



UNIVERSITÉ  
DE GENÈVE

FACULTÉ DE MÉDECINE



# Organisation of medical examinations and quality assurance in Switzerland

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Berlin October 2008

# [ Objectives of the presentation ]

- Brief review of the reforms of the medical curriculum in Switzerland, including implementation of Bologna
- Examinations and Internal quality assurance (Geneva)
- Quality assurance at the Swiss federal level including accreditation

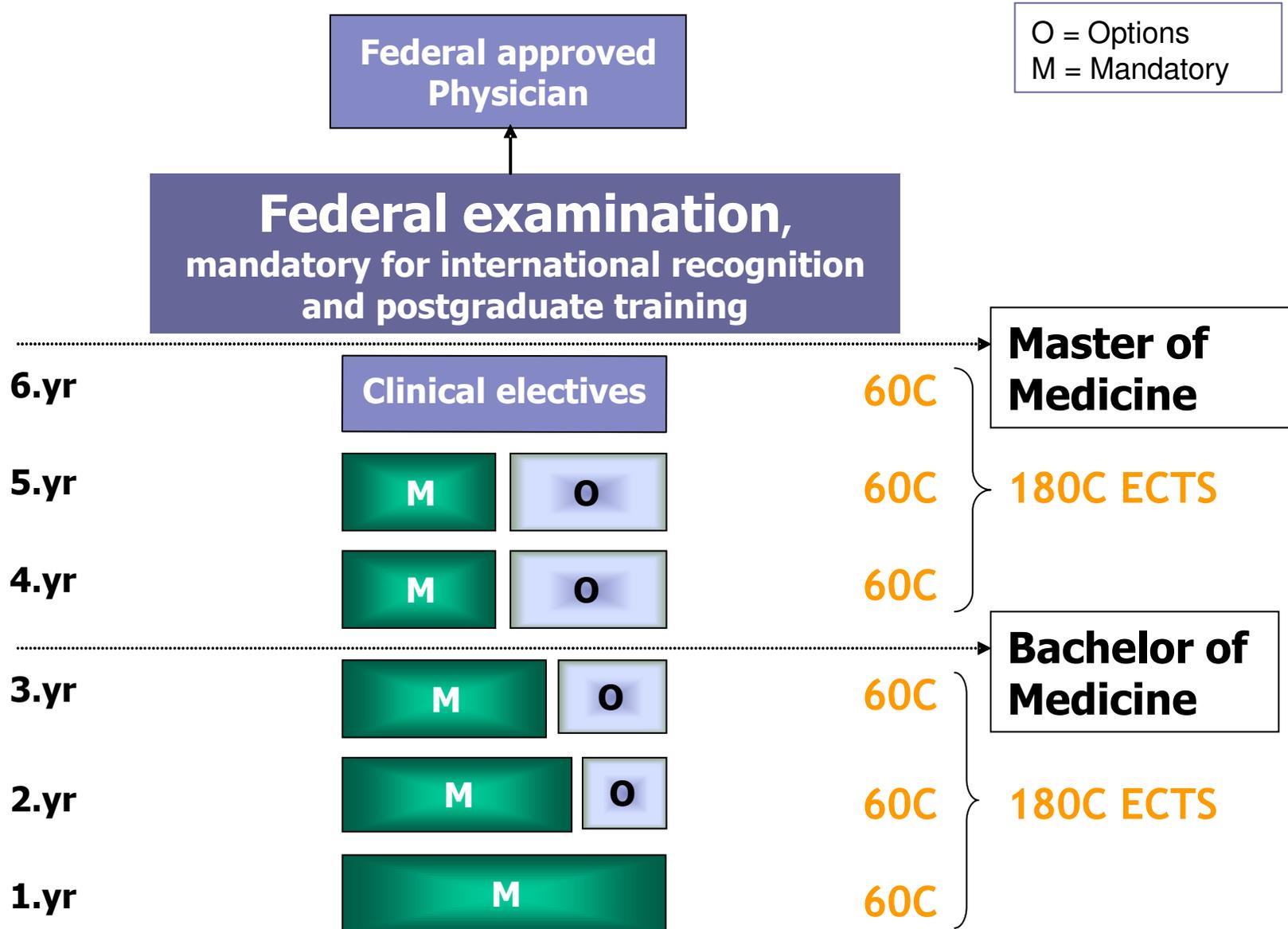
**1995, a report was published by the JCSMS**  
***“The necessary reform of the medical curriculum  
in Switzerland”***

- The conclusions in brief
  - We should motivate medical students by putting teaching in a medical context even for basic sciences
  - Whenever possible, teaching should be organized around a problem, as medical activity is centered on solving patient’s problems
- As a consequence, Swiss medical schools have changed their curricula ***according to their own philosophies, contexts, and possibilities*** but all have adopted these conclusions

## *State of Reforms at the Swiss medical schools*

- **Geneva** started in **1995** a reform of **years 2 to 5** (PBL/LCE). The **1<sup>st</sup> year** was reformed in October **2004**.
- **Berne** started in **1996** a reform of **year 1** (PBL), progressively extended to the entire curriculum
- **Basel** started its reform in **1998** (**years 3 and 4**). Now, reform is extended to the entire curriculum
- **Lausanne and Zürich** began in October **2004** a complete reform of their curricula

# Overview of the track in human medicine in Switzerland



# First year program in Geneva

## An overview of how the body functions

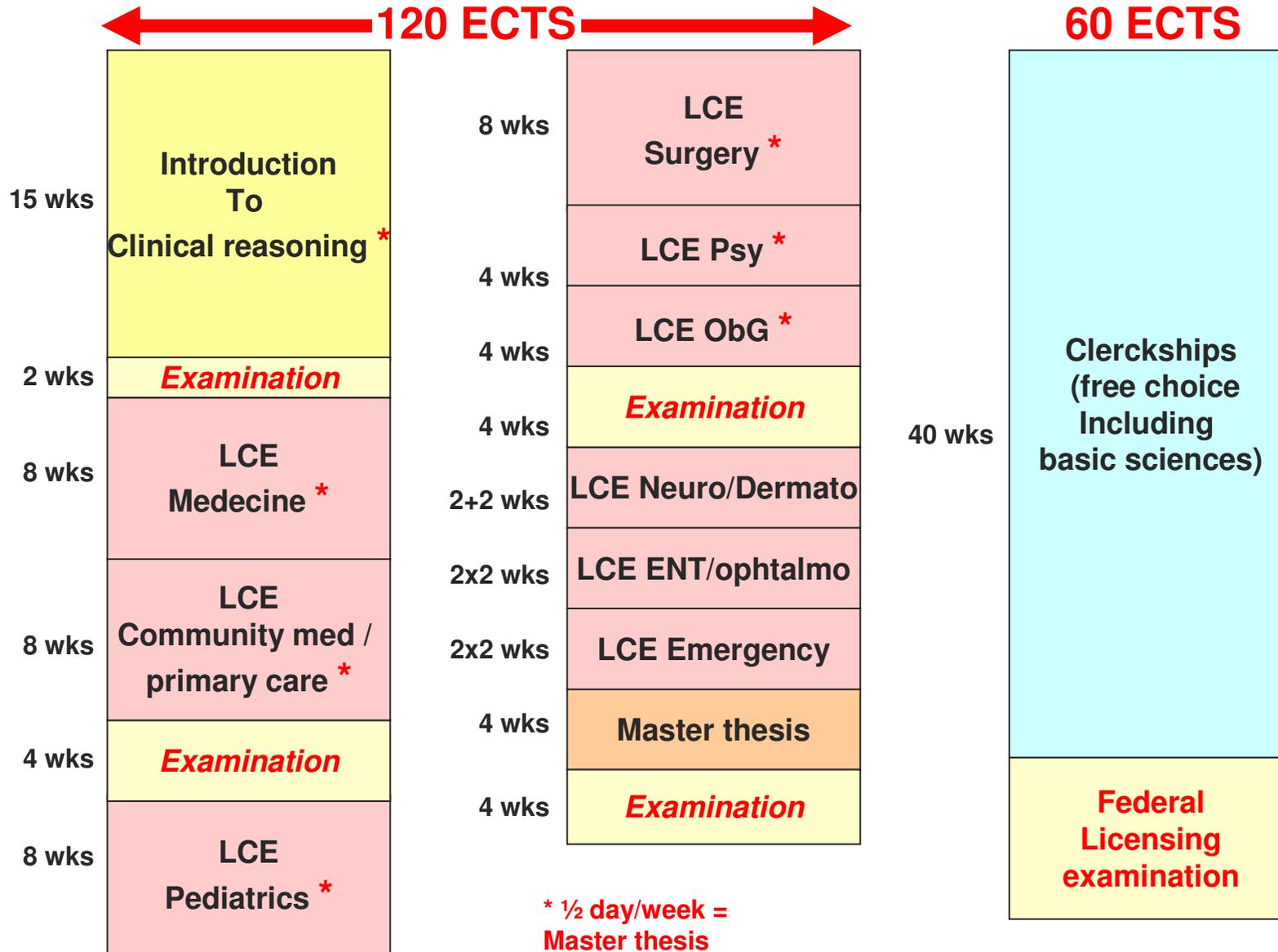
Semester 1		Exam	Semester 2		Exam
<b>Module A</b>	<b>Module A</b>		<b>EXAMINATION 1</b>	<b>Module B</b>	
<b>Molecules to Cells</b>	<b>Cells to Structures</b>	<b>Structures to Fonctions</b>			
Molecular biology/ genetics / microbiology chemistry / biochemistry / pharmacology physics	Embryology / mol. bio./ genetics cell bio. / cytology histology / pathology anatomy / radiology physics		FROM ORGANS TO SYSTEMS Nervous, Endocrine, Circulatory, Respiratory, Urinary, digestive, Osteo-articular, Systems Introduction to immunology	INTEGRATION Effort adaptation in normal & obese Sensory & emotional basis of Pain, Infection & acute inflammation, Graft rejection, Hemophilia	
					
Clinical activities (clinical & research)	Ethics/ history sociology		Psychosocial medicine	Informatics/ research of bibliography statistics /epidemiology	

# Examples of PBL themes in the 2<sup>nd</sup> year

Module 1	Module 2
Introduction to PBL	Heart & Circulation
Growth and aging	Excretion & Homeostasis
Nutrition, digestion & metabolism	Respiration
Reproduction	Synthesis 2
Synthesis 1	Revision & examination
Revision & examination	Revision & examination
Clinical skills and Community dimensions	

Note that for clinical skills, the examination is formative, to train students with standardized patients in an examination setting

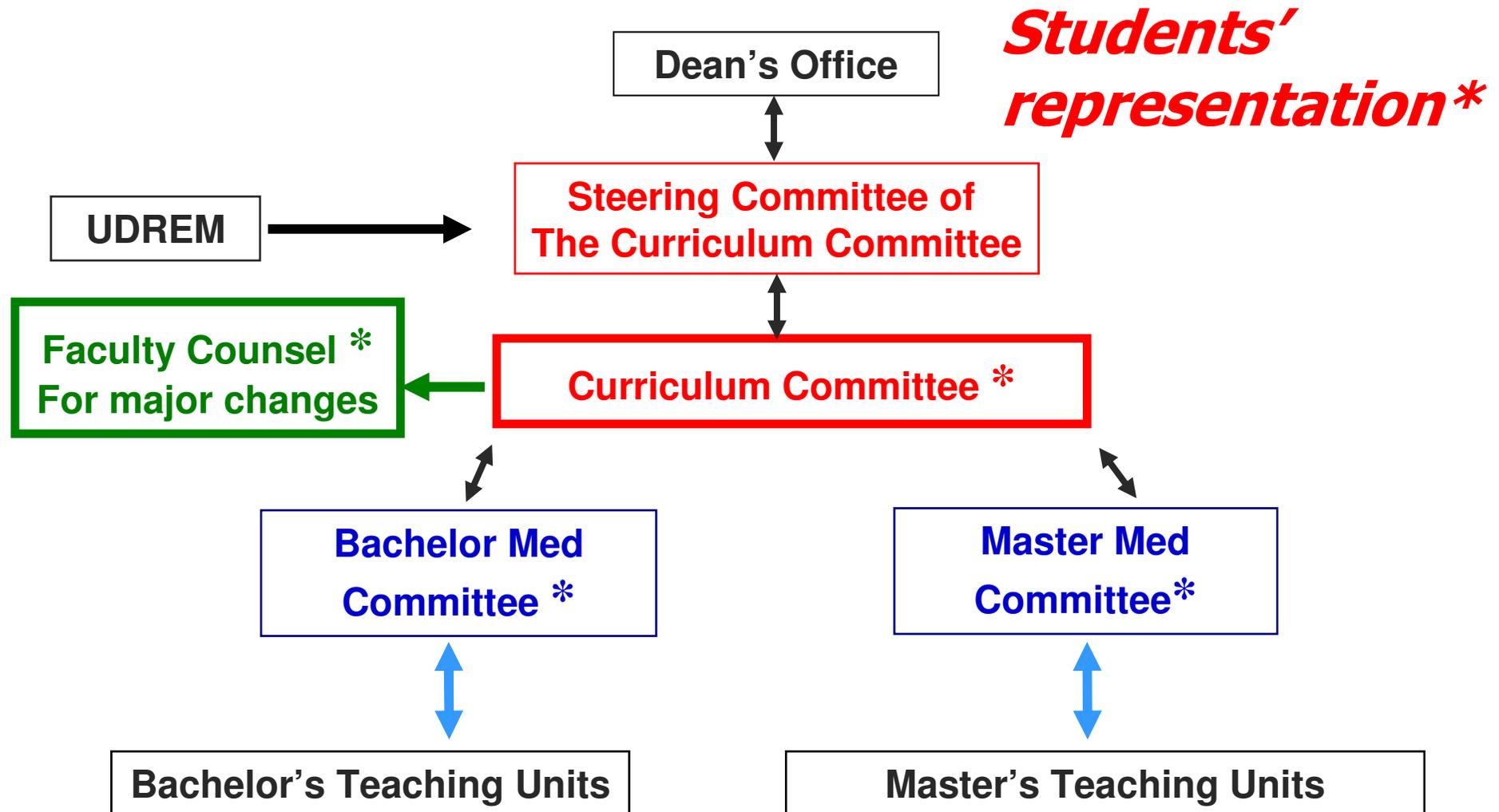
# Curriculum of years 4, 5, & 6





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# Governance and quality control



# How do we examine that the objectives are reached?

- Knowledge?
  - MCQ
  - practical exams (anatomy, histology, physiology, pathology)
- Clinical Skills?
  - OSCE
    1. Standardized patients
      - ➔ Dr-patient relationship
    2. Phantoms
      - ➔ venous injections, reanimation, etc.
    3. Clinical vignettes with
      - Pre-programmed questions
      - Pre-programmed expected answers

## Emphasis on Clinical skills: a summative examination at the end of 3<sup>rd</sup> year

- The field of the Clinical Skills exam includes all activities in 2<sup>nd</sup> & 3<sup>rd</sup> years
  - Technical skills, Patient-Dr relationship, Circulation semiology, Digestive semiology, Lymphatic system semiology, Gynecology semiology, Locomotion semiology, Renal and urological semiology, Neurological semiology, Psychiatric semiology, Respiratory semiology, Vital signs, Emergency
- It counts for half the note of Module 4 (the other half is the MCQ of the Unit Immunology & Infection)
- To be allowed to pass the exam, all formative stations must have been taken but not necessarily passed (**formative** stations)
- Note that a student can compensate an insufficient note in « Immunology & Infection » by a good note in Clinical skills...

# Program evaluation is based on three components

1. Performance of students on the Faculty's standardized written and practical examinations
2. Systematic and comprehensive evaluations **by the students** of all the teaching units and **of the teachers** (lectures) **and tutors** (PBL) (years 1-5) with a standard questionnaire (12 items on tutors + 7 on group functioning and open comments)
3. Regular review, **by the Curriculum Committees (Bachelor and Master, which include teachers and students)**, of proposed programs, examination results, teacher feedback and student evaluations

**Two Committees** in charge of ensuring that there is **recognition of all academic activities**

- The Renewal Committee investigates and proposes candidates for academic promotion
- The Committee for coordination of academic careers decides after consulting
  - the Research Committee, for research achievements
  - the Education Committee, for teaching achievements
    - Requests with insufficient teaching activity can be rejected
    - Some promotions have been made on the basis of outstanding teaching achievements
- You cannot ask big efforts without some rewards...

[ Federal level: Quality assurance required by the new law on medical professions (2006)



- **Autonomy** of medical schools was recognized as important to allow for **constant and rapid adaptation & innovation**
- ***BUT quality assurance was required***
  1. **The core curriculum is** defined in the **Swiss catalog of learning objectives**
  2. **International accreditation** based on the standards of the World federation for medical education
  3. **Federal examination to** have an external control of the « final product »

# Swiss Catalogue of Learning Objectives for Undergraduate Medical Training

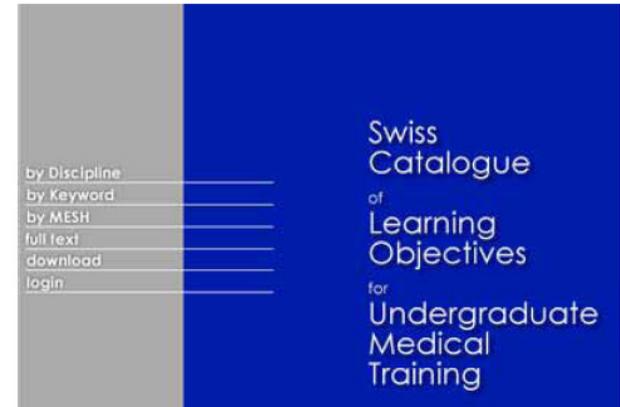
## Condition1 SCLO

Joint Commission of the Swiss Medical Schools

### SCLO 1st edition

The first edition from January 2002 of the Swiss Catalogue of Learning Objectives for Undergraduate Medical Training *is legally valid for defining the contents of the final federal examination until the year 2010.*

[Enter SCLO 1st edition](#)



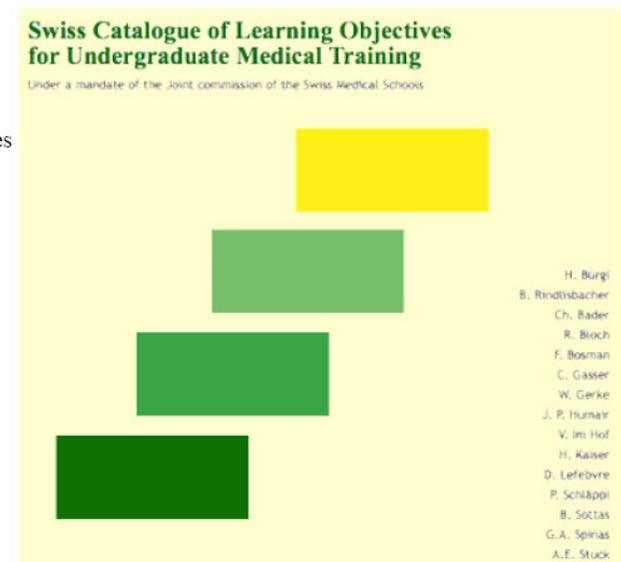
[www.smifk.ch](http://www.smifk.ch)

### SCLO 2nd edition

The second edition from June 2008 of the Swiss Catalogue of Learning Objectives for Undergraduate Medical Training *is legally valid for defining the contents of the final federal examination, which becomes effective from the year 2011 onward.*

 [Download SCLO 2nd Edition](#)

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# Condition 2

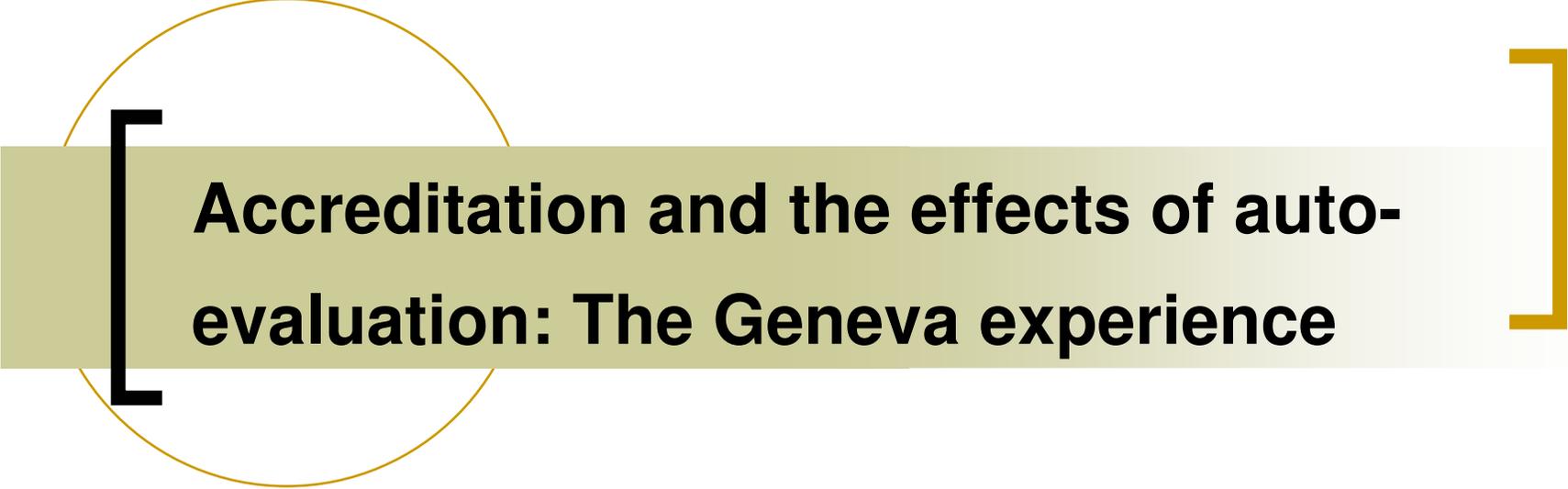
## International accreditation

**For this, you need standards**

**QUALITY STANDARDS FOR MEDICAL EDUCATION IN SWITZERLAND**

**Prepared Swiss Medical Schools**

In preparation for the accreditation process of Swiss Medical Faculties the 5 Faculties have reviewed and adapted the **WFME Global Standards for Quality improvement** to reflect the values and traditions of medical education in Switzerland.



**Accreditation and the effects of auto-  
evaluation: The Geneva experience**

# Accreditation of medical faculties in short

1. A series of criteria to respect on which Medical Faculties in the world agree (**WFME**), **adapted** by the JCSMS, the OAQ and the OFSP
2. **An auto-evaluation of the Faculty (includes students)**
  - testing the degree of realization or application of each criterion
  - Internal thinking for correcting deficiencies
  - An auto-evaluation report
3. **A visit by international experts**
  - interviews
    - ➔ Dean, Rector, direction of the University hospital, people in charge of Committees, teachers, students, students' advisors, administration ...
4. A public report on the results of the visit

# Standards of WFME

## **1.1 STATEMENTS OF MISSION AND OBJECTIVES**

- 1.2 PARTICIPATION IN FORMULATION OF MISSION AND OBJECTIVES
- 1.3 ACADEMIC AUTONOMY
- 1.4 EDUCATIONAL OUTCOME

## **2.1 CURRICULUM MODELS AND INSTRUCTIONAL METHODS**

- 2.2 SCIENTIFIC METHOD
- 2.3 BASIC BIOMEDICAL SCIENCES
- 2.4 BEHAVIOURAL AND SOCIAL SCIENCES AND MEDICAL ETHICS
- 2.5 CLINICAL SCIENCES AND SKILLS
- 2.6 CURRICULUM STRUCTURE, COMPOSITION AND DURATION
- 2.7 PROGRAM MANAGEMENT
- 2.8 LINKAGE WITH MEDICAL PRACTICE AND THE HEALTH CARE SYSTEM

## **3.1 ASSESSMENT METHODS**

- 3.2 RELATION BETWEEN ASSESSMENT AND LEARNING

## **4.1 STUDENTS - ADMISSION POLICY AND SELECTION**

- 4.2 STUDENT INTAKE
- 4.3 STUDENT SUPPORT AND COUNSELLING
- 4.4 STUDENT REPRESENTATION

## **5.1 STAFF - RECRUITMENT POLICY**

- 5.2 STAFF POLICY AND DEVELOPMENT

# Standards of WFME

## **6.1 PHYSICAL FACILITIES**

6.2 CLINICAL TRAINING RESOURCES

6.3 INFORMATION TECHNOLOGY

6.4 RESEARCH

6.5 EDUCATIONAL EXPERTISE

6.6 EDUCATIONAL EXCHANGES

## **7.1 MECHANISMS FOR PROGRAMME EVALUATION**

7.2 TEACHER AND STUDENT FEEDBACK

7.3 STUDENT PERFORMANCE

7.4 INVOLVEMENT OF STAKEHOLDERS

## **8.1 GOVERNANCE**

8.2 ACADEMIC LEADERSHIP

8.3 EDUCATIONAL BUDGET AND RESOURCE ALLOCATION

8.4 ADMINISTRATIVE STAFF AND MANAGEMENT

8.5 INTERACTION WITH THE HEALTH SECTOR

## **9 CONTINUOUS RENEWAL**

## **Positive effects of auto-evaluation**

- Shows what has not yet been achieved
- Stimulates the dialog with all partners
- Promotes the expression of dissatisfaction and satisfaction
- Provides opportunities for examining alternative solutions for improving teaching

# Positive effects of external expertise

- It is another view
- Legitimizes the options to be taken, when there is resistance (*e.g. to increasing exposure to primary care*)
- Identifies problems that we may not see anymore

## Experts:

1. Prof. Michael J. Field (peer leader), Associate Dean and Head, Royal North Shore Hospital, University of Sydney (Australia),
2. Prof. Jacques A. Bury, Director of ADSAN, Agence pour le développement et l'évaluation des politiques de santé (Switzerland),
3. Prof. Thomas Fleiner, Director Institute of Federalism, University of Fribourg (Switzerland)
4. Dr. Laurence Howard, formerly Sub-Dean, Faculty of Medicine, Leicester Warwick Medical School (UK)
5. Prof. David J. Steele, Assistant Dean for curriculum and evaluation, Director Office of Medical Education, Florida State University College of Medicine (USA).

# Effect of the pilot accreditation 1999 in Switzerland

- The 1999 « pilot accreditation » changed medical studies in Switzerland
  - The report was very critical for most Faculties
    - Reforms were developed everywhere
    - Pedagogical Units everywhere
    - Coordination between Faculties improved
  - The procedure leading to accreditation can be a potent drive!

# A little caveat on quality assurance and incentives

- In Geneva we have developed databases to record teaching and research achievements
- They can be used in promotion, reallocation of assistant positions, of lab and office space, etc.
- They are also used to redistribute bonus credits to the departments

## For example

All teaching activities are recorded in a data base (direct contact)

Teaching responsibilities are valorized by hours equivalents

→ These 2 elements are taken into account in the « Mimosa teaching », which distributes accordingly 300'000CHF/year to the Departments of the Faculty of medicine

→ For research, we redistribute 800'000 CHF/year

## Mimosa 2008 "Enseignement"

Basé sur les données de l'année académique 2005-2006 (heures d'enseignement) et de l'année académique 2006-2007 (responsabilités et développement)

Departments	Hours of direct contac with students 2008	CHF (direct contact )	Responsabilités & developpement	CHF (responsabilités et développement)
Biologie structurale et Bioinformatique	32	152	160	631
Médecine génétique et Développement	583	2'775	483	1'904
Microbiologie et Médecine moléculaire	402	1'914	1'408	5'550
Neurosciences fondamentales	1'049	4'994	3'155	12'437
Pathologie et Immunologie	488	2'323	1'800	7'095
Physiologie cellulaire et Métabolisme	1'286	6'122	1'657	6'532
Anesthésiologie, Pharmacologie et Soins Intensifs	793	3'775	1'216	4'793
Chirurgie	788	3'751	944	3'721
Gynécologie et Obstétrique	871	4'146	1'799	7'091
Médecine Interne	3'426	16'309	3'435	13'540
Neurosciences Cliniques	1'577	7'507	1'605	6'327
Dermatologie	243	1'157	250	985
Pédiatrie	1'959	9'325	1'135	4'474
Psychiatrie	1'964	9'349	2'255	8'889
Radiologie et Informatique médicale	808	3'846	910	3'587
Réhabilitation et Gériatrie	783	3'727	1'302	5'132
Santé et Médecine communautaires	2'435	11'591	4'832	19'047
Médecine Dentaire	5'974	28'436	910	3'587
Budget Enseignement	4'792	22'811	3'146	12'401
Institut du mouvement et du sport	1'201	5'717	1'030	4'060
UDREM	57	271	4'621	18'215
<b>TOTAUX</b>	<b>31'511</b>	<b>150'000</b>	<b>38'053</b>	<b>150'000</b>

Rewarding  
teaching

# [ All this is nice, but... ]

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- It is a big administrative load
- One has to be careful to keep it under academic control in order to
  - maintain the magnitude of quality assurance at a reasonable level
  - avoid an inflation of administration at the detriment of academic activities
- Too much of a good thing can be bad!

Time for Discussion?