REPORT of the Expert Panel on the

RE-ACCREDITATION OF the University of Split School of Medicine

Date of the site visit: March 5^{th} and $6^{th}\,2015$

April 2015

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INTRODUCTION

This report on the re-accreditation of the University of Split School of Medicine (USSM) was written by the Expert Panel appointed by the Agency for Science and Higher Education, on the basis of the self-evaluation of the institution and supporting documentation and a visit to the institution.

Re-accreditation procedure performed by the Agency for Science and Higher Education (ASHE), a public body listed in EQAR (European Quality Assurance Register for Higher Education) and ENQA (European Association for Quality Assurance in Higher Education) full member, is obligatory once in five years for all higher education institutions working in the Republic of Croatia, in line with the Act on Quality Assurance in Higher Education.

The Expert Panel is appointed by the ASHE Accreditation Council, an independent expert body, to perform an independent peer-review-based evaluation of the institution and their study programs.

The report contains:

- a brief analysis of the institutional advantages and disadvantages,
- a list of good practices found at the institution,
- recommendations for institutional improvement and measures to be implemented in the following period (and checked within a follow-up procedure), and
- detailed analysis of the compliance to the Standards and Criteria for Re-Accreditation (...).

The members of the Expert Panel were:

- Professor Stefan Meuer, Institute of Immunology, Ruprecht Karls-Universität Heidelberg, Federal Republic of Germany (Chair of the Expert Panel)
- Professor Markus Paulmichl, Paracelsus Medical University, Republic of Austria
- Professor Mare Saag, Department of Stomatology, Faculty of Medicine, University of Tartu, Republic of Estonia
- Professor Alastair Campston, Department of Clinical Neurosciences, University of Cambridge, United Kingdom of Great Britain and Northern Ireland
- Professor Peter Hylands, Institute of Pharmaceutical Science, King's College, United Kingdom of Great Britain and Northern Ireland
- Adam Vrbanić, student, Faculty of Medicine University of Zagreb, Republic of Croatia

In the analysis of the documentation, site visit and writing of the report the Panel was supported by the ASHE staff:

Dr. Josip Hrgović, coordinator

- Ivan Bišćan, support to the coordinator
- Đurđica Dragojević, translator

During the visit to the Institution the Expert Panel held meetings with the representatives of the following groups:

- The Faculty Management;
- The Working Group that compiled the Self-Evaluation;
- The representatives of the Quality management commission;
- The representatives of the Board for education and Heads of Study Programs;
- The students, i.e., a self-selected set of students present at the interview;
- The representatives of the Commission for Scientific Research and heads of research projects;
- Teaching assistants and junior researchers;
- Heads of the Departments;
- Teaching staff.

The Expert Panel also had a tour of the library, student register desk, a teaching base CHC Split, and the classrooms at the Faculty where they held brief question and answer sessions with the students and non-teaching staff.

Upon completion of re-accreditation procedure, the Accreditation Council renders its opinion on the basis of the Re-accreditation Report, an Assessment of Quality of the higher education institution and the Report of Fulfilment of Quantitative Criteria which is acquired by the Agency's information system.

Once the Accreditation Council renders its opinion, the Agency issues an Accreditation Recommendation by which the Agency recommends to the Minister of Science, Education and Sports to:

1. **issue a confirmation** to the higher education institution, which confirms that the higher education institution meets the requirements for performing the higher education activities or parts of activities, in case the Accreditation Recommendation is positive,

2. **deny a license** for performing the higher education activities or parts of activities to the higher education institution, in case the Accreditation Recommendation is negative, or

3. **issue a letter of recommendation** for the period up to three (3) years in which period the higher education institution should remove its deficiencies. For the higher education institution the letter of recommendation may include the suspension of student enrolment for the defined period.

The Accreditation Recommendation also includes an Assessment of Quality of the higher education institution as well as recommendations for quality development

SHORT DESCRIPTION OF THE EVALUATED INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: the University of Split School of Medicine (USSM) ADDRESS: Šoltanska 2, 21000 Split NAME OF THE HEAD OF HIGHER EDUCATION INSTITUTION: Professor Dragan Ljutić, MD, PhD ORGANISATIONAL STRUCTURE (e.g. chairs, departments, centres) LIST OF STUDY PROGRAMMES:

Integrated programmes:

Medicine

Dental Medicine

Pharmacy

Medicine in English Language

Professional programmes:

Clinical Epidemiology (CE)

Postgraduate programs:

Evidence Based Medicine (EBM)

Biology of Neoplasms (BN)

Translation Research in Medicine

NUMBER OF STUDENTS

Full-time: 1184

Part-time: 0

Absolvent: 11

NUMBER OF TEACHERS

Full-time: 31

Cumulative: 85

External associates: 58

TOTAL BUDGET (in kunas): 44.038.180,00

MSES FUNDING (percentage): 65,6%

OWN FUNDING (percentage): 34,4%

SHORT DESCRIPTION OF HIGHER EDUCATION INSTITUTION:

In 1997 the University of Split School of Medicine became an independent constituent of the University of Split. At that time there was only one study program, medicine. Today USSM conducts a six-year integrated "Medicine" programme for 509 students, a six year integrated "Dental Medicine" programme (since 2007) for 167 students, a six-year integrated "Medicine in English" programme for 153 students, and 3 postgraduate programmes: "Evidence based clinical medicine", "Biology of neoplasms" and "Translation Research in biomedicine" (TRIBE) with a total of 288 students.

At the end of 2011, the professional programmes "Radiology", "Nursing" and "Physiotherapy" separated from USSM, and are now part of a new University Department: Department of Health Sciences. Over the last 10 years, USSM has founded three new study programmes as follows: A six year integrated programme in "Dental Medicine", which commenced on October 1st 2007; A six-year integrated programme in "Medicine in English", which commenced on October 1st 2011; a five year integrated programme in "Pharmacy", which commenced on October 1st 2010.

CONCLUSIONS OF THE EXPERT PANEL

ADVANTAGES OF THE INSTITUTION

- 1. Impressive quality management
- 2. Visible strategic processes and high ambition
- 3. Very good personal interactions and enthusiasm
- 4. Highly motivated teachers and students
- 5. Comparably excellent publication record
- 6. Efficient use of limited resources

DISADVANTAGES OF THE INSTITUTION

- 1. Severe lack of staff (teaching, research, and administrative)
- 2. Shortage of (university employed) teaching staff requires the involvement of physicians based at affiliated hospitals which the consequence that the teaching quality is hard to control.
- 3. The enormous load of teaching obligations strongly limits the capacities to perform research at an internationally competitive level.
- 4. Severe shortage of space and financial resources.
- 5. Lack of sufficient facilities for clinical practical training (particularly for dental students)
- 6. Limited access to significant and relevant scientific journals

FEATURES OF GOOD PRACTICE

- 1. Strategic plan/document that delineates a realistic approach to achieve international recognition
- 2. Performance indicators (teaching quality; grant acquisition, bibliometrics)
- 3. Key topics, mission, vision, and analysis of potentials exist
- 4. Comprehensive research strategy document has been generated (it is, however, too early to judge its potential)

RECOMMENDATIONS FOR IMPROVEMENT

1. Management of the Higher Education Institution and Quality Assurance

- Given the existing restrictions in funds and qualified staff, the Faculty should be rather restrictive in increasing student numbers
- Remodel unsuccessful PhD programs (two out of three)
- Increase international student mobility
- Enhance scientific profiling to reach international visibility
- Reduce the "obsession" with bibliometric parameters

2. Study Programmes

- Good cooperation with stakeholders, local industry, and other faculties in Croatia
- Be careful when asked (by the government) to increase student quotas as long as the necessary resources to handle more students are not available.
- Exams should be more connected to the teaching programs and not simply oriented on "outdated" textbooks.

3. Students

- Students need to be given a feedback regarding influences of their evaluations on the improvement of the teaching quality.
- Input of students serving on committees should be taken more seriously.
- Establish means to improve student contacts with alumni.
- Increase the ratio of teaching staff/students (government obligation).
- Support their international mobility (see below, 6.).

4. Teachers

- Increase the number of University employed teaching staff, particularly in Pharmacy and Dental Medicine.
- Incentives and rewards should be considered to enhance motivation. For both research and teaching.
- Reduce the huge degree of teaching activities and allow more time for research.
- Especially those teachers who fulfill clinical duties have a hard time to qualify as good teachers. Criteria for an appropriate balance between clinical work, teaching duties and research should be established and applied.

5. Scientific and Professional Activity

- Enforce a monitoring strategy of performance indicators.
- Encourage patenting and licensing.
- Appoint an advisory board with, at least in part, international members.
- Identify and concentrate on a few original research topics.

6. International Cooperation and Mobility

- Encourage/support international exchange and mobility by adjusting the schedules of classes such that students do not loose time because of an exchange period.
- Try to attract students through ERASMUS and/or through exchange programs at the EUand international level.
- Try hard to attract good postgraduates, especially to research laboratories.
- Improve the implementation of ECTS standards and needs. Pay more attention to the input of students.

7. Resources, Administration, Space, Equipment and Finance

- There exists clearly a lack of all types of staff, not only in the medical school but also in the Schools of Pharmacy and Dental Medicine. The only approach that exists to improve on this is an increase of financial funds provided by the Government. Otherwise it will be very hard to develop these Schools into internationally visible and competitive institutions that train both physicians and academic staff.
- All schools need more space and facilities for clinical practical training of students (particularly Dental School).

DETAILED ANALYSIS OF INSTITUTIONAL COMPLIANCE TO THE STANDARDS AND CRITERIA FOR RE-ACCREDITATION

1. Institutional management and quality assurance

- 1.1 There exists a strategic process and ambition, but not yet a fully implemented strategic mission. The strategic plan was something we understood from the conversations, not necessarily from the written version. Monitoring mechanisms need to be improved or better explained as an area of special concern in the strategy. The operation plans are not updated regularly.
- 1.2 The competence of the management and the quality assurance mechanisms are largely developed at international levels. Mechanisms aimed at improving the quality of Institutional activities, teaching quality, as well as research quality are implemented and functional. The institution has developed effective organisational structures and processes. They are all formalized in legal documents.
- 1.3 The Medicals School contributes to the goals of the University and aligns its strategy with the university strategy. It should be noted that the Medical Faculty as the teaching entity is under the authority of the Ministry of Education, whereas the teaching hospital is under the authority of the Ministry of Health (is this helpful?). The Medical Faculty is strongly dependent on interactions with qualified physicians based at affiliated hospitals. Clearly, this strategy represents one mechanism for increasing the provision of teaching for which the academic staff have overall responsibility. However, one has to acknowledge that this arrangement does not enable precise quality control for all aspects of teaching provided through the University/Medical Faculty. Therefore, the panel recommends considerable expansion in the number of teaching personnel within the University/Medical Faculty.
- 1.4 The Faculty of Medicine of the University of Split successfully conducts teaching programmes in its Medical School, Dental School and School of Pharmacy in line with its institutional mission. In addition to a curriculum in Croatian language, medical education is also provided in an English programme, largely for students from foreign countries. The latter not only helps to promote interactions with international Universities but also contributes funds that are necessary to support both teaching staff and research.
- 1.5 Stakeholders such as the Pharmacy Chamber and the Dental Chamber are involved in shaping the teaching programs. Students are sent to private practices.
- 1.6 There are student evaluations. The mechanisms are definitely there, but their effectiveness is not entirely perfect monitoring should be improved but without making it a burdensome bureaucratic exercise. We have received no sufficiently obvious evidence that the results of evaluations by students play a particular role. Student

evaluations should exist in all courses and their content should be discussed with students.

- 1.7 Research is monitored quantity-wise, with impact factors etc.; this is not the perfect solution, as emphasis is then not necessarily on quality (but the overwhelming "obsession" with bibliometrics is quite usual worldwide).
- 1.8 The institution has functional and effective mechanisms for monitoring unethical behavior in teaching and research of which most members and students are informed.

2. Study programmes

- 2.1 There exists a good cooperation with the stakeholders, the local industry and the other faculties in Croatia.
- 2.2 The government asks the Faculty to increase the student quotas, and they are doing this within their possibilities.
- 2.3 The Faculty is aware that they lack staff and equipment; they are complaining about it and are forced to hire additional staff from their own funds, primarily earned through the English program. If the government wants them to educate more professionals, they need to increase the funding since, at present, they are absolutely under-resourced and there is an urgent need for change. There is OSCE in some classes. When students have low a pass rate, the threshold necessary to pass is lowered not to have too many students failing.
- 2.4 Knowledge is clearly described, but the practical skills are not well included in the outcomes. The exams should be connected to the teaching content, not simply based on textbooks. Otherwise, it is commendable that exam questions are not simply repeated.
- 2.5 Teachers work hard. Students confirm that they are easily accessible, there is a friendly atmosphere and a whole range of teaching methods is described in the documents.
- 2.6 The allocation of ECTS needs to be improved according to the input of students (currently the third year is more difficult than the second).
- 2.7 There are complaints that some programs are outdated. Textbooks are a problem and teachers should be encouraged to translate contemporary textbooks or employ literature in English, instead of using Croatian textbooks. This is a common difficulty all over the world, as there is no peer review for textbooks and they often contain numerous errors. Review articles would represent a better source of information.
- 2.8 Teachers employ teaching methods that are appropriate for subject matter and different ways of learning and encourage independent student learning.
- 2.9 Students are not using the medical school library to study since it is too small and, therefore, rather crowded. But there exists the University library. Most textbooks are out of date. An effort is made to propose English textbooks that are up to date, which is commendable.
- 2.10 A lot of "outside" opportunities are provided, but depend on the student's initiatives. The Faculty should encourage those students who may largely not be

sufficiently proactive to make use of these programs and also try to fit it into the curriculum so that the workload is not an obstacle.

3. Students

- 3.1 Students are selected on general criteria, namely their performances in secondary schools and on State Matura. They receive their education in line with contemporary standards and are also supported in their extracurricular activities. The panel had the impression that, regarding their interaction with teaching staff, the students want to get more involved in shaping teaching programs. To some extent, this may be a perceived deficiency that could be remedied by a more in-depth feedback on the measures that have been taken in response to their opinions and suggestions for an improvement in the quality of education. But this, again, might result from the limited time available to the teaching staff, who, besides their teaching obligations, carry significant clinical responsibilities. This emphasises further that the ratio of teaching staff to students is low and, self evidently, far from ideal. The Faculty admits the best students nationally. The Medicine in English program should have stricter criteria, and the national admission process should also include individual, personal assessment, value-based recruitment through a structured, objective interview. Regarding the pharmacy programme, teaching and curriculum correspond to European standards. The effort undertaken to offer the students a solid (> two month) hands-on experience in selected pharmacies is very much appreciated. We were able to visit a pharmacy hosting a student and could verify at firsthand the setting as well as the mentoring, which are both of high standard and quality and very well organized.
- 3.2 A lot of "outside" opportunities are provided, but depend on the student's initiatives. The Faculty should encourage those students who may largely not be sufficiently proactive to make use of these programs and also try to fit it into the curriculum so that the workload is not an obstacle.
- 3.3 There is good support by the Faculty. Learning Croatian for foreigners might be better organized in cooperation with students, however, this also depends on the initiative of the students themselves. Students feel satisfied regarding contact with teachers and dislike the idea of having a tutor, although we support the idea of an individual "go-to" person.
- 3.4 The students can refuse the mark as allowed by law. Multiple choice is used in all faculties in Croatia, and there are, in addition, practical/oral exams.
- 3.5 There exists no contact with alumni except at the individual and personal level, however they have mentioned this issue to become a future University project.
- 3.6 The website contains all the necessary information.
- 3.7 Students sit on all committees and fill in evaluations, however they feel that their opinions are not taken into account sufficiently.

3.8 The students do not really know what happens with their feedback; this used to be better organized in earlier times but has become a difficulty due to recent measures e. g. in data protection guidelines.

4. Teachers

- 4.1 The lack of teachers represents the major point of criticism and we believe that this is a fault of the government. It needs to invest into the programs substantially and in short order. The Faculty tries to employ people from its own funds and makes arrangements with health centers and private clinics. The current situation is absolutely unsustainable. A vibrant University Department needs sufficient "own" staff, and particularly at Pharmacy and Dental Medicine this is not the case. The national standards are not high-quality standards, they require too much teaching and result in grotesquely unfair distributions between activities in research, clinical duty and education. This is not the fault of the institution the teachers are truly dedicated. Most people live in a mess of teaching, research and clinical work, and clinical commitments are taking a large portion of their time. There are problems with monitoring clinical staff. This appears to represent a national problem. This particular institution seems to be disadvantaged in comparison to other Croatian faculties. The promotions are not connected to salaries, which is the ministry's fault. There are no regular appraisals. Although this may not be a part of the national culture it needs to be introduced.
- 4.2 4.6. (see above: 4.1 addresses all points those questions seem redundant and repetitive).

5. Scientific and professional activity

- 5.1 There is a strategic paper, and its aims seem to be realistic ('become internationally respected'). However this document is rather new and more of an aspirational plan than a monitored strategy. Thus, we cannot give it a top mark as it is too early. Performance indicators are bibliometrics and the advisory board with some quality criteria added, and within limits it can be said that a monitoring strategy has been implemented in the past. Yet, the key topics, mission, vision and analysis of potentials are all visible. The Faculty plans to appoint an advisory board for monitoring and evaluation purposes, which is commendable. They want to use this board to come up with a proposal, while we suggest that this is something that should be done internally. Additionally, we suggest them to go into niches, not mainstream research, in order to be able to compete. Moreover, partnering potential also needs to be built. We wish to emphasize, however, that we appreciate the effort invested into creating this research agenda.
- 5.2 With regard to mobility and international cooperation the institution has an impressive record. Not only does it support mobility in the framework of local and international

exchange programmes; but participation in international associations, international study programme (medicine in English), and the ability to attract individuals from abroad as members of faculty are successful and applauded.

- 5.3 While the Institution has developed a strategic research agenda, its implementation suffers from the low number of individuals directly involved in research. Clearly, however, those who exist perform very well as documented by an impressive record of peer-reviewed scientific publications.
- 5.4 According to the Self-evaluation, the institution is the best per capita publisher in the country (among the Schools of Medicine) and has some internationally relevant publications (Nature Genetics, which is due to participation in large consortia, however the paper on mutations has a first authorship which is excellent). They are particularly good for Croatian standards.
- 5.5 Successful people get promotions without getting a salary raise. There are annual awards for best papers and projects. Additional funding would help them in this regard.
- 5.6 See 5.4.
- 5.7 The Faculty has a large number of national projects and some international ones, however they need a lot of funds to raise the level of excellence. They are doing very well with the limited funds they have. The Dentistry department is new and thus has few projects, which can be improved. They need more staff in the research area. However one group managed to get international funding for 12 individuals.
- 5.8 A patent office exists at the University, as well as trained people in the Faculty. However, there are no patents so far, which indicates that additional encouragement is needed.
- 5.9 The efforts to earn additional income are substantial, and these funds are invested into core activities. Again, the panel members are very appreciative of the efforts made by this Medical Faculty to develop into an internationally visible and competitive institution that trains both physicians and academic staff. Again, the existing lack of financial resources limits these efforts.
- 5.10 The Institution offers three postgraduate programmes. While two of these appear not to succeed (since the rates of failure are extremely high), the "TRIBE" programme performs very well and could serve as a model for the two rather less successful PhD programmes. This is important since successful completion of a PhD programme is one prerequisite for an academic career and a well-organized PhD programme with a high success rate will certainly substantially add to the School's reputation. The situation with the doctoral programs in Croatia is to be criticized in general, as they seem to function largely as a source of funds for which students get very little in return. The present system does not serve anybody - not the students, not the research, not the schools. The TRIBE program is convincing as it looks at the research proposals and awards supervisors from day one, so the chances of failing are considerably smaller.

6. International cooperation and mobility

6.1 Many doctoral students come from other academic institutions but mainly from Croatia.

- 6.2 It seems that the students have the opportunity to participate in exchange programs but the interest among the students to do so is not high. There exists a "disincentive" due to scheduling, since students can lose up to a year through being active in an exchange program. There is also the CROMSICK student exchange. The institution offers a full medical curriculum for students in English, however demands for tuitions. The English program could serve to increase the number of incoming Erasmus students. The integration of national and foreign students might be increased for a mutual benefit.
- 6.3 A number of times it was said that teachers are encouraged to go abroad. In fact, most teachers have undergone education abroad as PhD students and/or postdocs. The institution is trying to attract people from abroad with some success, mainly individuals connected to Split personally. More recently it was possible to attract others in addition. Also in this regard the Faculty seems to be highly motivated and ambitious.
- 6.4 The Medical Faculty of Split is part of international associations of similar institutions exchanging the results of scientific research in a wider scientific community. It also organizes visible international congresses in Split.

6.5 see 6.2

6.6 see 6.3

6.7 see 6.3 and 6.4

7. Resources: administration, space, equipment and finances

- 7.1 There is a lack of all types of staff teaching, research, and administrative. Laboratory equipment and relevant usage protocols comply with recognized international standards, but there are still difficulties due to space and budget restrictions including a preclinical training class for students of Dental Medicine.
- 7.2 see 7.1
- 7.3 This criterion was discussed already; no institution can ever meet this criterion fully as there is always room for improvement.
- 7.4 Laboratory equipment, at least to some extent and as it was presented to the panel members is modern/contemporary.
- 7.5 The Medical School Library is small and crowded and, therefore not used regularly by the students. Subscriptions for to most prominent scientific journals e.g. The Lancet, New England Journal of Medicine do not exist. Yet, equipment for student teaching complies with European standards. The Faculty needs to find funds for the already initiated reconstruction and re-equipment of the existing dental clinic to create more space and facilities for clinical practical training of students in order for them to obtain mandatory skills, improve their confidence and prepare for general dental practice.
- 7.6 see 7.5
- 7.7 There is a lack of all types of staff teaching, research, and administrative. Therefore and again, this Faculty needs and definitely deserves more funds from the Croatian Government. However, laboratory equipment and relevant usage protocols comply with recognized international standards.

7.8 The Faculty is successfully investing its funds into its further development in line with its mission.