

Introduction of CBME in postgraduate medical education in Switzerland - challenges and opportunities

Monika Brodmann Maeder

PD Dr.med. et MME, President SIME

Content

- Introduction: Swiss Institute of Medical Education SIME / SIWF / ISFM
- Postgraduate Competency Based Medical Education in Switzerland PCBME
 - Why:
 - PROFILES
 - International role models
 - What:
 - CanMEDS
 - EPAs
 - Faculty Development
- Vision:
 - Continuum of under- and postgraduate medical education
 - PCBME in Switzerland within 10 years

The Swiss Institute for Medical Education SIME

is the competence centre for all aspects of CME and CPD in Switzerland.

unites, as an autonomous body of the FMH, all the main players and organisations in this field

ensures high-quality continuing education and continuing professional development for physicians in over 130 specialties

SIME's regular work

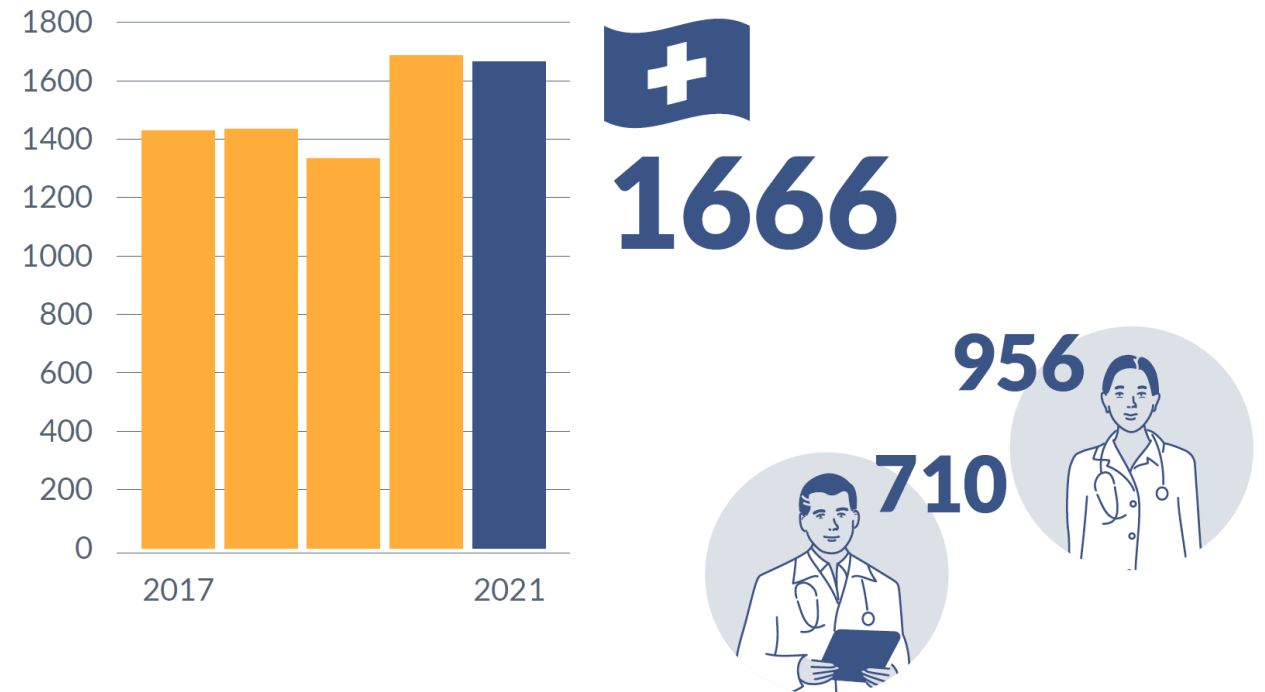
- 45 Federal specialist titles (Facharzttitel)
 - + 1 pract.med. (prakt. Arzt)
 - 89 titles under private law:
 - 47 Advanced training competency programs (Schwerpunkte)
 - of which 8 interdisciplinary
 - 42 Skills certificates (Fähigkeitsausweise)
- > 135 different training programs (Weiterbildungsprogramme)
- > 2400 certified training centers (anerkannte Weiterbildungsstätten)
 - > 2200 certified training „cabinets“ (anerkannte Praxisweiterbildner)

SIME's regular work

- 45 Federal specialist titles (Facharztstitel)
 - + 1 pract.med. (prakt. Arzt)
- 89 titles under private law:
 - 47 Advanced training competency programs (Schwerpunkte)
 - of which 8 interdisciplinary
 - 42 Skills certificate (Fähigkeitsausweise)

-> 135 different training programs (Weiterbildungsprogramme)

Erteilte eidgenössische Facharztstitel 2021



SIME's regular work

- Quality control:
 - Visitations
 - Annual survey „ETH-Umfrage“
- > 2400 certified training centers
(anerkannte Weiterbildungsstätten)
- > 2200 certified training „cabinets“
(anerkannte Praxisweiterbildner)

PCBME



WHY:

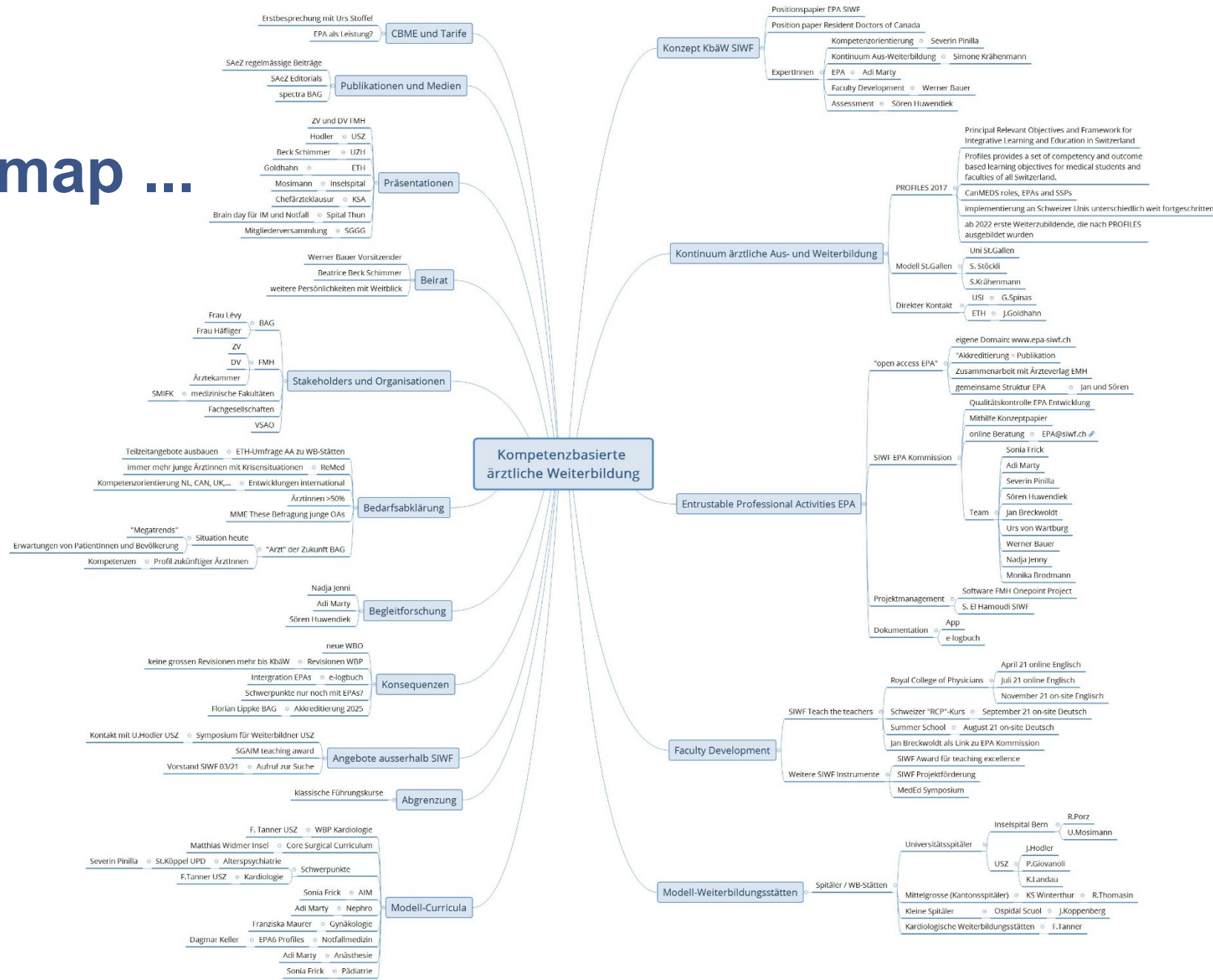
- PROFILES since 2017
- Worldwide development
 - Canada
 - Netherlands
 - UK

PCBME Canada



"... As a new paradigm, CBME will result in a dramatic shift in the way physicians are trained. We must ensure, ..., that our medical education and postgraduate training systems continue to meet the needs of our patients. ... "

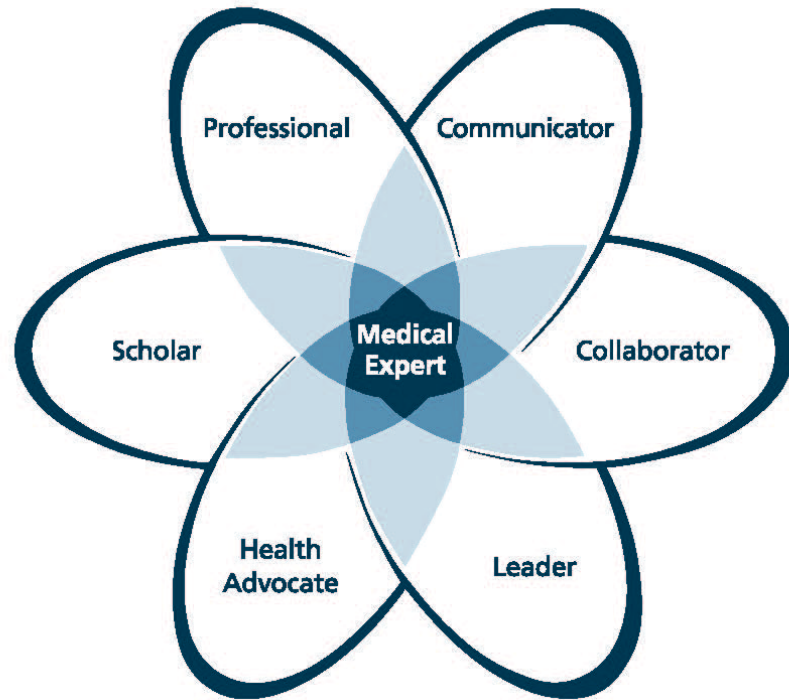
From Mindmap ...



... to Roadmap

2021 - 2032

Pillar 1: Competence



CANMEDS

<http://canmeds.royalcollege.ca/en/framework>

Competence =

- Knowledge
- Skills & Abilities
- Values & Attitude

... which are necessary for the practice of the medical profession

Pillar 2: EPAs

... Is a unit of professional practice that can be fully entrusted to a resident, as soon as her or she has demonstrated the necessary competence to execute this activity unsupervised.

6. Recognize a patient requiring urgent / emergency care, initiate evaluation and management

[linked roles: EXP / COM / COL / LEA / PRO]

- EPA 6.1 Recognize abnormal vital signs
- EPA 6.2 Interpret the clinical situation using pathophysiological principles
- EPA 6.3 Assess the severity of a patient's situation / illness and indications for escalating care
- EPA 6.4 Identify possible underlying aetiologies of the patient's deteriorating condition
- EPA 6.5 Initiate a care plan for the decompensating patient; apply basic and advanced life support as needed
- EPA 6.6 Take into account a "do-not-resuscitate" request
- EPA 6.7 As a team member, share vital and relevant information with other members, using structured communication techniques as well as briefings and debriefings for continuing decision-making and follow-up of the patient
- EPA 6.8 Identify the need for rapid transfer of patient to another facility
- EPA 6.9 Update the patient/family and ensure that they understand the indications, risks and benefits, alternatives and potential complications. If possible, ask for the patient's informed consent or advance directives

Michaud PA, Jucker-Kupper P and members of the Profiles working group. PROFILES; Principal Objectives and Framework for Integrated Learning and Education in Switzerland. Bern: Joint Commission of the Swiss Medical Schools; 2017.

Pillar 2: EPAs



ten Cate 2005

6. Recognize a patient requiring urgent / emergency care, initiate evaluation and management

[linked roles: EXP / COM / COL / LEA / PRO]

- EPA 6.1 Recognize abnormal vital signs
- EPA 6.2 Interpret the clinical situation using pathophysiological principles
- EPA 6.3 Assess the severity of a patient's situation / illness and indications for escalating care
- EPA 6.4 Identify possible underlying aetiologies of the patient's deteriorating condition
- EPA 6.5 Initiate a care plan for the decompensating patient; apply basic and advanced life support as needed
- EPA 6.6 Take into account a "do-not-resuscitate" request
- EPA 6.7 As a team member, share vital and relevant information with other members, using structured communication techniques as well as briefings and debriefings for continuing decision-making and follow-up of the patient
- EPA 6.8 Identify the need for rapid transfer of patient to another facility
- EPA 6.9 Update the patient/family and ensure that they understand the indications, risks and benefits, alternatives and potential complications. If possible, ask for the patient's informed consent or advance directives

Michaud PA, Jucker-Kupper P and members of the Profiles working group. PROFILES; Principal Objectives and Framework for Integrated Learning and Education in Switzerland. Bern: Joint Commission of the Swiss Medical Schools; 2017.

Pillar 2: EPAs



9.1. Manage a patient with aortic disease

Description

Timeframe: from diagnosis of an aortic disease until establishment of effective treatment

Setting: outpatient setting, inpatient setting, and emergency department

Including:

assessment of a patient with acute and chronic aortic disease

implementing medical therapy

referring for interventional or surgical treatment

Excluding: performing interventional or surgical treatment

Canadian Medical Education Directives for Specialists (CanMEDS) roles

- Medical expert
- Communicator
- Collaborator
- Professional

Knowledge

- Describe the epidemiology, aetiology, genetics, and pathophysiology of aortic diseases, including
 - Aneurysms of the thoracic aorta
 - Dissection of the thoracic aorta
 - Aortitis
 - Aortic atheromatous disease
 - Aortic occlusive disease
 - Genetic syndromes associated with aortic pathologies
- Classify the types of aortic dissection
- Describe the clinical features of diseases associated with aortic diseases
- Relate the clinical features to the aortic pathology
- Classify the risk conditions for aortic diseases
- Describe the particularities of different imaging modalities in the diagnosis of aortic diseases
- Discuss the medical treatment of aortic diseases
- Describe the indications for interventional and surgical strategies for management of aortic diseases

Skills

- Conduct an appropriate clinical history and physical examination including evaluation of peripheral pulses and blood pressure measurement in both arms and legs
- Obtain a relevant family history and recognize situations that require family screening
- Perform and interpret the following diagnostic modalities:
 - ECG
 - Transthoracic echocardiography
 - Trans-oesophageal echocardiography
- Interpret the following diagnostic modalities:
 - Chest X-ray
 - Coronary angiography and aortography
 - Cardiac CT
 - Cardiac MR
- Manage a patient with diseases of the aorta in a timely fashion, with medical, interventional, or surgical procedures
- Recognize indications for genetic testing and appropriate referral for medical genetics consultation

Attitudes

- Recognize the urgency required in the management of acute aortic diseases
- Work in team with interventional cardiologists, cardiothoracic and vascular surgeons, radiologists, and intensive care physicians

Assessment tools

- Direct observation/WBA (e.g. DOPS, Mini-CEX, fieldnotes)
- CbD (case-based discussion)/EBD (entrustment-based discussion)

Level of independence


- 4. Distant supervision

Pillar 3: Faculty Development

Royal College of Physicians | SIWF^{FMH} ISFM | Setting higher standards

Faculty development/Teach the teachers
Workshops from the Royal College of Physicians and the Swiss Institute of Medical Education

April & November 2022 - Online (in English)
June, July & November 2022 – Face-to-Face (in German and English)
August 2022 - Swiss Medical Education Summer School (in German)



- SIME: First faculty development workshops with the Royal College of Physicians of London in 2012
- Content: Clinical teaching, Assessment and feedback, Supporting the underperforming trainee, Leadership
- Since 2018, building a team of Swiss instructors

Pillar 3: Faculty Development



Learning culture

The cultural change that is necessary to implement the concept of competency-based continuing medical education is not possible without dedicated continuing educators who take responsibility in their training centers.

CH-PCBME today



- Human Resources
- Training Programs
- Training Departments
- Faculty Development



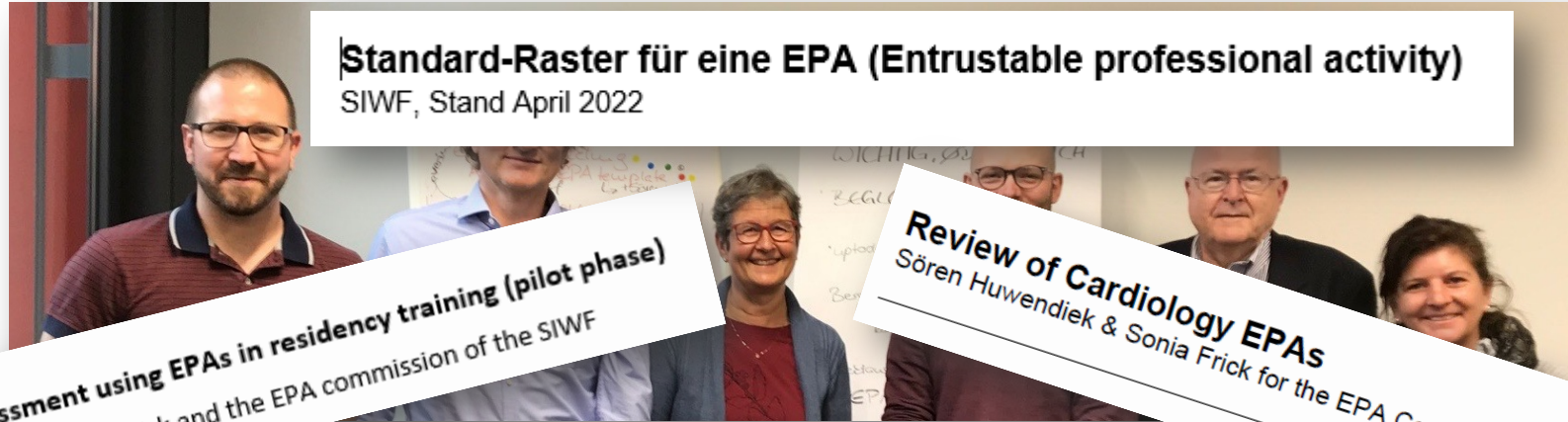
EPA Commission



Adi Marty, Sören Huwendiek, Monika Brodmann, Severin Pinilla, Werner Bauer, Nadja Jenni
Missing: Jan Breckwoldt, Sonia Frick, Urs von Wartburg, Ueli Woermann, Christoph Burkhart

- Monthly (virtual) meetings
- Supports increasingly
- Development of standards
- Expansion of the group in prospect

EPA Commission



Standard-Raster für eine EPA (Entrustable professional activity)

SIWF, Stand April 2022

Suggestions for assessment using EPAs in residency training (pilot phase)
Sören Huwendiek, Sonia Frick and the EPA commission of the SIWF

Review of Cardiology EPAs
Sören Huwendiek & Sonia Frick for the EPA Commission of the SIWF

Andi Marty, Sören Huwendiek, Monika Brodmann, Severin Pinilla, Werner Bauer, No...
Missing: Jan Breckwoldt, Sonia Frick, Urs von Wartburg, Ueli Woermann, Christoph Burkner

- Monthly (virtual) meetings
- Supports increasingly
- Development of standards
- Expansion of the group in prospect

Training programs with EPAs

Specialist title (17/45)

General internal medicine

Anesthesiology

Occupational Medicine

Endocrinology / Diabetology

Gastroenterology

Vascular Surgery

Gynecology and obstetrics

Hand Surgery

Intensive Care Medicine

Cardiology

Medical genetics

Nephrology

Neurology

ORL

Pediatrics

Psychiatry and psychotherapy

Radiology

Focal points (6/47)

Emergency Medicine

Geriatric Psychiatry

Geriatrics

Pediatric Surgery

Pediatric Hematology-
Oncology

Pediatric Cardiology

Other (1)

Core Surgical Curriculum

Model Training Programs

Core Surgical Curriculum

- Swiss College of Surgeons; SGC (Surgery), SGG (Vascular), SGT (Thorax), SGH (Hand), SGACT (General and Trauma) and SGVC (Visceral)
- Defines the two first years of training in surgery



Core Surgical Curriculum

Cardiology

- First competency-based curriculum with EPAs
- Based on ESC Core Curriculum for the Cardiologist



European Heart Journal (2020) 41, 3605–3692
doi:10.1093/eurheartj/ehaa641

ESC Report

ESC Core Curriculum for the Cardiologist

Felix C. Tanner^{1*}, Nicolas Brooks², Kevin F. Fox³, Lino Gonçalves⁴, Peter Kearney⁵, Lampros Michalis⁶, Agnès Pasquet⁷, Susanna Price⁸, Eric Bonnefoy⁹, Mark Westwood¹⁰, Chris Plummer¹¹, and Paulus Kirchhof^{12,13*}

Model Training Centers

- Center da sandà Engiadina Bassa Scuol
 - 2 Departments

Under negotiation:

- Cantonal Hospital Winterthur
 - 48 departments
- University Hospital Inselspital Bern
 - 88 departments
- Pilot Departments in Cardiology
 - Inselspital, USZ, HUG, Cardiocentro Lugano, KSSG

Accompaniment by SIWF during the introduction of CBME:

- Preferential access to Teach-the-Teachers courses
- Introduction of EPA as a "new type of workplace-based assessments".
- Support of senior physicians in their function as clinical lecturers

Teach the Teacher Courses 2022



Royal College
of Physicians



Setting higher standards

Faculty development: Teach the teachers / Leadership

Workshops from the Royal College of Physicians and the Swiss
Institute of Medical Education

- Introductory workshop for new Swiss instructors (expansion of the team) in April
- 9 face-to-face workshops in German language in June / November
- 2 face-to-face workshops in French (Feedback efficace, apprenant/-e en difficulté)
- 5 face-to-face workshops in English (RCP)
- 4 online workshops in English (RCP)
- «Summer School»

Teach the Teacher Courses 2023

3 Levels

- **Basic offer for as many doctors as possible who** take on a management function (main topics: Teaching in everyday clinical practice, assessments / feedback, leadership / teamwork; carried out by the Swiss team).
- **Advanced student level** with in-depth workshops and additional topics; carried out by the Royal College and the Swiss team
- **Expert level events** for the further training and promotion of instructors

CBME: Research in education

- **Cardiology**

- The purpose of the observational study is to describe the implementation of competency-based medical education (CBME) and, specifically, Entrustable Professional Activities EPAs in cardiology residency training.
- Team: Heiko Schneider, Felix Tanner, Jan Breckwoldt, Sören Huwendiek, Nadja Jenni, Monika Brodmann Maeder

- **Core Surgical Curriculum**

- The aim of the observational study is to compare the didactic quality of the newly introduced "Core Surgical Curriculum" (Track CSC) with the previous training in the first two years of surgery (conventional track) in Switzerland.
- Team: Dieter Hahnloser, Raffaele Rosso, Matthias Widmer, Urs von Wartburg, Nadja Jenni, Monika Brodmann Maeder

Information

FMH ISFM

«Je veux mieux équiper les
médecins pour leur profession»

Interview: Cornelia Eisenach
Journaliste scientifique

FMH SIWF

Kompetenzbasierte Bildung –
eine Einführung

Jan Breckwoldt^a, Monika Brodmann Maeder^b

FMH ISFM

La formation médicale basée sur
les compétences: le contexte

Stefan Eisoldt^a, Severin Pinilla^b

FMH Editorial

Das SIWF und die kompetenz-
basierte ärztliche Weiterbildung

Monika Brodmann Maeder
PD Dr. med. et MME, Präsidentin des SIWF

FMH ISFM

Mini-CEX et DOPS pour soutenir
la formation médicale postgraduée

Andrea Lörwald^a, Eva Hannel^a, Severin Pinilla^b, Sören Huwendiek^a

420

Financing of continuing medical education



Konferenz der kantonalen Gesundheits-
direktorinnen und -direktoren

Conférence des directrices et directeurs
cantonaux de la santé

Conferenza delle direttrici e dei direttori
cantionali della sanità

Haus der Kantone
Speichergasse 6, CH-3001 Bern

+41 31 356 20 20
office@gdk-cds.ch

www.gdk-cds.ch

Medienmitteilung

Bern, 2. März 2022

Ärztliche Weiterbildung Interkantonale Vereinbarung tritt in Kraft

Die interkantonale Vereinbarung zur Finanzierung der ärztlichen Weiterbildung (WFV) tritt in Kraft. Das dafür nötige Quorum von 18 beigetretenen Kantonen wurde im Januar 2022 erreicht. Die Vereinbarung leistet einen wichtigen Beitrag zur langfristigen Versorgung der Bevölkerung mit Fachärztinnen und Fachärzten.

PCBME in CH



K2 (Pakistan); 8611 m
First winter ascent 16.1.2021 by 10 Nepali

- Major project
- Roadmap 2021 - 2032 - ...
- Cultural change in continuing medical education
- CanMEDS, EPAs
- Focus on high-quality professional development and clinical teachers
- Bridges and
- Teamwork