAPEUTIC DRUG MONITORING****BIOMARKER MONITORING**

**Contact**

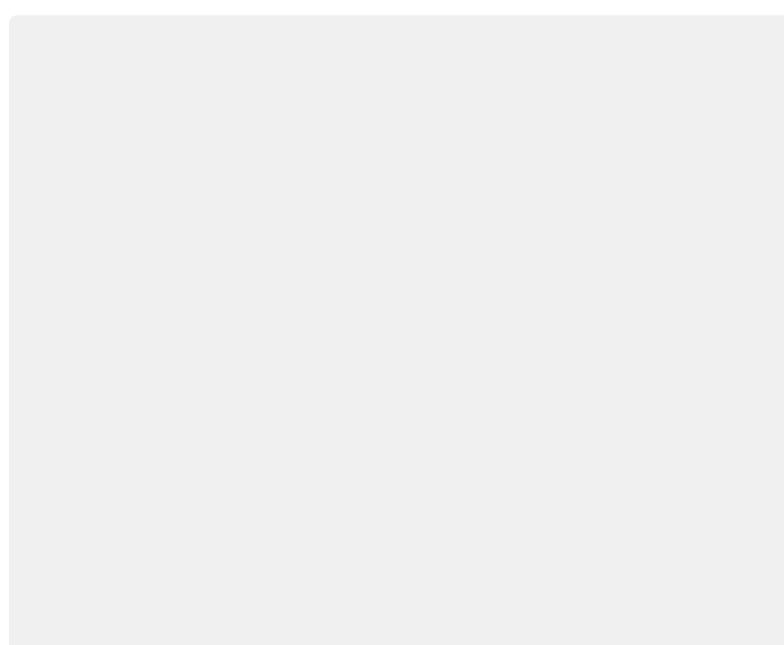
We hope to meet your interest with this project. If you are interested in a cooperation and / or to use the platform, please contact Sharon Mitchell: sharon.mitchell@unibe.ch



**Prof. Dr. phil. Sissel Guttormsen Schär**  
Director IML

+41 31 684 62 01

sissel.guttormsen (at) unibe.ch





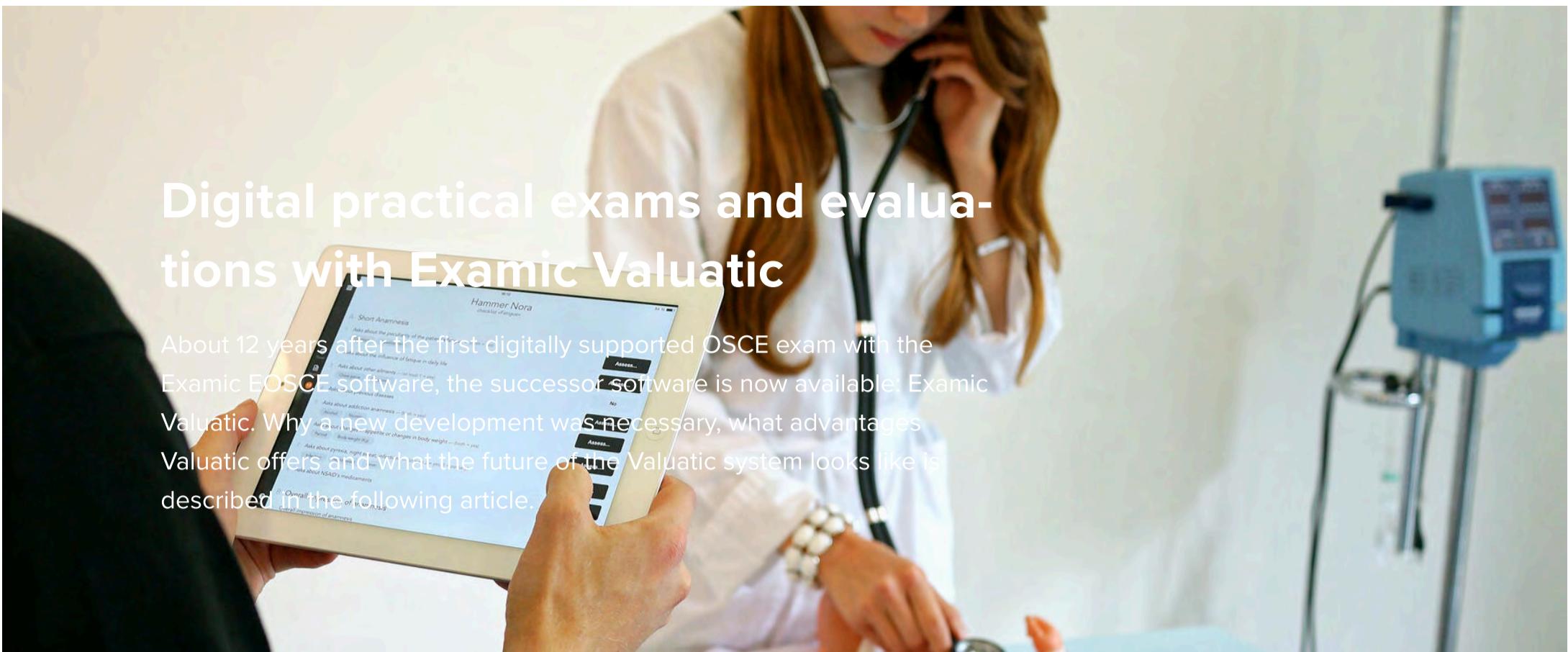
**Sharon Mitchell**  
Scientific collaborator

[sharon.mitchell \(at\) unibe.ch](mailto:sharon.mitchell@unibe.ch)

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# Digital practical exams and evaluations with Examic Valuatic

About 12 years after the first digitally supported OSCE exam with the Examic EOSCE software, the successor software is now available: Examic Valuatic. Why a new development was necessary, what advantages Valuatic offers and what the future of the Valuatic system looks like is described in the following article.



**Text:** Dr. sc. ETH Philippe Zimmermann, 23.04.2024

**2023** **2024** **2025** **Assessment** **Examic**

## The transformation from paper to digital assessments on iPads

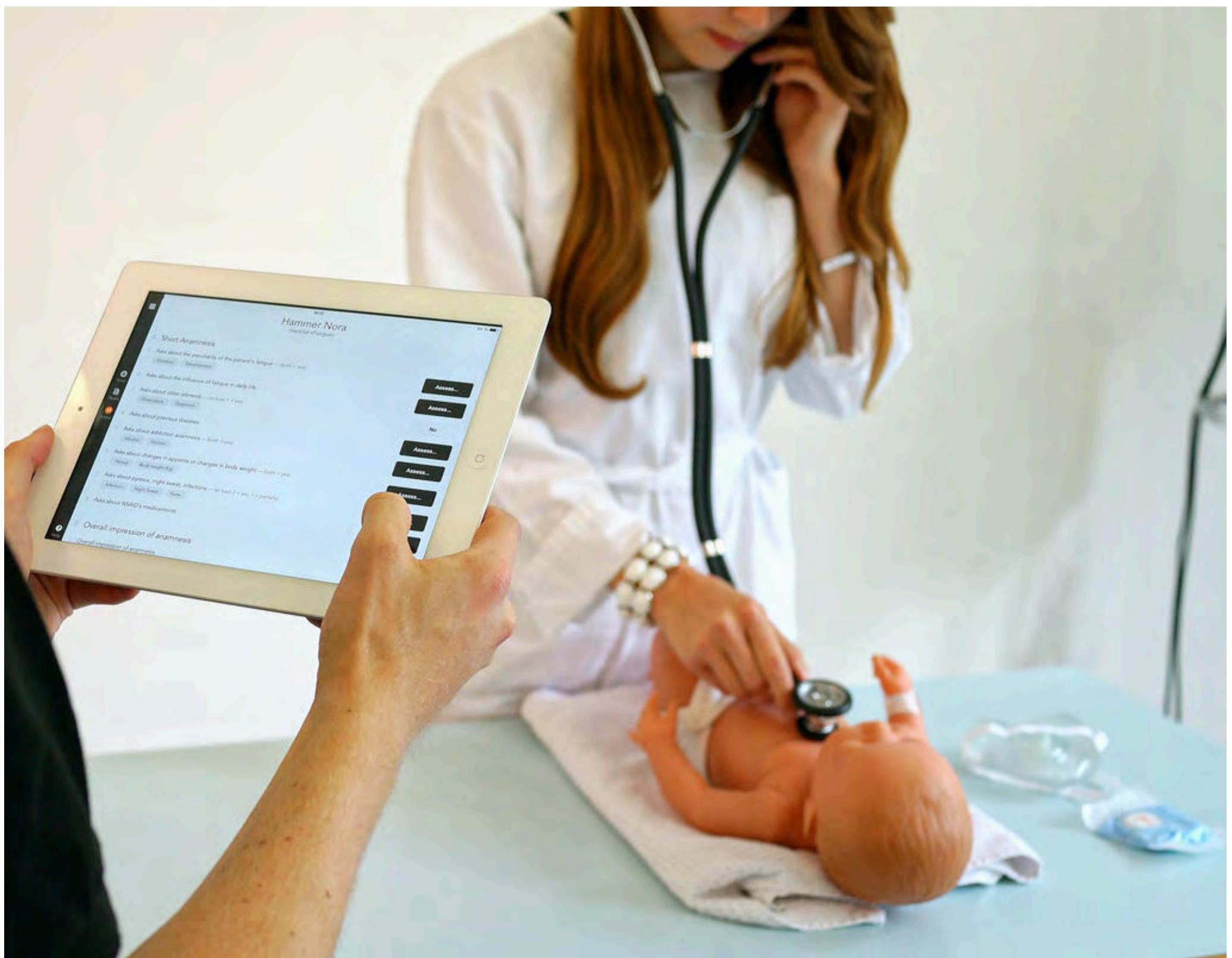
About 16 years ago - in January 2009 - the Institute for Medical Education (IML) took the first steps to change the assessment of students in Objective Structured Clinical Exams (OSCEs), which were still done on paper at the time, to a completely digital solution. In collaboration with the Institute for Software at the University of Applied Sciences Rapperswil and with the support of the Switch-AAA programme, various software prototypes were developed and evaluated in several iterations, which made it possible to prepare an OSCE exam digitally, have it assessed on tablets and analyse it on a desktop computer.

Several obstacles had to be overcome during the development: inadequate and error-prone technology (there were no iPads at the time), scepticism towards digitalisation on the part of the examiners, precise conversion of the paper checklists into a digital user interface, and decades of experience with the paper process that needed to be adapted. Fortunately, the benefits of a fully digital process prevailed: no missing or misleading marks, better data quality, faster scoring, and less stressful assessment during the exam thanks to the support provided to the examiners by the software.

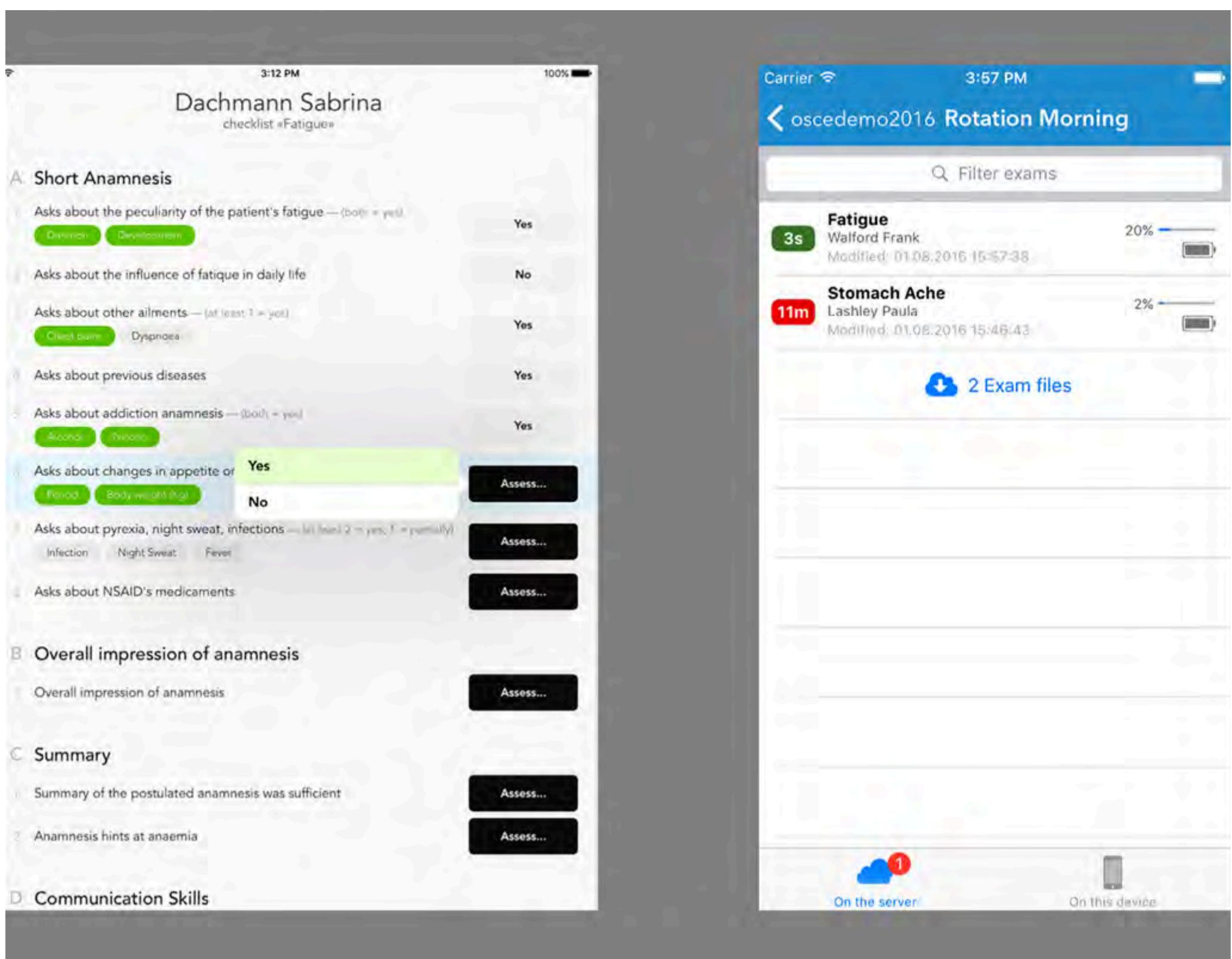
The first «real» exams with Examic EOSCE were conducted in the spring of 2012. The feedback was overwhelmingly positive. EOSCE quickly became known nationally and internationally and was used by various institutions worldwide for their OSCEs. The first national federal exam in Switzerland was then conducted with EOSCE in 2014 at five different faculties, in two languages and with 1,200 students.



The 3 EOSCE applications: OSCE-Eval, OSCE-Editor and OSCE-Track



Assessing a student with EOSCE



OSCE-Eval and OSCE-Track applications

## Valuatic takes over from EOSCE

The functionality and user interface of EOSCE had been continuously expanded over the years, so in 2018 we had to decide whether the technical basis of the software was still sufficiently adaptable for new functionalities or whether a new, modern code base had to be created. The decision to move to a new platform was also the starting point for the Valuatic project, in which we rethought and reassessed all processes within the exam cycle.

The idea was to develop a software that could not only be used within the narrow framework of an OSCE exam, but also offers appropriate functionalities and degrees of freedom for other forms of evaluations, e.g. surveys, interviews or oral exam.

With Valuatic we wanted to create a software system that can:

- create and manage digital forms/checklists;
- import external data (e.g. students or interview partners);
- easily distribute the exam/evaluation data to a large number of tablets;
- carry out the assessment of participants;
- monitor the exam/evaluation centrally;

- collect the results with a single click and export them for further analysis.

These basic functionalities were already available in EOSCE, but they needed to be implemented with more degrees of freedom to make the software more flexible for different application scenarios:

- Extended, powerful forms with different question types, more design options, flexible scoring, etc.
- Flexible exam structure/process without a predetermined schedule, order, or allocation of forms to examiners
- Easier exam distribution without having to manually add exam data to each tablet
- Customisable output with selectable elements and level of detail, as well as the institution's corporate design
- Windows based exam management, as the majority of customers use Windows based computers
- Hardened security and reliability in any exam scenario

It took almost a year to develop the basic concepts, software architecture, user interface and application interfaces. The actual development started in 2019.

### **Valuatic in use**

Already early versions of Valuatic were being used in exams, e.g. at the Medical University of Vienna or the Washington Medical School. Interest in Valuatic grew steadily from 2022, both from partners already using EOSCE and from other interested institutions that wanted to fully digitalise their exam processes.

The Institute for Medical Education (IML) also used Valuatic as a replacement for EOSCE in existing exams, including the federal exams of veterinarians and chiropractors. Valuatic is now used at various institutions in Switzerland, Germany, Canada, Great Britain, the USA and Australia.

The feedback of customers using Valuatic is overwhelmingly positive. They specifically appreciate the degrees of freedom in creating forms with various item types, not being bound to a specific schedule when planning the exams and the reliability of the Valuatic system in case of network failure.

**Pain in right leg (100 %)**

**C Working Diagnosis & Management plan**

- Working Diagnosis: Affection lumbar spine. Yes No
- Prescription**
  - a) Sick leave for one week Yes No
  - b) Pain medication. Yes No
  - c) Physiotherapy Yes No
- Recommendation of immediate consultation in case of red flags:
  - Pain augmentation
  - Neurological symptoms
  - None
- Follow-up in weeks:  1 2 3 X

**Finalize Assessment**

I, Prof. Thierry Maillard, confirm to have assessed the candidate using this iPad according to the examination guidelines and that this assessment is final and no further changes can be made.

**T Maillard**

**Finalize**

**Clinical Exam 2022 (v3)**

**Form**: Pain in right leg

**Examiner**: Maillard Thierry (4)

**Candidate**: Conti Sandrina (1)

**Scan Code**

**Assess Candidate**      **Finalize Assessments**

Examiner / Created	Candidate	Form	Progress
PROF. THIERRY MAILLARD		Pain in right leg	1 assessment to final
Tue, 13:40	Mr Hansmartin Camenzind	Pain in right leg	95%
Tue, 13:20	Mr Philippe Aebi	Pain in right leg	Finalized
Tue, 13:00	Mr Jonathan Adams	Pain in right leg	In progress
<b>PROF. HANS MÜLLER</b>			
Tue, 11:00	Mrs Laurence Lewandowski	Cardiovascular Examination	In progress
Tue, 10:40	Mrs Kirsten Leuzinger	Cardiovascular Examination	In progress
Tue, 10:20	Mr Jan Kowalski	Cardiovascular Examination	In progress
Tue, 10:00	Mrs Hélène Kohli	Cardiovascular Examination	In progress
<b>PROF. STEPHEN TYLER</b>			
Tue, 9:00	Mrs Sandrina Conti	Abdominal Pain	In progress
Tue, 8:40	Mr Hansmartin Camenzind	Abdominal Pain	In progress
Tue, 8:20	Mr Philippe Aebi	Abdominal Pain	In progress
Tue, 8:00	Mr Jonathan Adams	Abdominal Pain	In progress

Valuatic Touch: assessment overview and signing of assessments

Studio

Valuatic Testing Exam.valuatic-project - Valuatic Test Exam

## Content > Fatigue

Edit Document

Single Select Answer

Answer

Options

Icon	Label	Points	Key
<input checked="" type="radio"/>	Very Good	4	option-1
<input checked="" type="radio"/>	Good	3	option-2
<input checked="" type="radio"/>	Sufficient	2	option-3
<input checked="" type="radio"/>	Insufficient	1	option-4
<input checked="" type="radio"/>	Poor	0	option-5

?

Options Guidance

Properties

Mandatory

Require an answer for this element.

On

Display

Visualisation

Defines style and position of the answer options in Valuatic Touch.

Pop-Up Menu

Visible

A mandatory answer element is always visible.

On

?

Multi Select Answer: Infection, Night Sweat, Fever, None

8. Asks about NSAID's medicaments

Single Select Answer: Yes, No

B Overall impression of anamnesis

1. Overall impression of anamnesis

Single Select Answer: Very Good, Good, Sufficient, Insuffici...

C Summary

1. Summary of the postulated anamnesis was sufficient

Single Select Answer: Yes, No

2. Anamnesis hints at anaemia

Single Select Answer: Yes, No

D Communication Skills

1. Overall impression: expresses himself/herself clearly,...

Single Select Answer: Fine, Sufficient, Insufficient, Poor

E Patient's Opinion

Valuatic Studio: creating and modifying forms

The screenshot shows the 'Valuatic Test Exam - Draft with All Data (v1)' interface. At the top right is a green 'Export...' button. To its right, a section titled 'Assessments to Export:' shows a total of 19 items, with 11 finalized. A table lists three items: 'Fatigue (Short)', 'Pain in right leg (Short)', and 'Standard Examination - Pharma'. The first two are highlighted in green. Below the table, it says '3 items (3 selected)'. To the right of the table are several export settings: 'Export only finalized assessments' (11 finalized assessments will be exported), 'Export CSV' (On), 'One File per Form' (selected), 'Use Numeric Values' (Specifies the formatting of specific data in the CSV file), 'Detailed Selection Information' (Includes statistics for all configured answer options), 'Export PDF Reports' (On), 'Minimal Required Content' (Minimizes the PDF content to only contain sections, question and answers to reduce the number of pages), 'Omit Examiner Signature', and a note with a question mark: 'Further information is available online.' followed by 'Valuatic Us'.

Valuatic Studio: exporting results

## What does the future hold?

However, the development of Valuatic does not stand still: continuous evaluation reveals potential for improvement and many of our partners contact us with requests for new functionalities or adjustments to their exam processes.

Currently, improvements are being implemented that will improve the handling of large and complex exams (e.g. federal exam in human medicine: 7 faculties/locations, 3 languages, 1,500 students).

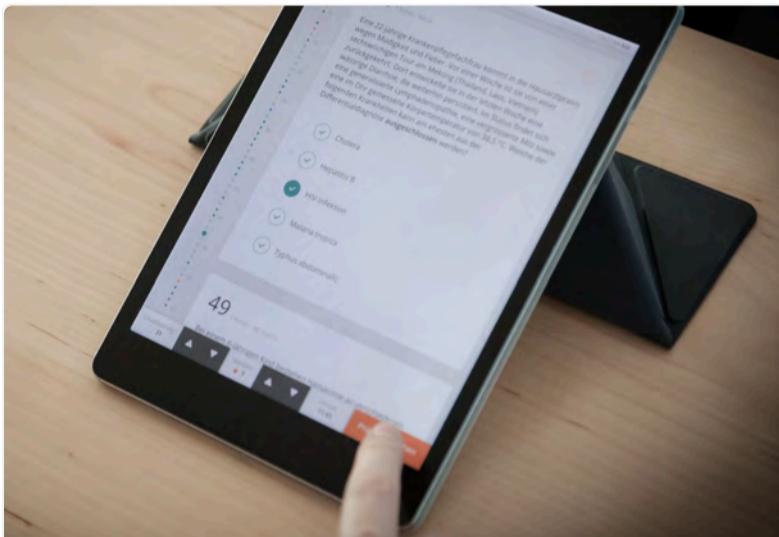
There is no end to development planned: not only are the technical frameworks constantly changing, but the requirements of exams are evolving also and exams are becoming more diverse. This is why we will continue to release new versions of Valuatic at regular intervals.

**Further information:**

The two Valuatic applications Valuatic Studio (for Windows) and Valuatic Touch (for iPad) can be obtained free of charge for evaluation purposes via the Valuatic website (<https://valuatic.com/>).

For more information on the Valuatic and EOSCE platforms, see:

- [examic-assessment-suite/valuatic](#)
- [valuatic](#)
- [eosce](#)

**Story**

[Swiss Federal Licensing Exam in Human Medicine carried out entirely digital for the first time](#)



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**Text:** Dr. med. Nina Chiara Loretz, 23.04.2024

2023 Assessment Research

Whoever embarks on a clinical career has - despite all the options - a clear path ahead of them. If you deviate from it, there are suddenly many new possibilities.

After studying medicine in Basel, I wrote my dissertation on a blood marker after cardiac arrest in Prof. Sabina Hunziker's research group. Afterwards I continued my clinical education in internal medicine and psychiatry. There I had to realise that the hospital is not the optimal environment for me and that I can better use my skills elsewhere.

At the beginning of my job search, I only had one clear idea: I wanted to work at a university. Moreover, although I wanted to leave the clinical field, it was very important to me to remain connected to medicine. Through an acquaintance, I learned about her position at the Institute for Medical Education (IML) and its important place in the education of medical students in Switzerland. What I liked about her description was the idea of being involved in practical examinations, so-called OSCEs (Objective Structured Clinical Examinations), the creative side of developing examination cases, the flexibility in the organization of one's workday and the cooperation between different professional groups. I have now been employed as a research assistant in the Department of Assessment and Evaluation (AAE) since June 2023.

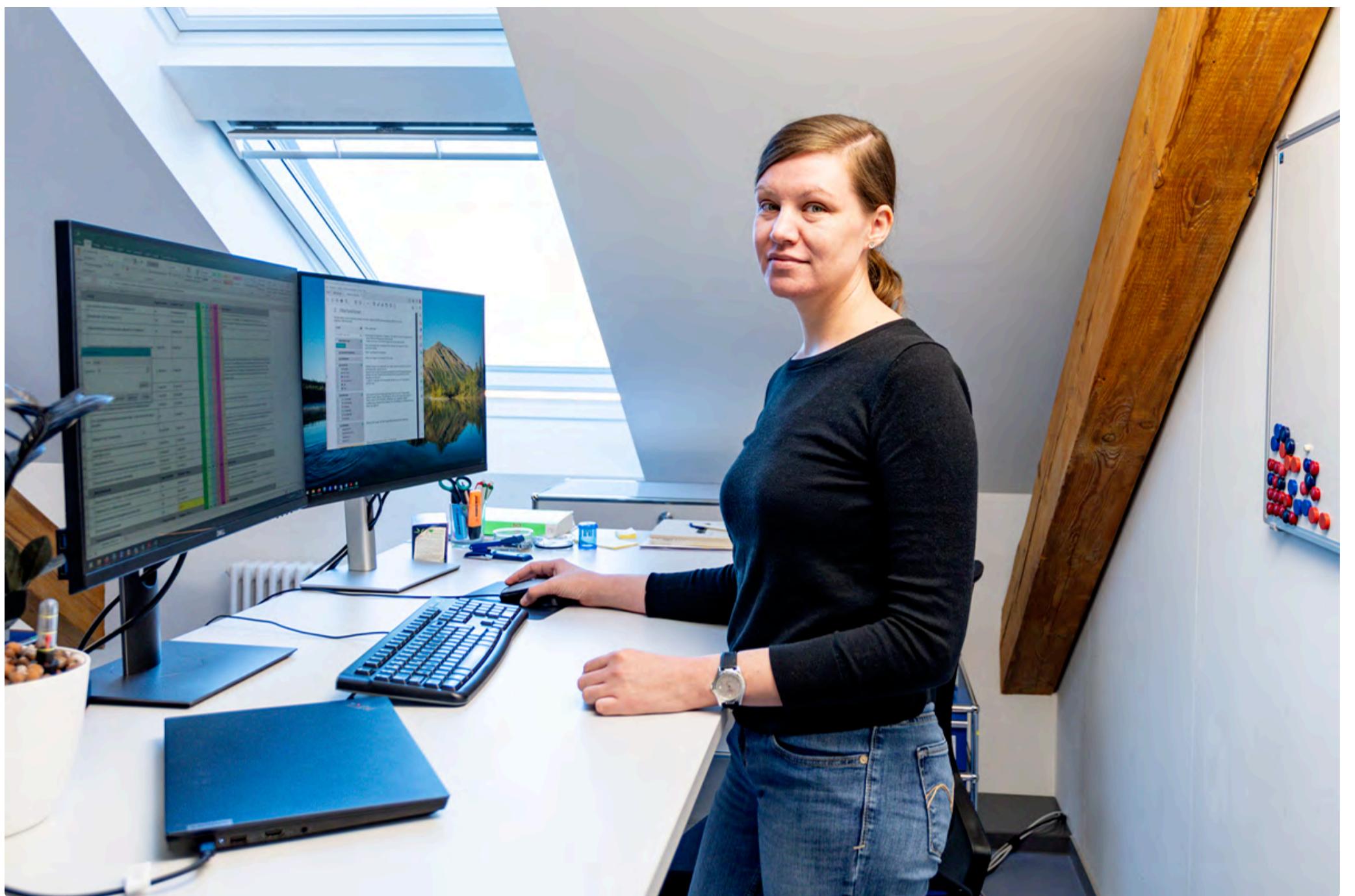
The transition from my life as a resident to my new function as a research assistant was a further challenge. Instead of patients, I now take care of examination cases. Whereas the telephone used to be my main mode of communication, I mostly email these days. Previously, my tasks consisted of studying patient files, going on rounds, consulting with specialists. Nowadays, case orders (How can the management of a patient suspected of having pneumonia be tested in practice?), plausibility checks (Is the examination case consistent?), simulated participant (Can this case be played out realistically?), and examination observations (Does the case test what it is supposed to test?) characterise my tasks. I have always enjoyed writing and editing texts and I am happy to be able to use this skill every day now. The OSCEs, which are the culmination of all our efforts, present a welcome change to the more solitary duties. A highlight of my experience so far has been the Swiss Federal Licensing Exam in Clinical Skills, which was held for the first time in three languages (German, French, Italian) this year. It has been great fun being involved in an examination that takes several years to prepare, involves countless different specialists from almost all parts of the country, and allowed me to put my clinical experience

to use. This huge undertaking is one of the good reasons for me to be involved in the IML. Other advantages are the cooperation with different faculties, the multilingualism and the proximity to national decision-makers in medical education.

At the end of the month, I am attending my first training in OSCE skills, as I am responsible for the content of the third-year OSCE in addition to helping with the Federal Licensing Exam. The OSCE is not specific to Swiss universities, which gives me the opportunity to exchange ideas internationally. I am very curious to learn how OSCEs are conducted in other countries and which insights from seasoned experts can possibly be implemented at the IML.



Practising with the question creation software

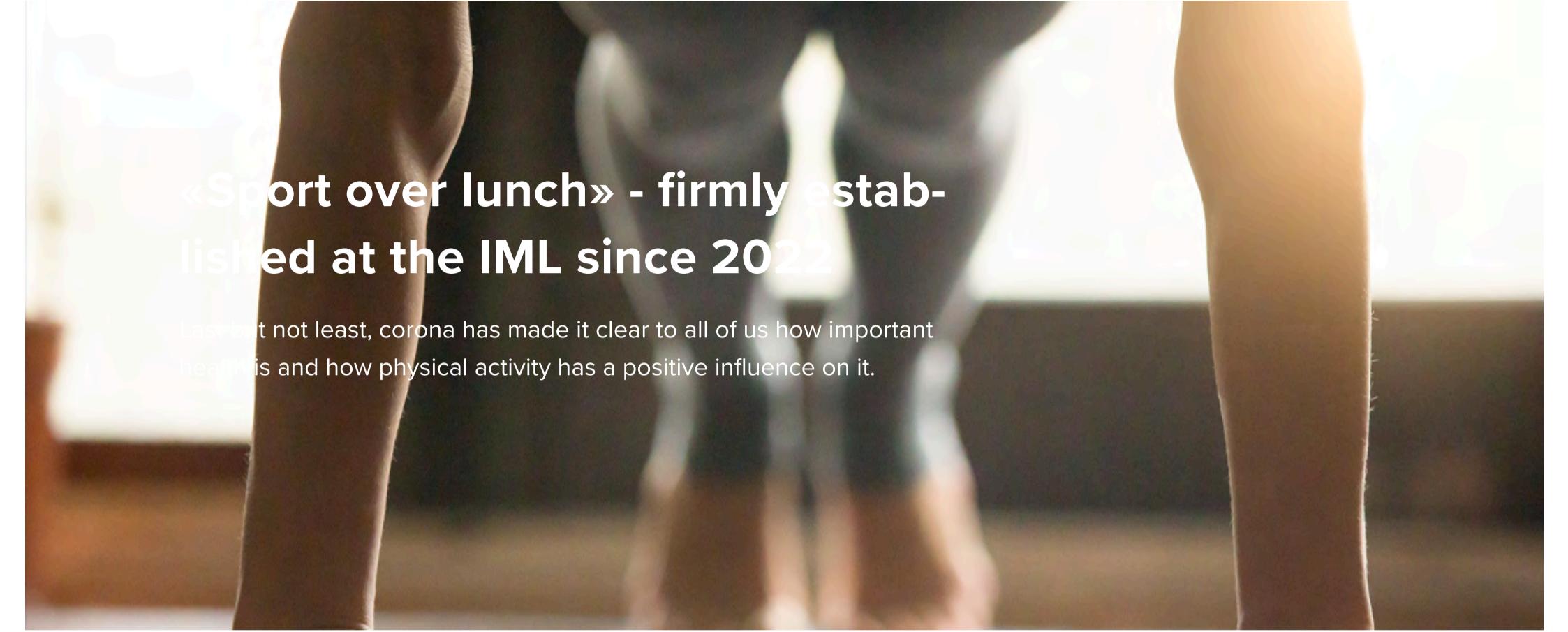




**Dr. med. Nina Chiara Loretz**

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## «Sport over lunch» - firmly established at the IML since 2022

Last but not least, corona has made it clear to all of us how important health is and how physical activity has a positive influence on it.

**Text:** Prof. Dr. phil. Sissel Guttormsen Schär, Susanne Yvonne Moser-Eichenberger, 23.04.2024

**2023** **2024** **Event**

Especially after the pandemic, we were also keen to promote healthy team activities. With this in mind, the IML management team therefore decided to launch the «Sport over lunch» health promotion programme at IML.

The aim was to offer employees the opportunity to engage in physical activity in a group, virtually at the workplace. So we asked Unisport for support. Unisport was and is enthusiastic about it; the IML is obviously taking on a pioneering role with this programme. We defined the following parameters:

- Guided training sessions of approx. 45 - 50 minutes take place twice a week. Attending the training sessions counts as a lunch break.
- Registration is required for participation, which is possible from week to week.
- The instructors are provided by Unisport and paid by the IML.

In September 2022, we launched two programmes for the time being until the end of the year: Jogging as outdoor training and BodyArt as indoor training. Jogging did not seem to prove successful. The needs and levels were too different; perhaps the nasty winter weather also put some people off training. BodyArt is a workout that trains people holistically, i.e. as a unity of body, mind and soul. The focus is on flowing movements, stretching and relaxation elements that lead to physical well-being in everyday life. BodyArt started with a small group. We attributed this to the intensive year-end work and absences due to illness.

The management team decided to continue the sports programme in 2023. A Pilates lesson was added to the programme on Mondays, while BodyArt on Thursdays remained unchanged. The slightly adapted offer and certainly also the good New Year's resolutions of the employees really got the sports programme going. The momentum still seems to be there today, especially as employees motivate each other to take part. The training sessions are attended by employees from different departments. This promotes contacts across departmental boundaries, which also strengthens cooperation within IML as a whole.

The instructors have also become an integral part of our sports programme and appreciate our small groups. Today, it is hard to imagine IML life without «sport over lunch». This is also clear from the following statements from participants:

**“**

I often go, even though I don't actually have the time. Concentrating on your breathing during training means that you can return to work refreshed and energised at the end of the session.

— (T.H.)

**“**

The fact that we can attend a BodyArt course here on site is a huge opportunity. The training can be easily integrated into everyday life and I get to know my work colleagues from a completely different perspective.

— (S.G.)

**“**

I really appreciate having the opportunity to do a body art workout right in the office building at lunchtime. It's incredibly good for me and I feel invigorated and fit for the afternoon thanks to the break from work with physical activity. I can really recommend Bodyart.

— (T.Z.)

However, it is a challenge to find suitable premises for sports at Mittelstrasse 43. Fortunately, thanks to the flexibility of all employees and the instructors, it has always been possible to convert a meeting room for this short period of time.

We would like to take this opportunity to thank the instructors for their dedicated leadership and all those who contribute to the success of the sports programme with their participatio



**Links**

Sport not only makes you fit and (even) more beautiful. Exercise also plays a decisive role in preventing serious illnesses. [Read more](#) (in DE)

However, when people do sport together, much more happens than just increasing the fun factor. It doesn't matter whether it's a team sport or a jogging session with your best friends.

[Read more](#) (in DE)



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