



swiss center of accreditation and  
quality assurance in higher education

**Proposal for accreditation of the Study Programme in Basic Medical Education,  
University of Lausanne and 1st year University of Neuchâtel**

**OAQ Report**

22 August 2011

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## 1 Frame of reference, object and procedural steps

### 1.1 Frame of reference

The accreditation of study programmes leading to a Federal Diploma in Medicine is mandatory according to the Federal Law on Financial Aid to Universities of 8 October 2009 (UFG)<sup>1</sup> and to the Federal Law on Medical Professions of 23 June 2006 (MedBG, Art. 23 § 1)<sup>2</sup>. Art. 24 § 1 MedBG defines the criteria that must be fulfilled for accreditation of study programmes in addition to the accreditation requirements according to UFG. The legally defined educational objectives are of key importance (Art. 4 MedBG, Art. 6-10 MedBG).

The quality assessment is based upon quality standards that were developed by the Deans of the five Swiss Medical faculties, in cooperation with the Swiss Center of Accreditation and Quality Assurance in Higher Education (OAQ) and the Federal Office for Public Health (FOPH). They were based on the internationally accepted "Basic Medical Education WFME Global Standards for Quality Improvement"<sup>3</sup> and authorised on 11 June 2003 by the Joint Commission of the Swiss Medical Schools (SMIFK). Under the mandate of the FOPH, in 2007 the Quality standards were revised by the OAQ and adapted to the requirements of the MedBG.

This work resulted in the developments of the quality standard set "Accreditation of Study Programmes in Basic Medical Education. Quality Standards"<sup>4</sup>, dated February 2010, which comprises the educational objectives specified in Art. 4, 6, 7, 8 of the MedBG as well as the general quality standards for study programmes outlined in Art. 10 and 12 of the Accreditation Guidelines of the Swiss University Conference (SUC)<sup>5</sup>.

These procedures foresee the assessment of fulfilment of the accreditation criteria according to the MedBG as well as the fulfilment of the quality standards according to the SUC Accreditation Guidelines.

Between March 2010 and August 2012 the OAQ conducts the accreditation procedures of all the Bachelor and Master programmes in Veterinary Medicine, Human Medicine and Dental Medicine as well as Chiropractics.

The accreditation proposals to the two accrediting bodies, the SUC (UFG criteria) and the Swiss Accreditation Council (MedBG criteria) are each limited to the respective quality criteria. However, the accreditation decision according to UFG is a precondition for accreditation according to MedBG.

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<sup>1</sup> Bundesgesetz über die Förderung der Universitäten und über die Zusammenarbeit im Hochschulbereich vom 8. Oktober 1999 (UFG), SR 414.20.

<sup>2</sup> Bundesgesetz über die universitären Medizinalberufe vom 23. Juni 2006 (MedBG), SR 811.11.

<sup>3</sup> Die Originalstandards der World Federation of Medical Education (WFME) sind abrufbar unter [www.wfme.org](http://www.wfme.org)

<sup>4</sup> [www.bag.admin.ch/themen/berufe/03937/03939/index.html?lang=de](http://www.bag.admin.ch/themen/berufe/03937/03939/index.html?lang=de)

<sup>5</sup> Richtlinien der Schweizerischen Universitätskonferenz für die Akkreditierung im universitären Hochschulbereich vom 28. Juni 2007 (Akkreditierungsrichtlinien/Accreditation Guidelines), SR 414.205.3.

The conceptual planning of the procedures as well as all accompanying instruments (quality standards, guidelines) were defined by the OAQ under the mandate of the FOPH and in cooperation with the SUC and the FOPH itself.

## 1.2 Object of the accreditation procedure

The object of the accreditation procedure is the full study cycle (Bachelor + Master) in Human Medicine offered at the School of Medicine within the Faculty of Biology and Medicine (FBM) of the University of Lausanne. The first year of the Bachelor is offered as well at the Faculty of Science of the University of Neuchâtel and is therefore included in the assessment procedure.

The Bachelor programme consists of 3 years of study and focuses on basic knowledge as well as the pre-clinic education. The Master programme consists again of 3 years and is oriented towards medical research and clinical education in a hospital environment. According to the Bologna reform, the Master is conceived as consecutive programme following the Bachelor.

In an earlier form the study programme was the object of a pilot accreditation in 1999.

In the Swiss System of Higher Education any student holding a “Matura” or an equivalent diploma gains admission into any study programme of a Swiss university. The only exception is medicine where the number of study places is limited. Most cantons have agreed to base admission on a central aptitude test. By decision of the Council of State of the Canton de Vaud the University of Lausanne does not require this test. In order to guarantee equal opportunities, a common exam is foreseen at the end of the 1<sup>st</sup> year of study.

In Lausanne, the number of students per year in 2010 was **576** for the first Bachelor year, **191** for the second Bachelor year and approximately **150-160** students from the third year of Bachelor on. At the first year of Bachelor in Neuchâtel there were **90** students enrolled in 2010. Among the students who were admitted in the second Bachelor year, **15** went to Lausanne and **6** to Geneva. The selection ratio of the 1<sup>st</sup> year students in Neuchâtel and Lausanne who are admitted to the 2<sup>nd</sup> year is set to be equivalent.

Altogether there are more than **600** academic staff in the FBM. At the present date, **221** are professors (approximately half of them being full professors), out of which **146** are directly involved in teaching activities in the unit under accreditation.

## 1.3 Procedural steps

16.04.2010	Opening of the procedure
23.11.2010	Approval of the expert panel by the Scientific Advisory Board of the OAQ as well as by the Swiss Accreditation Council
22.12.2010	Self-evaluation report of the University of Lausanne
20.12.2010	Self-evaluation report of the University of Neuchâtel
21-24.02.2011	On-site visit of the unit under accreditation (sites of Lausanne and Neuchâtel)

24.03.2011	Preliminary expert report
08.04.2011	Position statement of the University of Lausanne
06.04.2011	Position statement of the University of Neuchâtel
14.04.2011	Definitive expert report
27.05.2011	Draft OAQ report with proposal on accreditation decision
30.06.2011	Statement of the Scientific Advisory Board of the OAQ
18.07.2011	Statement of the MEBEKO
22.08.2011	Position statement of the unit under accreditation according to Art. 27 § 2 of the SUC Accreditation Guidelines
22.08.2011	Definitive OAQ report with proposal on accreditation decision

The procedure was properly conducted under all formal aspects and legal requirements.

#### 1.4 The panel of experts

- Prof. Franco CAVALLO, Peer Leader (University of Turin)
- Prof. Georges BORDAGE (University of Illinois, Chicago)
- Prof. Ray MITCHELL (Georgetown University, Washington)
- Prof. Ron J.G. PETERS (Academic Medical Center, Amsterdam)
- Cyrus BRODEN, Student (Karolinska Institute, Stockholm)

#### 1.5 Reference documents

- Self evaluation report of the University of Lausanne, dated 22 December 2010
- Self evaluation report of the University of Neuchâtel, dated 20 December 2010
- Expert report dated 14 April 2011
- Position statements of University of Lausanne, dated 8 April and 22 August 2011
- Statement of the MEBEKO dated 18 July 2011

## 2 External Evaluation

### 2.1 The self-evaluation report

The University of Lausanne and the University of Neuchâtel chose to prepare two separate reports. The members of the expert panel judged both reports as being clear and honest. Although containing useful basic pieces of information, experts noted that, in many instances, evidences were insufficient as to assess how individual standards were fulfilled.

On-site, the experts requested more detailed information, e.g. about student assessment and finances, in order to complement the available documentation.

## 2.2 The on-site visit

The on-site visit by the experts took place between February 21<sup>st</sup> and February 24<sup>th</sup>. The expert team, supported by two OAQ scientific collaborators, had the opportunity to meet the Faculty members invited for the different meetings and to visit the school premises in Lausanne (the Dorigny Campus and the Clinical Hospital) and in Neuchâtel, where the first year of the Bachelor degree is run in parallel. Additionally, the experts could assist to a first year's class in Lausanne and one in Neuchâtel.

Altogether, the expert panel believes that the information gathered from the reports, from the interviews, and from the on-site visits was transparent, forthright, of good quality and sufficient to assess the unit under accreditation against the quality standards.

## 2.3 Assessment of the fulfilment of the quality standards

Based on the individual examination areas the experts have highlighted the following strengths of the unit under accreditation:

- High quality educational programme;
- Dedicated teaching staff, particularly in the bachelor phase;
- Commitment from faculty leadership;
- Excellent atmosphere with good student satisfaction;
- Excellent quality of didactic resources and teaching infrastructures.

As for the weaknesses, the expert panel has underlined the following:

- Stressful selective first year of Bachelor, although out of the sphere of control of the School of Medicine;
- Assessment strategies are not sufficiently aligned with the educational goals expressed in the Swiss Catalogue of Learning Objectives and assumed by the School of Medicine as their own objectives;
- Integration of basic and clinical sciences is not strongly developed;
- Lack of professionally-led student counselling services.

In order to comply with the MedBG criteria, not every single quality standard needs to be completely fulfilled. The recommendation for accreditation by the experts and the accreditation agency is the result of a global judgement taking into account evidences at the level of sub-areas of examination.

The expert panel has indicated a large number of recommendations for the quality improvement of the study programme and for its further development.

Additionally the experts have formulated two conditions for accreditation with regard to Standard 4.2.2 (relationship between assessment and learning):

1. Prepare Module exams that assess mainly student's ability to apply and integrate knowledge and skills within and across topics and body systems.
2. Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration in a summative way at the bedside.

## **2.4 Compliance with the legal requirements**

The expert panel concludes that the medical curriculum under consideration complies with the legal requirements foreseen by Art 24 MedBG.

## **2.5 Position statement of the unit under accreditation on the expert report**

The University of Lausanne listed the inaccuracies found in the preliminary expert report and added comments in case of disagreement with the experts. The main controversies concerned the student counselling services, the teacher evaluation practices and the quality assurance system.

The formal feed-back of the University of Neuchâtel simply stated that there were neither comments nor requests for modification of the preliminary expert report.

Experts did take into consideration the comments of the University of Lausanne in their definitive report.

## **2.6 Consultation of the OAQ Scientific Advisory Board**

The OAQ sent the self-evaluation report, the expert report, the position statement of the unit under accreditation and the OAQ's draft report to its Scientific Advisory Board on 27 May 2011 for consultation. On 30 June 2011 the Board stated its agreement with the OAQ report.

## **2.7 Consultation of the MEBEKO**

The OAQ sent the self-evaluation report, the expert report, the position statement of the unit under accreditation and the OAQ's draft report to the MEBEKO on 27.05.2011 for the first consultation, according to Art. 27 § 5 MedBG. The OAQ received the MEBEKO statement on 20 July 2011. The MEBEKO agrees in general with the proposed conclusions but proposes a slight modification of the second condition. With regard to the way integration at the bedside should be periodically assessed, the MEBEKO expresses criticism towards summative evaluations to be undertaken for clinical education in different hospitals. The OAQ accepts the arguments provided and adopts the reformulated text as: "Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration at the bedside as formative evaluation".

## **2.8 Position statement of the unit under accreditation according to Art. 27 § 2 of the SUC Accreditation Guidelines**

In its statement dated 22 August 2011 the unit under accreditation welcomed the modifications on the formulation of the conditions proposed by the MEBEKO and confirmed that it is able to rectify the shortcomings within a time-span of 3 years.

The management of the School of Medicine has formally discussed the way into which an integrative perspective can be brought into assessment methods, as well as the possibility to evaluate the students' improvements over time in clinical performance. That will be conducted in coordination with the other Faculties of medicine in Switzerland, as stated by the University of Lausanne.

Continuous revision and development of the assessment methods, with a focus on the relationship between assessment and learning, involves mechanisms internal to the faculty of medicine. The larger effort to encourage integrated and interdisciplinary learning as aimed at in the two conditions formulated by the experts can be achieved by the faculty of medicine using existing mechanisms. Based on these considerations and on the position statement of the University of Lausanne (according to Art. 27 § 2 of the SUC Accreditation Guidelines) the OAQ therefore concludes that the shortcomings can be rectified within the given time-span of 3 years.

## **3 Conclusions of the OAQ**

Based on the self-evaluation reports, the expert report, the position statement of the unit under accreditation, the statements of the MEBEKO and of the Scientific Advisory Board, the OAQ concludes that the Study Programme in Basic Medical Education of the University of Lausanne and 1<sup>st</sup> year of the University of Neuchâtel fulfils to a large extent the quality standards for accreditation of the FOPH.

The very many recommendations formulated in the expert report are intended by the experts to contribute to the development of the quality of the study programme. The OAQ agrees with the recommendations of the experts.

In addition, the experts formulated two conditions for the accreditation with regard to Standard 4.2.2. The OAQ agrees with the conditions, taking into account the MEBEKO statement.

### **3.1 OAQ's proposal for accreditation according to UFG for the attention of the SUC**

Concluding that the Study Programme in Basic Medical Education of the University of Lausanne including the first year course at the University of Neuchâtel fulfils the accreditation standards pursuant to art. 10 of the Accreditation Guidelines the OAQ thus proposes:

Conditional accreditation of the Study Programme in Basic Medical Education of the University of Lausanne and the University of Neuchâtel for a period of 7 years, with the following two conditions to be reviewed within a time-span of 3 years:



1. Prepare Module exams that assess mainly student's ability to apply and integrate knowledge and skills within and across topics and body systems.
2. Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration at the bedside as formative evaluation.

### **3.2 OAQ's proposal for accreditation according to MedBG for the attention of the Swiss Accreditation Council**

Concluding that the Study Programme in Basic Medical Education of the University of Lausanne and the University of Neuchâtel fulfils the objectives and accreditation criteria pursuant to Art. 4, 6, 7, 8 and 24 of the MedBG, the OAQ thus recommends for the attention of the Swiss Accreditation Council:

Conditional accreditation of the Study Programme in Basic Medical Education of the University of Lausanne and the University of Neuchâtel for a period of 7 years, with the following two conditions to be reviewed within a time-span of 3 years:

1. Prepare Module exams that assess mainly student's ability to apply and integrate knowledge and skills within and across topics and body systems.
2. Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration at the bedside as formative evaluation.

### **3.1 Antrag des OAQ auf Akkreditierung gemäss UFG an die SUK**

Das OAQ kommt zum Schluss, dass der Studiengang in Humanmedizin die Akkreditierungsstandards gemäss Art. 10 der SUK-Richtlinien erfüllt.

Daher beantragt das OAQ: Akkreditierung des Studiengangs in Humanmedizin der Universitäten Lausanne und Neuchâtel für sieben Jahre, mit zwei Auflagen zu überprüfen innerhalb 3 Jahren nach Rechtsgültigkeit des Akkreditierungsentscheids:

1. Es sind Modulprüfungen zu erstellen, welche die Fähigkeit der Studierenden prüfen, Wissen und Fertigkeiten innerhalb von Fachgebieten wie auch disziplinenübergreifend und über Körpersysteme hinweg anzuwenden und zu integrieren.
2. Die klinischen Verhältnisse, welche die Studierenden im Laufe der Zeit während der klinischen Rotationen (M1 und M3) erfahren, sind mittels Logbuch zu überwachen. Deren Integration soll periodisch als formative Evaluation am Patientenbett überprüft werden.

### **3.2 Antrag des OAQ auf Akkreditierung gemäss MedBG an den Schweizerischen Akkreditierungsrat**

Das OAQ kommt zum Schluss, dass der Studiengang in Humanmedizin der Universitäten Lausanne und Neuenburg die Ziele und Akkreditierungskriterien gemäss Art. 4, 6, 7, 8 und 24 MedBG erfüllt.

Daher beantragt das OAQ die Akkreditierung des Studiengangs in Humanmedizin der Universitäten Lausanne und Neuchâtel für sieben Jahre, mit 2 Auflagen zu überprüfen innerhalb von 3 Jahren nach Rechtsgültigkeit des Akkreditierungsentscheids:

1. Es sind Modulprüfungen zu erstellen, welche die Fähigkeit der Studierenden prüfen, Wissen und Fertigkeiten innerhalb von Fachgebieten wie auch disziplinenübergreifend und über Körpersysteme hinweg anzuwenden und zu integrieren.
2. Die klinischen Verhältnisse, welche die Studierenden im Laufe der Zeit während der klinischen Rotationen (M1 und M3) erfahren, sind mittels Logbuch zu überwachen. Deren Integration soll periodisch als formative Evaluation am Patientenbett überprüft werden.

### **3.1 Propositions relative à l'accréditation de l'OAQ selon LAU adressée à la CUS**

L'OAQ certifie que la filière d'études en médecine humaine satisfait aux standards d'accréditation conformément à l'Art. 10 des directives de la CUS et propose l'accréditation de la filière d'études en médecine humaine des universités de Lausanne et Neuchâtel pour 7 ans, avec les 2 conditions suivantes, à remplir dans un délais de 3 ans:

1. Préparer des examens de Module qui évaluent principalement la capacité de l'étudiant à mettre en pratique et intégrer les connaissances et compétences au niveau disciplinaire et interdisciplinaire ainsi que dans les différents systèmes de l'organisme.
2. Garder la trace (journal de bord) des conditions cliniques observées au fil du temps par l'étudiant dans ses rotations cliniques (en M1 et M3) et évaluer périodiquement l'intégration auprès des patients de manière formative.

### **3.2 Propositions relative à l'accréditation de l'OAQ selon LPMéd adressée au Conseil suisse d'accréditation**

L'OAQ certifie que la filière d'études en médecine humaine satisfait aux objectifs et critères d'accréditation conformément aux Art. 4, 6, 7, 8 et 24 de la LPMéd et propose l'accréditation de la filière d'études en médecine en médecine humaine des universités de Lausanne et Neuchâtel pour 7 ans, avec les 2 conditions suivantes, à remplir dans un délais de 3 ans:

1. Préparer des examens de Module qui évaluent principalement la capacité de l'étudiant à mettre en pratique et intégrer les connaissances et compétences au niveau disciplinaire et interdisciplinaire ainsi que dans les différents systèmes de l'organisme.
2. Garder la trace (journal de bord) des conditions cliniques observées au fil du temps par l'étudiant dans ses rotations cliniques (en M1 et M3) et évaluer périodiquement l'intégration auprès des patients de manière formative.

**Academic accreditation in Switzerland**

**Expert report**

**Faculty of Biology and Medicine, University of Lausanne**

**Study programme in basic medical education  
(University of Lausanne / 1<sup>st</sup> year University of Neuchâtel)**

**Report submitted on 14/04/2011**

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## **1 Introduction**

In the context of the accreditation process of the Study programme in basic medical education (University of Lausanne / 1<sup>st</sup> year University of Neuchâtel) organised by OAQ, a team of experts was contacted and finally appointed by the end of 2010; the self-assessment study reports prepared by the two Universities were subsequently sent to the experts and the final dates and schedule for the site visit agreed upon.

The visit took place from February 21<sup>st</sup> to 24<sup>th</sup> and was concluded with a feed-back session with faculty members from both Universities.

This report is the concluding part of the review.

## **2 Accreditation procedure**

### **Presentation of the unit**

The Units seeking accreditation include the Faculty of Biology and Medicine of Lausanne (Study Programme in Basic Medical Education) and the Faculty of Science of the University of Neuchâtel that simultaneously offers the first year of the same study programme, mainly for students from that particular region. The full Study Programme is comprised of a three-year Bachelor's Degree plus a three-year Master's Degree. Graduation to the Master's Degree in Medicine allows the graduate to enter post graduate programmes, either in the medical specialties, including General Practice, or in the PhD tracks available at the Faculty or elsewhere.

### **Self evaluation report**

The accreditation team were given two self-study reports, one from the University of Lausanne and one from the University of Neuchâtel.

Both reports were clear, well presented and candid, and contained most of the major points needing to be discussed with the experts on site. In both reports, detailed financial accounts were lacking.

The Neuchâtel report was shorter than the Lausanne report because it only needed to illustrate the structure of the first year and the reasons for having a first year separated from the main course in a Faculty of Science, running in conjunction with the local Biology Programme. The Lausanne report was more extensive, dealing with the overall structure of the study programme, its resources, the curriculum structure, the link with the University Hospital and the sharing of budgets and resources involved with these relationships.

Both reports contained basic information, but in many instances the group of experts were looking for more detailed justification as to how individual standards were fulfilled; it is the institution's responsibility to justify (prove) to the site visitors, and the accrediting body, their perceived level of compliance with each standard. In some cases more detailed information about student assessment and budget (shared with the University Hospital) was requested by the experts who later discussed this information with members of the steering group of

the two Universities. Additional information was also requested during the interviews (e.g. financial data, examples of evaluation forms, examples of exams).

Overall, the group of experts greatly appreciated the effort made by the members of the two steering groups in preparing the reports. It showed a strong involvement of all interested parties working at the University, as well as a number of other stakeholders involved in the education of medical doctors.

### **Group of experts**

Peer leader:

- Prof. Franco CAVALLO, Department of Public Health and Microbiology of the University of Torino, Full Professor of Clinical Epidemiology at the Faculty of Medicine of the same University, former President of the Association of Schools of Public Health of the European Region and former Chair of the PEER Committee of the same Association.

Experts:

- Prof. Georges BORDAGE, MD, PhD, professor in the Department of Medical Education in the College of Medicine at the University of Illinois at Chicago. He is the Secretary of the Faculty at that institution
- Prof. Ron J.G.PETERS, cardiologist, Department of Cardiology, Academic Medical Center, Amsterdam, the Netherlands. Immediate past chair of the University of Amsterdam Medical School (2005-2010)
- Prof. Ray MITCHELL, Internist/Pediatrician in Rheumatology, Dean for Medical Education at Georgetown University
- Cyrus BRODEN, 5<sup>th</sup> year medical student at Karolinska Institute, Stockholm, Sweden

### **On-site-visit**

The on-site visit by the experts took place between February 21<sup>st</sup> to February 24<sup>th</sup>, starting with a preparatory session in the late afternoon of the first day, followed by a number of meetings and visits during the following three days. .

The expert team, besides the Faculty members invited for the different meetings, had the opportunity to meet a number of other people and to visit the school premises in Lausanne (Dorigny and the Clinical Hospital) and in Neuchâtel, where the first year of the Bachelor degree is also run. During this visit it had also the opportunity to shortly assist to two lessons of the first year.

A final de-briefing session in the afternoon of February 24<sup>th</sup> concluded the visit.

All meetings and sessions were well organised; the participants were on-time and for those who had problems (very few) an 'ad hoc' meeting was arranged. The experts were well supported and taken care of in all aspects and phases of the study visit. The time was efficiently organised and allowed the experts to become fully aware of all aspects they were interested in during the time available. An extraordinary session was also organised by the Dean on Wednesday late afternoon to provide additional information on some budgetary issues, as requested by the experts.

The expert team feels that the information gathered from the reports, from the interviews, and from the on-site visits was transparent, forthright, of good quality and sufficient to have a thorough understanding of the situation.

### **3 Compliance with the Quality Standards**

#### **Area 1: Mission and Objectives**

Overall evaluation

The mission is stated, but it is quite general, going from primary care to excellence in research. Even if there is no contradiction between the two areas, one should understand whether research and areas of application are deemed to be coherent with each other or serving different objectives (i.e. research aiming towards molecular medicine and primary care towards public health objectives).

As the main stakeholders interested in medical education are actively involved in the Faculty, it should be feasible to discuss with them, and point out in a more precise way, what direction the Faculty wants to privilege and make it clear in its mission.

#### **Sub-area 1.1: Mission and Objectives**

Standards

- 1.1.1 The faculty of medicine defines its mission and objectives and makes them known publicly. The mission statement and objectives describe the educational process. After completion of the programme, Plus the appropriate post graduate training, doctors have the ability to practice their profession as well as an appropriate basis for further training in any specialised branch of medicine. They are able to take responsibility for their role as doctors in the health care system.
- 1.1.2 The mission statement and the objectives take into consideration social responsibility and community involvement.
- 1.1.3 The mission statement and objectives are compatible with the strategic planning and the research goals.

## Analysis

The faculty of medicine has defined its mission and objectives and has made them known publicly but the mission statement describes the educational process only in general terms.

After completion of the program the graduating doctors have an appropriate basis for further training in other specialised branches of medicine, including general practice, and, as expected, appear ready to gradually take responsibility for their role as resident physicians in post-graduate training and eventually in independent practice in the health care system.

The mission statement and the objectives take into consideration social responsibility and community involvement.

The mission statement and objectives are compatible with the strategic planning and the research goals even if they should be further defined.

## Conclusions

Standard compliance 1.1.1: partially fulfilled

Standard compliance 1.1.2: fulfilled

Standard compliance 1.1.3: fulfilled

## Recommendation

***Prepare a more precise definition of the mission statement.***

### **Sub-area 1.2: Participation in formulation of Mission and Objectives**

Standard:

1.2.1 The mission statement and objectives of the faculty of medicine are defined by its principal stakeholders and other interested parties.

## Analysis

The mission statement and objectives of the faculty of medicine are defined by its principal stakeholders and other interested parties.

## Conclusions

Standard compliance 1.2.1: fulfilled



### **Sub-area 1.3: Academic autonomy**

Standard:

- 1.3.1 The faculty of medicine has a policy within which it has freedom to design the curriculum and allocate the resources necessary for its implementation.

#### Analysis

The faculty of medicine has the freedom to design the curriculum and allocate the resources necessary for its implementation.

Both Faculties are bound by Canton legislation to admit all applicants who qualify for medical school, irrespective of their numbers. This is a heavy burden on the program, both from the large number of first-year students and from the necessity to create a selective first year of the study, with its inherent consequences of competition and stress for the new students. The number of first-year students attending the courses has recently been reduced by abolishing the possibility for repeaters to attend lessons.

Both Faculties, and the students in both locations, stated a preference for a preadmission process before entering Medical School, similar to the situation in all German speaking Cantons in Switzerland.

#### Conclusions

Standard compliance 1.3.1: fulfilled

### **Sub-area 1.4: Educational outcome**

Standards:

- 1.4.1 Based on the Swiss Catalogue of Learning Objectives for Undergraduate Medical Training and the MedBG, the faculty of medicine defines the competencies to be achieved by students at the completion of their studies, necessary for their subsequent training and their future roles in the health care system.
- 1.4.2 Information concerning performance assessment and other data on the competence of the graduates is used for the further development of the educational programme.

#### Analysis

The Faculty has made great efforts to make its Learning Objectives (LO) coherent with the Swiss Catalogue of Learning Objectives for Undergraduate Medical Training (SCLO), but the effort still needs to be completed. A general problem remains in the fact that it is difficult to derive LOs coherent with the SCLO in the Bachelor Programme, as in general SCLO objectives are based on competencies at the level of a Master's degree, while Bachelor's modules are based on basic sciences. No learning objectives for the Bachelor's degree are available in Switzerland, with the exception of the University of Freiburg that offers only a Bachelor's degree in Medicine.

The Faculty of the University of Neuchatel has changed its curriculum to more closely match the modular curriculum at the University of Lausanne (even though they also send some students to Geneva). This allows better overall achievement of objectives by the 15 students who complete UNE and matriculate into the second year at the University of Lausanne.

Systems for performance assessment are in an early phase of development and may be expanded. Data on the competence of the graduates are not systematically gathered.

This effort is therefore to be pursued to achieve complete coherence but it has already been used to further develop the programme.

#### Conclusions

Standard compliance 1.4.1: partially fulfilled

Standard compliance 1.4.2: partially fulfilled

#### Recommendations

***Continue efforts to make the study programme completely coherent with the SCLO, and in addition, develop learning objectives for the Bachelor's degree.***

***Develop a system to monitor student performance as they progress through the program and develop a system to follow-up the graduates during postgraduate training.***

## Area 2: Study programme

### Overall evaluation

Passive learning methods predominate throughout the study programme, including a very large proportion of ex-cathedra courses, even if, since the last review, a great effort has been made to introduce more active methods based on group work and self-learning methods. The expert team appreciated the new structure of the curriculum, with the introduction of more primary care and public health based modules, new social sciences and

ethics contents and the effort to link practice not only with hospital care but also with general practice. The latter was stimulated in recent years based on the health care needs of the Swiss society.

### **Sub-area 2.1: Curriculum models and instructional methods**

Standards:

- 2.1.1 The faculty of medicine defines the curriculum models and instructional methods.
- 2.1.2 The study programme and instructional methods ensure that the students have responsibility for their own learning processes and are prepared for lifelong, self-directed learning.

Analysis

The development of lifelong learning skills is not an explicit goal of the program. In defining curriculum models and instructional methods, the Faculty could include better training of the students in the English language, as this is a pre-requisite for the students being prepared for lifelong learning as well as for managing their own learning process. This also allows full utilization of existing Web-based international libraries and medical research databases, that are predominantly in English, and could include the use of English textbooks. Some more active learning methods should also be introduced to obtain the same objective.

Conclusions

Standard compliance 2.1.1: fulfilled

Standard compliance 2.1.2: partially fulfilled

Recommendation

***The Faculty could improve the student's use of English references and textbooks.***

***The Faculty could explicitly foster the development of life-long learning skills. To facilitate this, the Faculty could increase the use of new methods of active learning and evidence based clinical practice.***

### **Sub-area 2.2: Structure, Composition and duration of the study programme**

Standards:

- 2.2.1 The faculty of medicine describes and defines the contents, extent, and sequencing of the study programme elements, including the balance between core and optional content.
- 2.2.2 The study programme is based on the goals of the Swiss Catalogue of Learning Objectives and the MedBG.
- 2.2.3 Basic sciences and clinical sciences are integrated in the study programme as well as the interface with complementary therapies.

### Analysis

The faculty of medicine describes and defines the contents, extent, and sequencing of the study programme elements, including the balance between core and optional content.

The study programme is based on the SCLO but complete coherence between LO of the study programme and SCLO is still to be completed.

The integration between basic and clinical sciences is present within the study programme, but the transition between basic sciences in the Bachelor track and clinical sciences in the Master track appears abrupt. Clinical teaching could be expanded in the bachelor phase and basic sciences components further developed in the Master phase.

The curriculum is based on modules where a juxtaposition of fragmented pieces of disciplines and specialties prevails rather than fostering real integration of contents in the learners.

Horizontal integration of contents and disciplines is explicit, even if still to improve, while vertical integration is less clear.

### Conclusions

Standard compliance 2.2.1: fulfilled

Standard compliance 2.2.2: partially fulfilled

Standard compliance 2.2.1: partially fulfilled

### Recommendation

***The Faculty could pursue their efforts of establishing the coherence of their study programme with the SCLO.***

***The Faculty could further strengthen the integration between basic and clinical sciences within the Bachelor and Master degree and make the transition more gradual. Partial repetition of topics from basic sciences in the Master phase ('just in time learning') is recommended.***

***The integration between disciplines is still limited to a juxtaposition of contents rather than fully integrate them. Expansion of case-based learning and integrated assessment methods may enhance the curriculum.***

### **Sub-area 2.3: Study programme management**

Standards:

- 2.3.1 A curriculum committee has the responsibility and competence for the planning and implementation of the study programme.
- 2.3.2 The curriculum committee has appropriate resources for the choice and implementation of appropriate teaching and learning methods, evaluation of students, evaluation of programme, and innovations in the study programme. The administration, academic staff, students, and other stakeholders are represented in the curriculum committee.

Analysis

The curriculum committee has the responsibility and competence for the planning and implementation of the study programme.

The curriculum committee has appropriate resources for the implementation of teaching and learning methods; administration, academic staff, students, and other stakeholders are represented in the curriculum committee.

Conclusions

Standard compliance 2.3.1: fulfilled

Standard compliance 2.3.2: fulfilled

### **Sub-area 2.4: Scientific methods**

Standard:

- 2.4.1 The faculty of medicine teaches the principles of scientific methods and evidence-based medicine, including analytical and critical thinking, throughout the entire study programme.

Analysis

The acquisition of clinical knowledge and skills at the level of the Master's degree appears appropriate for continued training and for assuming clinical responsibilities under supervision. It should be noted that this is the case in most, if not all, medical faculties in

Europe, where post-graduate training is required to get full autonomy and professional independence and responsibility.

It is not readily apparent what level of critical thinking is developed during the clinical years, as the details concerning the use of evidence-based methods are not fully documented in the self-assessment reports nor in the modules syllabi. One-way teaching methods appear to dominate and assessment includes predominantly factual-recall questions. Even if we are aware of the fact that also courses in plenary and small group discussions can help developing critical thinking, we believe that this could be more efficiently achieved by the use of interactive teaching methods.

Research methods are taught within the course, but they are especially fostered in the master thesis work and in the offering of a MD-PhD track that allows a subset of students to access directly the PhD course after graduation.

Conclusions

Standard compliance 2.4.1: partially fulfilled

Recommendation

***The Faculty could enhance/ evidence-based thinking, also by increasing more interactive teaching methods.***

### **Sub-area 2.5: Basic biomedical sciences**

Standards:

- 2.5.1 The faculty of medicine identifies the contributions of the basic biomedical sciences and integrates them into the study programme.
- 2.5.2 The contributions of biomedical sciences are adapted to scientific, technological, and clinical developments, as well as to the health needs of society.

Analysis

The Faculty of medicine identifies the contributions of the basic biomedical sciences and integrates them into the study programme.

The contributions of biomedical sciences are adapted to scientific, technological, and clinical developments, as well as to the health needs of society.

Conclusions

Standard compliance 2.5.1: fulfilled

Standard compliance 2.5.2: fulfilled

### **Sub-area 2.6: Behavioural and social sciences, medical ethics**

Standards:

2.6.1 The faculty of medicine identifies the contributions of behavioural and social sciences, medical ethics, educational sciences, and the legal and economic basis of health care that enable effective communication, clinical decision-making, and ethical practices. This is integrated into the study programme.

2.6.2 The contributions of behavioural and social sciences, medical ethics and humanities are adapted to scientific developments in medicine, to changing demographic and cultural contexts, and to the health needs of society.

Analysis

Following a 1999 review of the curriculum, the Faculty intensely reviewed its curriculum in order to adapt it to the changing needs of society and integrated new contributions from behavioural and social sciences. This was highly appreciated by the expert team.

The clinical student evaluation forms include paragraphs on attitude and professional behaviour.

Conclusions

Standard compliance 2.6.1: fulfilled

Standard compliance 2.6.2: fulfilled

Recommendation

***The Faculty could protect and further develop these new areas in order to update its contents in relationship with the changing needs of society.***

### **Sub-area 2.7: Clinical knowledge and skills**

Standard:

2.7.1 The faculty of medicine assures that the students have patient contact appropriate to their level of education and have acquired sufficient clinical knowledge and skills, so that after graduation they can assume appropriate clinical responsibility.

#### Analysis

The Faculty assures appropriate clinical contact so that the students can assume appropriate clinical responsibility during their post-graduate training.

#### Conclusions

Standard compliance: fulfilled

### **Sub-area 2.8: Linkage with medical practice and the health care system**

#### Standards:

- 2.8.1 An operational link between the study programme, postgraduate medical education, and the independent professional practice of medicine is assured.
- 2.8.2 The curriculum committee uses information from the professional field, the health care system, and society to improve the study programme.

#### Analysis

The curriculum is linked with postgraduate education and gets input from the professional field. Both students and faculty indicated a drawback as a consequence of the current organisation of the Masters-phase. Students are exposed to clinical disciplines only in the third and last year and this may lead to a delay before the start of a residency program for most of the graduates. Until recently, clinical rotations started earlier, in the 2<sup>nd</sup> year of the Masters-phase, with better continuity between pre-graduate and postgraduate training.

#### Conclusions

Standard compliance 2.8.1: fulfilled

Standard compliance 2.8.2: fulfilled

#### Recommendation

***The Faculty re-examine the position (sequence) of the last clinical year in the master's program.***



### **Area 3: Students**

#### Overall evaluation

There is a spirit of equality when every student in a canton that wants to go to medical school is able to. Every student that wants to is admitted and knows about the selection procedure. These students are numerous and push the capacity and infrastructures of the FBM to its limit. Under such intense stress, it makes it even more important to have a clear and well-publicized counselling service that takes care of students who may experience academic, personal or financial problems or find themselves in distress. There is no such organisation at FBM in Lausanne, even if there are well-publicized counseling structures at the UNIL-level. There are strong student organisations that, besides their active commitment in the study program, are assuming the role of a counselling service at the moment.

Even during the clinical years, the clinical faculty seems to be working at the limit of its capacity.

#### **Sub-area 3.1: Admission policy and selection process**

##### Standards:

- 3.1.1 The governing body and the faculty of medicine have formulated admission conditions that clearly explain the student selection process.
- 3.1.2 Gender equality is guaranteed.

##### Analysis

See note in paragraph 1.3.1. The admission policy is clear but it has negative consequences on the quality of the first year study program and probably also on the following years, because it fosters competition rather than collaboration. It is also very stressful and doesn't allow for small-group work.

While the University of Neuchatel also uses similar admissions criteria, their region has a lower number of first-year students in the first Bachelor year. Their admission criteria into continued Bachelor's Studies are similarly restrictive. However, the faculty at Neuchatel are deeply engaged and, perhaps due to the lower number of students, are able to support students in the first year more thoroughly, including those students whose test results do not lead to further study in medicine.

##### Conclusions

Standard compliance 3.1.1: fulfilled

Standard compliance 3.1.2: fulfilled

Recommendation

***Consider talks with the Canton leadership about the way the selection (admission) process could be modified.***

***Consider methods of providing advice and additional support to the large first-year classes.***

### **Sub-area 3.2: Number of students**

Standard:

3.2.1 In all phases of the study programme, the number of students is defined and in accordance with the capacity of the faculty of medicine.

Analysis

The number of students is clearly defined but its accordance with the capacity of the Faculty is not fully defined in the first year, while it is well defined in the following years. As it was described in 1.3.1, the number of first-year students have recently been reduced by abolishing the possibility of repeating the first year. This has improved the capacity of the faculty for the first years compared to before. The Faculty acknowledges that, based on the needs of society, more MD's should be trained (by all Faculties in Switzerland) than is currently the case. This acknowledgment lead the Faculty to increase the number of graduating student from 120 to 160 a year

Clinical faculty seems to be working at the limit of their capacity, but it is not clear whether this limit is in the number of beds, or rooms for bedside clinical teaching, or in the teaching 'availability' of clinical personnel. A lack of clarification and transparency of incentives for teaching appeared to play a role.

Conclusions

Standard compliance 3.2.1: partially fulfilled

Recommendation

***There is a need to better analyse the real capacity of the Faculty to deliver good education during the first year, if no selection were made, and in the clinical years, where the student/resource ratio is crucial for the adequate education of the future doctors.***

### **Sub-area 3.3: Student support and counselling**

Standards:

- 3.3.1 The medical faculty offers support and counselling services for the students.
- 3.3.2 The counselling programme is based on monitoring the learning progress of the students and takes their social and personal needs into account.
- 3.3.3 Students have access to a gender equality commission.

Analysis

The faculty does not offer a well-established student counselling service; this service is available only at the University of Lausanne level. As this service is lacking, some of its functions have been transferred to the student organisations. As noted, The University of Neuchatel does an admirable job of supporting first-year students on their campus despite relatively large numbers.

Students have access to a gender equality commission in the University but it is not specific for the FBM.

Conclusions

Standard compliance 3.3.1: partially fulfilled

Standard compliance 3.3.2: partially fulfilled

Standard compliance 3.3.3: fulfilled

Recommendation

***A counselling service for the students should be put in place to take care of students having problems or distress. The students need to be well-informed about this counselling service from the beginning of the first year and throughout the program.***

### **Sub-area 3.4: Student representation**

#### Standards:

- 3.4.1 The medical faculty has a policy on the representation and appropriate participation of the students in the design, implementation, and evaluation of the study programme, as well as in other matters relevant to the students.
- 3.4.2 Student organisations are promoted.

#### Analysis

There is excellent student involvement at all levels of the faculty in Lausanne. The students expressed great interest in influencing faculty decisions. There are also strong student organisations (AEML and CCE) in Lausanne that are promoted by the faculty. Students in Neuchatel are less inclined to contribute to the organisation of the program because of the high pressure of passing their first year and their short stay in that Faculty.

#### Conclusions

Standard compliance 3.4.1: fulfilled

Standard compliance 3.4.2: fulfilled

### **Area 4: Assessment of students**

#### Overall evaluation

The importance of student assessment cannot be overemphasized in the curriculum, especially in reference to one of the main goals of the curriculum at Lausanne, namely, integration. Not only is assessment a measure of the level of mastery of the learning objectives by the students, but also assessment drives the curriculum. Indeed the students learn, pay attention to what they are actually tested on, and not simply on what is expected of them (the objectives). The program director, Dr. JP Hornung, along with the staff of the Unité de Pédagogie Médicale at Lausanne and the Institute for Medical Education in Bern, have put together an excellent system for preparing, delivering, and analyzing the exams over the six years of the program. They have also used, and rightly so, multiple types of assessment methods and instruments, depending on the nature of the learning objectives to be measured. These include: MCQs for the modules, formative assessment for the block courses (M1), standardized formative assessment forms for the optional courses (M3),

OSCEs for the clinical and communication skills (B2, B3, M2), and a standardized form for assessing the master's dissertation.

"Integration" plays a central and critical role in the Lausanne curriculum. This has important consequences for assessment. First, it means that assessment should focus on applying the student's knowledge, that is, going beyond simply testing factual recall or understanding, to test the student's ability to apply their knowledge for any given topic. Second, it means that assessment should test the student's ability to integrate knowledge and skills within and across topics and body systems.

#### **Sub-area 4.1: assessment methods.**

##### Standards

4.1.1 The faculty of medicine defines and communicates the methods of assessment and criteria for the assessment of the students.

4.1.2 The reliability and validity of the assessment methods are documented and evaluated and new assessment methods developed.

##### Analysis

1. Modules. The content of the modules is almost exclusively tested with multiple-choice questions (including a mix of A and K-type questions). Other less used methods include oral exams (M2) and script concordance tests (M2.6). The exam questions are prepared by the teachers, typically 2 questions per lecture per teacher, and revised by Dr. Waeber, a pathophysiologist, for quality assurance. The exams are prepared and administered locally. The students' responses are analyzed in three steps: 1- the answer sheets are sent to Bern for a first analysis of the raw data; 2- the results are reviewed by the program director and dysfunctional items are removed (i.e.,  $r < 0.20$ ) in order to obtain a level of reliability greater than .80; 3- final adjustments are made before making the results public. The school upholds high standards for reliability for locally developed exams, that is, Cronbach alpha greater than .80. Given the high-stake nature of the exam results at the end of the first year, where roughly three quarters of the candidates will "fail", then reliability at the .85 or .90 levels are needed. The reliability of the first-year MC-exams is above 0.85, sometimes above 0.90. A quick review of two recent exams from February 2011 (B2.2 (Sang, immunité, infection) and B3.2-10 (Douleurs abdominales)) by the members of the site-visiting team revealed that 90.3% and 90.8% of the questions respectively tested straightforward factual recall, that is only 9.7% and 9.2% of the questions were testing application or integration. The true test of the students' knowledge is not in factual recall but in the students' ability to apply their knowledge within and across topics and systems (i.e., vertical and horizontal integration).

2. Block courses (cours blocs). The student assessment for the block courses (M1) is formative and not compulsory. Only student presence is compulsory and verified.
3. Optional courses (cours optionels). The student assessment for the optional courses (M3), otherwise known as clerkship rotations, is formative but compulsory. The assessment is based on a well-designed evaluation form and closely monitored by the course director, Dr. Schaller. Dr. Schaller is to be commended for her dedication and high standards.
4. Skills. Clinical and communication skills are assessed on three, six-station OSCEs during the B2, B3, and M2 years. Psychometric data from one M2 OSCE was made available; similar analyses are not made for B2 and B3 OSCEs.
5. Master's dissertation. The master's dissertation is assessed using a well-designed standardized evaluation form that assesses the quality of the literature review, problem statement, methods, results, discussion and conclusion, critical appraisal, references, and presentation.

#### Conclusions

Standard compliance 4.1.1: fulfilled.

Standard compliance 4.1.2: partially fulfilled.

#### Recommendations

**Maintain the levels of reliability for the first-year exams at the .85 or .90 levels.**

**Verify the psychometric quality of the OSCEs after each administration.**

**When verifying content validity of the Module exams, go beyond simply making sure that the proportion of questions on the exam matches the proportion of lectures given in the module, and verify the representativeness of the questions on the exam with the domain of learning objectives for the module.**

**Reconsider the use of K-type questions as well as negatively formulated exam questions.**

#### **Sub-area 4.2: relationship between assessment and learning.**

##### Standards

4.2.1 Assessment principles and practices correspond to teaching objectives and promote learning.

4.2.2 The number and type of examinations encourage integrated and interdisciplinary learning.

Analysis (see 'Analysis' in sub-area 4.1)

#### Conclusions

The panel of experts have two major concerns:

1. the paucity of applied and integrated questions on the Module exams; and,
2. the lack of compulsory and summative student assessment during the M1 block courses as well as the lack of summative assessment during the M3 optional courses.

These two shortcomings go to the heart of the curriculum, that is, integration, and thus were judged serious enough by the site visitors to warrant conditions for accreditation.

Standard compliance 4.2.1: partially fulfilled

Standard compliance 4.2.2: not fulfilled

#### Conditions

- 1. Prepare Module exams that assess mainly student's ability to apply and integrate knowledge and skills within and across topics and body systems;**
- 2. Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration in a summative way at the bedside.**

The first condition should not be too difficult to fulfil because the lecturers are about to be trained on how to write applied and integrated questions. Special attention should also be paid to administering exams that test integration across courses, for example, across disciplines and body systems, for example within a module, as in the B2.2 module with blood, immunity, and infection, and longitudinally across modules. Also many of the existing factual questions could be fairly easily converted to applied, integrated questions. Finally make sure that the questions beginning with a clinical scenario actually test application and integration because some of the scenario-based questions reviewed by the sight visitors could be answered without reading the scenario. The scenarios are there to force application and integration.

As for the second condition, and given the numerous short, mini rotations (e.g. 3-4 days) during the M1 block courses, the spirit of this condition is not necessarily to develop multiple assessments for each mini rotation but rather (a) to keep track (log) of the clinical conditions seen by the student across the rotations over time and (b) to periodically assess progress towards the achievement of the SCLO objectives. As for the assessment during the M3 optional courses (clerkship rotations), a mechanism should be put in place (a) to also track the clinical conditions seen by the students over time and (b) to periodically assess integration at the bedside in a summative way. The relevance of this requirement is enhanced by the fact that students do not follow clerkships in all 'traditional' medical and surgical specialties. The focus of this phase of the training programme is on the general medical approach and skills of the students and these should therefore be assessed. Perhaps consideration should be given to require a series of rotations of at least two to three weeks in the 16-week module to allow better exposure and student assessment. By the end of the sixth year, there should be a way to guarantee that each student has fulfilled the objectives in the SCLO, perhaps including the use of objective structured clinical exams.

#### **Area 5: Academic staff/faculty**

Overall evaluation:

- recruitment policy is not sufficiently defined with respect to teaching needs, even if recently it has been agreed on at least 50 hours teaching for professors; recruitment seems to be dominated by research needs.
- No career incentive for teaching role and activity

#### **Sub-area 5.1: Recruitment policy**

Standards:

- 5.1.1 The faculty of medicine has a staff recruitment policy, which defines the academic staff required for the adequate implementation of the programme. It describes the type and composition of the academic personnel, the balance between medical and non-medical staff, as well as between full and part-time employees. Responsibilities are clearly defined and periodically examined.
- 5.1.2 The faculty of medicine has formulated staff selection criteria, which take into account performance in science, teaching and clinical activities, as well as the demands of the mission statement of the institution, economic considerations, and further issues.
- 5.1.3 The recruitment policy for academic, administrative, and technical personnel is published.



## Analysis

The faculty of medicine has a staff recruitment policy, which does not define the academic staff required for the adequate implementation of the programme. Research responsibilities and clinical duties are clearly stated, however educational or teaching tasks are not explicit. This has begun to change in new contracts.

The faculty of medicine staff selection criteria do not take into account performance in teaching activities.

The recruitment policy for academic, administrative, and technical personnel is published in very broad terms, e.g. gender equality.

## Conclusions

Standard compliance 5.1.1: partially fulfilled

Standard compliance 5.1.2: partially fulfilled

Standard compliance 5.1.3: partially fulfilled

## Recommendation

**A staff recruitment policy could be implemented that defines educational responsibilities and required teaching skills. In addition, incentives for staff members should be developed in order to stimulate and reward their participation in education.**

## Sub-area 5.2: Staff policy and development

### Standards:

- 5.2.1 With its staff policy, the faculty of medicine strives for a balance in teaching, research, and service functions, and ensures recognition of meritorious academic activities with appropriate emphasis on both, research attainment and teaching qualifications.
- 5.2.2 The staff policy includes training, development, and assessment of the teaching staff. It considers teacher-student ratios appropriate to the various components of the study programme, and assures that teaching staff is represented on relevant committees and bodies.
- 5.2.3 The staff has access to a gender equality commission.
- 5.2.4 The faculty of medicine supports a long-term promotion of young academic staff.
- 5.2.5 The staff has access to continuing education, career development opportunities, and appropriate counselling.

## Analysis

With its staff policy, the faculty of medicine does not seek a balance in teaching, research, and service functions; consequently teaching is clearly the lowest priority of the three. The staff policy does include training of the teaching staff. Evaluation of teaching skills is incidental, limited to lecturing skills and results are disclosed only to the individual teacher. The teacher-student ratios seem appropriate to the bachelor part of the study programme. In the master phase a limitation in the availability of clinical teachers appears to limit the capacity of the program and of the quantity of teaching provided during the clinical rotations. The Faculty does assure that teaching staff is represented on relevant committees and bodies

The staff has access to a gender equality commission.

Long-term promotion of junior academic staff is predominantly dependent on research output and clinical reputation. The staff does have access to continuing education and career development opportunities. A system for counselling was not presented.

## Conclusions

Standard compliance 5.2.1: partially fulfilled

Standard compliance 5.2.2: partially fulfilled

Standard compliance 5.2.3: fulfilled

Standard compliance 5.2.4: partially fulfilled

Standard compliance 5.2.5: partially fulfilled

## Recommendation

**The faculty of medicine should strive for a balance in teaching, research, and service functions. Recognition of teaching activities should be ensured with appropriate emphasis on both academic tasks, and with appropriate incentives for teaching. In addition, an academic teaching career track should be considered.**

## Area 6: Educational resources

Overall evaluation:

During the first year, the faculty is operating at the maximum of its resources.

Similarly, in the clinical years the program seems to operate at the maximum of its resources. The limiting factor seems to be teaching time available for clinical staff, in addition to patient numbers.

Otherwise resources are sufficient and of high quality in all sectors including the presence of an expert and committed Medical Pedagogical Unit.

The quality of the research infrastructure is reflected in the master thesis and in the MD-PhD track

Clinical library, both in Lausanne and Neuchatel, is well equipped and changing into an ICT learning center.

Access to Web-based resources is limited by an English language barrier.

There is an exchange policy based on Erasmus/Socrates programme now exchanging 45 students per year

### **Sub-area 6.1: Infrastructure**

Standards:

6.1.1 The faculty of medicine provides an appropriate infrastructure to ensure that the study programme can be adequately implemented.

6.1.2 The learning environment for the students is regularly adapted to developments in medical education.

Analysis

The faculty of medicine does provide an appropriate infrastructure.

The learning environment for the students is regularly adapted to developments in medical education.

Conclusions

Standard compliance 6.1.1: fulfilled

Standard compliance 6.1.2: fulfilled

Recommendation

**To facilitate access to Web-based resources including PubMed and Up-toDate programs, stimulate the mastery of the English language. This will enhance the study program and promote lifelong learning.**

**Sub-area 6.2: Practical clinical training resources**

Standard:

6.2.1 The faculty of medicine provides the necessary resources for adequate clinical education, including a sufficient number of patients and clinical training facilities.

Analysis

The faculty of medicine does provide the necessary resources for adequate clinical education.

Conclusions

Standard compliance 6.2.1: fulfilled

**Sub-area 6.3: Information Technology**

Standard:

6.3.1 The faculty of medicine has a policy for the efficient use of information and communication technologies in its study programme. Teachers and students are enabled to use information and communication technology for self-learning, accessing information, managing patients and working in health care systems.

Analysis

The faculty of medicine does have a policy for the efficient use of information and communication technologies in its study programme. Other than the previous statements concerning the English language, ICT is well integrated into the program.

Conclusions

Standard compliance 6.3.1: fulfilled

### **Sub-area 6.4: Research**

Standards:

- 6.4.1 The faculty of medicine has a policy describing the research facilities and areas of research priorities at the institution, as well as the relationship between research and teaching.
- 6.4.2 The interrelationship between research and teaching is reflected in the study programme and in the current course offerings. The students are encouraged and prepared to participate in medical research and development.

Analysis

The research facilities appear to be appropriate; however, the research policy of the Faculty is not focussed on education.

Research is represented in the program in the form of the Master thesis and the possibility for an MD-PhD program (about 20 students per year). Students may participate in research in an extra-curricular setting. The majority of teachers appear to be involved personally in research.

Conclusions

Standard compliance 6.4.1: fulfilled

Standard compliance 6.4.2: fulfilled

### **Sub-area 6.5: Educational expertise**

Standard:

- 6.5.1 The faculty of medicine includes educational expertise when planning basic medical education and developing teaching, learning and assessment methods.

Analysis

The faculty of Medicine has an expert and committed unit of education ('Pedagogical Unit') that clearly enhances the quality of the program.

Conclusions

Standard compliance 6.5.1: fulfilled

Recommendation.

**The unit is doing innovative work and should consider adding a research agenda to its service mission.**

### **Sub-area 6.6: Cooperation**

Standards:

- 6.6.1 The faculty of medicine has formulated a policy for cooperation with other educational institutions and the transfer of educational credit points.
- 6.6.2 Regional and international exchange of academic staff and students is facilitated by the provision of appropriate resources.

Analysis

An exchange policy is formulated, mainly consisting of European exchange through the Erasmus and Socrates programs. The aim is to spend 1 to 2 semesters (14-28 weeks) at a foreign university, usually during the 4<sup>th</sup> year of the curriculum (Master 1). About 45 students each year are exchanged. Exchange outside Europe is rare. Exchange is facilitated for students, including administrative and financial support.

Conclusions

Standard compliance 6.6.1: fulfilled

Standard compliance 6.6.2: fulfilled

### **Area 7: Programme evaluation**

Overall evaluation:

The study programme is periodically evaluated through the evaluation of the modules. In the first years, the evaluation used to be systematic, but now, because of a lack of resources in the Pedagogical Unit, it has been restricted to a sub sample of them.

Teacher evaluation is also quite incidental and its results are kept confidential and disclosed only to the individual teachers. This fact makes it difficult to have an overall discussion of the teaching quality. Student participation is also quite variable.

Also student performance is not fully monitored, due to the difficulty to consider individual responses to the MCQ items.

### **Sub-area 7.1: Study programme evaluation**

Standards:

- 7.1.1 The faculty of medicine has quality assurance mechanisms (i.e. evaluations) that monitor the study programme and student progress, and ensure that weaknesses are identified and addressed.
- 7.1.2 Study programme evaluation includes the context of the educational process, the specific components of the study programme, and the general outcome.

#### Analysis

There is a systematic evaluation of modules, recently reduced to 1 in 3 by limitation in capacity. Results are discussed by the curriculum committee and used for improvement. Student performance progress is not systematically monitored; only overall data on exam results and study success are available.

Teacher evaluation appears to be incidental and limited to their lecturing quality. In addition, results are confidential and disclosed only to the individual teacher.

Students participation to the evaluation process is quite variable and ranges from 20 to 70%.

The evaluations include components of the programme but not the quality of the exams or their results. This is partly due to the fact that the evaluations are carried out before the date of the exam.

#### Conclusions

Standard compliance 7.1.1: partially fulfilled

Standard compliance 7.1.2: partially fulfilled

#### Recommendation

***While the Faculty must respect privacy, there should be more systematic monitoring of student performance and teachers' teaching quality and analysis of individual and program quality.***

## Sub-area 7.2: Teacher and student feedback

Standards:

- 7.2.1 Feedback from both teachers and students is systematically collected, analysed, and used to continually improve the study programme.
- 7.2.2 Teachers and students are to be actively involved in planning the study programme evaluation and using its results for programme development.

Analysis

Feedback from teachers (peer evaluation) is not collected; the Faculty has recently initiated a program for this purpose. Feedback from students is collected through the evaluations described above. In addition, occasional evaluations are performed on the performance of individual teachers. This concerns only their lecturing skills. The results of these evaluations are confidential and are presented to the teachers only.

Feedback from exams is not easily available as results are collected at a central level and review of the student performance at the level of each question of the MCQ test is not possible.

The results that are available are used to involve teachers and students in programme evaluation and development.

Conclusions

Standard compliance 7.2.1: partially fulfilled

Standard compliance 7.2.2: partially fulfilled

Recommendation

***Systematic teacher evaluation and feedback is recommended, including performance of individual teachers. Their performance may be discussed with the pedagogical unit, and if necessary, occasionally, with their superiors. This may be used to address limitations and support the teachers in their development and teaching career.***



### **Sub-area 7.3: Student performance**

Standard:

7.3.1 Student performance is analysed in relation to the mission, objectives, and study programme of the faculty of medicine, and brought to the attention of the curriculum committee.

Analysis

The performance of individual students is not systematically monitored. Overall data on exam results are collected and used for improvements.

Conclusions

Standard compliance 7.3.1: partially fulfilled

Recommendation

**A systematic analysis of students performance is recommended and its results used for improvement of the programme.**

### **Sub-area 7.4: Involvement of stakeholders**

Standard:

7.4.1 The processes and outcome of study programme evaluation involve the governance and administration of the faculty of medicine, academic staff and students and take into consideration feedback from additional stakeholders.

Analysis

There is a good involvement of stakeholders in discussing and reviewing the study programme.

Conclusions

Standard compliance 7.4.1: fulfilled

## **Area 8: Governance and administration**

### **Sub-area 8.1: Governance structures and functions**

Standards:

- 8.1.1 Governance structures of the faculty of medicine and their functions are defined, including their relationship within the university and to the university hospital.
- 8.1.2 The faculty of medicine has a strategic plan.
- 8.1.3 The academic staff participates in decision-making processes concerning teaching and research.
- 8.1.4 Decision-making processes, competencies, and responsibilities are communicated to all participants.

Analysis

Governance structures are clear and transparent. The Dean is personally and deeply engaged, knowledgeable, and highly respected.

He is supported with a productive relationship with formal reporting, regular communication, and support from the leadership of the University

Recent changes from the Canton regulations have led to changes in the representation of academic staff in the Faculty Committee, resulting in disengagement by senior faculty.

Conclusions

Standard compliance 8.1.1: fulfilled

Standard compliance 8.1.2: fulfilled

Standard compliance 8.1.3: fulfilled

Standard compliance 8.1.4: fulfilled

Recommendation

***The School continues their action to reengage faculty leadership in the academic process, including town-hall (small group) meetings, and use of the innovative ADIFAC instrument in meeting with chairs and Faculty across FBM and CHUV.***

### **Sub-area 8.2: Academic leadership**

Standards:

- 8.2.1 The responsibilities of the academic leadership of the faculty of medicine for the medical study programme are clearly stated.
- 8.2.2 The academic leadership is periodically assessed with regard to the fulfilment of the mission and objectives of the faculty of medicine.

Analysis

The Dean has created adequate vice dean positions for education, research and clinical care and the Directorship of the School to address the mission and strategic plan.

The Vice dean for Education provides deeply respected leadership critical to the success of the New Curriculum

The dean is empowered by his relationship and reports to the Rector of the University and his relationship with senior leadership of CHUV to adequately direct and stimulate faculty toward teaching and academic engagement.

Conclusions

Standard compliance 8.2.1: fulfilled

Standard compliance 8.2.2: fulfilled

Recommendation

***We commend the dean's leadership and recommend following through with communication plans in progress in order to engage all stakeholders from Canton and CHUV leadership, as well as key faculty, in the strategic plan.***

### **Sub-area 8.3: Administrative staff**

Standard:

- 8.3.1 The faculty of medicine has sufficient administrative staff. This ensures the organisational implementation of the study programme and other activities, and guarantees efficient resource management.

## Analysis

Recent changes in staffing through the Vice Dean for Education have provided adequate secretariat staff to provide support for the new curriculum.

The Pedagogical unit generally has adequate resources for management and evaluation of program and students. However, maternity leaves were not compensated, resulting in fewer course evaluations.

## Conclusions

Standard compliance 8.3.1: fulfilled

Recommendation.

***Maintain resources in the Pedagogical Unit at full or increased capacity.***

## **Sub-area 8.4: Educational budget and resource management**

### Standards:

- 8.4.1 The faculty of medicine has clear authority and responsibility for the study programme and its financing. This includes a dedicated educational budget.
- 8.4.2 The faculty of medicine has sufficient autonomy to direct resources, including the remuneration of teaching staff, in order to achieve the overall objectives of the faculty.
- 8.4.3 The financial sources and all conditions linked to financing are transparent, and do not hinder the autonomy of the faculty of medicine to make decisions concerning teaching and research.

## Analysis

There are adequate resources in the budget transmitted from the University to the Faculty of Medicine (FBM) and CHUV to achieve the Strategic plan and Mission.

There are negotiations in progress to provide more transparency and mission based allocation of that budget in the clinical phase of the programme, using innovative reporting and productivity reporting to promote academic activities across the mission.

## Conclusions

Standard compliance 8.4.1: fulfilled

Standard compliance 8.4.2: fulfilled

Standard compliance 8.4.3: fulfilled

Recommendation

***The Dean needs to continue to acquire data through ADIFAC and engage senior leadership and Chiefs of Service in this process such that dedicated teaching and research funds reach critical teaching faculty, including junior faculty.***

### **Sub-area 8.5: Interactions with the health sector**

Standard:

8.5.1 The medical faculty collaborates with the health and health related sectors of society and government.

Analysis

The Faculty of Medicine has worked with Canton leadership, regional medical leadership, and local clinical faculty to meet local needs of providing more primary care careers.

This has included early and required exposure to general medical practitioners, provision of Generalist curriculum, and work with advocacy with primary care groups

Conclusions

Standard compliance 8.5.1: fulfilled

### **Area 9: Continuous renewal/quality assurance**

Standard:

9.1.1 As a dynamic institution, the faculty of medicine implements procedures for the periodic reviewing and updating of its structure and functions, and rectifies documented deficiencies.

### Analysis

The quality assurance system of the faculty is not fully established. Review procedures are sometimes incidental with no clear periodicity and criteria for coverage of all activities of the school (teacher evaluation, administrative procedures evaluation and so on). We acknowledge the fact that there is a University wide system taking care of that, but we would expect more from the medical school, especially related to clinical teaching.

There are few examples of rectifications of documents and procedures after revision.

### Conclusions

Standard compliance 9.1.1: partially fulfilled

### Recommendation

***A structured quality assurance system needs to be put in place with clear definition of procedures, including adequate resources for the Pedagogical Unit to oversee this process.***

#### 4 Compliance with legal requirements

- Art. 24 (Loi sur les professions médicales, LPMéd) Filières d'études

1 Une filière d'études devant mener à l'obtention d'un diplôme fédéral est accréditée si elle répond, outre à l'exigence d'accréditation prévue dans la LAU aux critères suivants:

- a. elle permet aux étudiants d'atteindre les objectifs de la formation à la profession médicale universitaire qu'ils ont choisie;
- b. elle permet aux étudiants de suivre une formation postgrade.

The experts team believes that the medical curriculum under consideration complies with the legal requirements foreseen by the law.

#### 5 Strengths and Weaknesses

Given the previous analysis of the curricula in Lausanne and Neuchatel, the expert team underlines the following **strengths** of this programme.

- a) **High quality educational programme** – The educational programme is well designed, with a full coverage of all necessary contents for a good medical doctor and a satisfactory exposure to basic clinical aspects of medical training.
- b) **Dedicated teaching staff, particularly in the bachelor phase** – In the Bachelor phase the dedication to teaching is particularly evident and the attention to all aspects of a quality didactic taken into account, thanks also to the Pedagogical Unit set up for this purpose. Dedication to teaching is also evident in the clinical phase, even if competition with clinical care and not enough career merit assigned to it makes it difficult to keep a quality level or even improve it.
- c) **Commitment from faculty leadership** – The Faculty leadership is fully committed to the development of the School and to its quality improvement, even if lack of representativeness from the overall teaching staff has made the Dean's position more difficult.
- d) **Excellent atmosphere with good student satisfaction** – The students have always expressed high satisfaction for the School and for their learning experience, except for the stressful experience of the first year. They appreciate the quality of teaching and the quality of the general resources available to support their learning experience.

- e) **Excellent quality of didactic resources and teaching infrastructures** – The expert team has very much appreciated the quality of the didactic resources available at both sites of training and of all infrastructures generally available to the students: space for studying, electronic resources, library resources, laboratories for practicals, space for meeting and resting.

As for the **Weaknesses**, the expert team would underline the following.

- a) **Stressful first year of the bachelor phase** – The expert team realises that this factor is not under the Faculty control and therefore not even under their responsibility. However the negative influence that this situation creates is evident on the quality of the learning during the first year .
- b) **Assessment strategies are not aligned with the educational goals** – As frequently mentioned in the report, the assessment strategies do not appear coherently aligned with the educational goals expressed in the SCLO and assumed by the Faculty as own Learning Objectives. A good effort has been done so far to reach this coherence but more has to be done.
- c) **Integration of basic and clinical sciences is not strongly developed** – Basic and clinical sciences appear quite disjointed between the Bachelor and Master phases, even if some attempt towards early clinical exposure and re-uptake of basic concepts during the clinical years has been developed. The progressive integration of the two components has to be worked through in a more continuous and smooth way along the six years of training.
- d) **There is no stand alone and professionally-led student counselling services** – The numerous occasions which can involve stressful experiences on the students, apart from the first year, should be taken care of by a permanent service organised by the Faculty rather than left to the students' initiative and good will, with no control of the professional competence of the involved professionals.



## 6 Comprehensive list of recommendations and conditions

Recommendations for quality enhancement:

- Prepare a more precise definition of the mission statement.
- Continue efforts to make the study programme completely coherent with the SCLO, and in addition, develop learning objectives for the Bachelor's degree
- Develop a system to monitor student performance as they progress through the program and develop a system to follow-up the graduates during postgraduate training.
- The Faculty could improve the student's use of English references and textbooks.
- The Faculty could explicitly foster the development of life-long learning skills. To facilitate this, the Faculty could increase the use of new methods of active learning and evidence based clinical practice.
- The Faculty could pursue their efforts of establishing the coherence of its study programme with the SCLO.
- The Faculty could further strengthen the integration between basic and clinical sciences within the Bachelor and Master degree and make the transition more gradual. Partial repetition of topics from basic sciences in the Master phase ('just in time learning') is recommended.
- The integration between disciplines is still limited to a juxtaposition of contents rather than fully integrate them. Expansion of case-based learning and integrated assessment methods may enhance the curriculum.
- The Faculty could enhance/ evidence-based thinking, also by increasing more interactive teaching methods.
- The Faculty could protect and further develop these new areas in order to update its contents in relationship with the changing needs of society.
- The Faculty re-examine the position (sequence) of the last clinical year in the master's program.
- Consider talks with the Canton leadership about the way the selection (admission) process could be modified.
- Consider methods of providing advice and additional support to the large first-year classes.
- There is a need to better analyse the real capacity of the Faculty to deliver good education during the first year, if no selection were made, and in the clinical years, where the student/resource ratio is crucial for the adequate education of the future doctors.

- A counselling service for the students should be put in place to take care of students having problems or distress. The students need to be well informed about this counselling service from the beginning of the first year and throughout the program.
- Maintain the levels of reliability for the first-year exams at the .85 or .90 levels.
- Verify the psychometric quality of the OSCEs after each administration.
- When verifying content validity of the Module exams, go beyond simply making sure that the proportion of questions on the exam matches the proportion of lectures given in the module, and verify the representativeness of the questions on the exam with the domain of learning objectives for the module.
- Reconsider the use of K-type questions as well as negatively formulated exam questions.
- A staff recruitment policy could be implemented that defines educational responsibilities and required teaching skills. In addition, incentives for staff members should be developed in order to stimulate and reward their participation in education.
- The faculty of medicine should strive for a balance in teaching, research, and service functions. Recognition of teaching activities should be ensured with appropriate emphasis on both academic tasks, and with appropriate incentives for teaching. In addition, an academic teaching career track should be considered.
- To facilitate access to Web-based resources including PubMed and Up-toDate programs, stimulate the mastery of the English language. This will enhance the study program and promote lifelong learning.
- The unit is doing innovative work and should consider adding a research agenda to its service mission.
- While the Faculty must respect privacy, there should be more systematic monitoring of student performance and teachers' teaching quality and analysis of individual and program quality.
- Systematic teacher evaluation and feedback is recommended, including performance of individual teachers. Their performance may be discussed with the pedagogical unit, and if necessary, occasionally, with their superiors. This may be used to address limitations and support the teachers in their development and teaching career.
- A systematic analysis of students performance is recommended and its results used for improvement of the programme.
- The School continues their action to reengage faculty leadership in the academic process, including town-hall (small group) meetings, and use of the innovative ADIFAC instrument in meeting with chairs and Faculty across FBM and CHUV.

- We commend the dean’s leadership and recommend following through with communication plans in progress in order to engage all stakeholders from Canton and CHUV leadership, as well as key faculty, in the strategic plan.
- Maintain resources in the Pedagogical Unit at full or increased capacity.
- The Dean needs to continue to acquire data through ADIFAC and engage senior leadership and Chiefs of Service in this process such that dedicated teaching and research funds reach critical teaching faculty, including junior faculty.
- A structured quality assurance system needs to be put in place with clear definition of procedures, including adequate resources for the Pedagogical Unit to oversee this process.

Conditions (standard 4.2.2):

1. Prepare Module exams that assess mainly student’s ability to apply and integrate knowledge and skills within and across topics and body systems
2. Keep track (log) of the clinical conditions seen by the student across the clinical rotations over time (both in M1 and M3) and periodically assess integration in a summative way at the bedside

## **7 Recommendation on accreditation**

YES, under the conditions elicited under standard 4.2.2, to be reviewed within a time-span of no less than 3 years.