

REPORT OF THE EXPERT PANEL ON THE RE-ACCREDITATION OF FACULTY OF MEDICINE OSIJEK UNIVERSITY JOSIP JURAJ STROSSMAYER OF OSIJEK

Date of preliminary site visit: 27 March 2023 Date of online re-accreditation: 29–31 March 2023

April 2023

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG), and good international practice in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of Faculty of Medicine Osijek.

Members of the Expert Panel:

- prof. dr. rer. nat. Peter Bugert, Medical Faculty Mannheim Ruprecht-Karls-University Heidelberg, Federal Republic of Germany, Panel Chair
- assoc. prof. Dijana Detel, PhD, MD, Faculty of Medicine, University of Rijeka, Republic of Croatia
- assist. prof. Jurij Dolenšek, PhD, Faculty of Medicine, University of Maribor, Republic of Slovenia
- prof. Igor Borić, MD, PhD, representative of the business sector, St. Catherine Specialty Hospital, Zagreb, Republic of Croatia
- Mia Slapničar, student, School of Medicine, University of Split, Republic of Croatia.

During the on-line re-accreditation, the Expert Panel held meetings with the following stakeholders:

- management,
- Committee for Monitoring and Assurance of Higher Education Quality,
- students,
- full-time teaching staff,
- heads of departments
- heads of study programmes
- the Ethics Committee; head librarian; Erasmus coordinator; ECTS coordinator,
- alumni
- teaching assistants and postdoctoral researchers,

- heads of research projects,
- representatives of the business sector, potential employers.

Some of the Expert Panel members went to the preliminary site-visit on 27 March 2023 during which they had a tour of the classrooms, laboratories, library, IT classrooms, student services, divisions, departments, clinics, and attended sample lectures, where they held a brief Q&A session with the students.

During the preliminary site visit, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of Faculty of Medicine Osijek on the basis of Faculty of Medicine Osijek Self-evaluation Report, other relevant documents, preliminary site visit, and on-line meetings.

The Report contains the following elements:

- Short description of the evaluated higher education institution
- Brief analysis of the institutional advantages and disadvantages
- List of institutional good practices
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard
- Appendices (quality assessment summary by each assessment area and standard, and protocol)
- Summary

In the analysis of the documentation, preliminary site visit to the Faculty of Medicine Osijek, online meetings and writing of the Report, the Expert Panel was supported by:

- Iva Žabarović, coordinator, ASHE
- Maja Šegvić, assistant coordinator, ASHE
- Igor Opić, interpreter at the preliminary site visit and during the online meetings
- Dijana Ćurković, PhD, translator of the Report, ASHE

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation to the Minister for Higher Education and Science:

- 1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
- 2. **denial of license** for performing the activities, or parts of the activities
- 3. **issuance of a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality grade of a higher education institution, and recommendations for quality improvement.

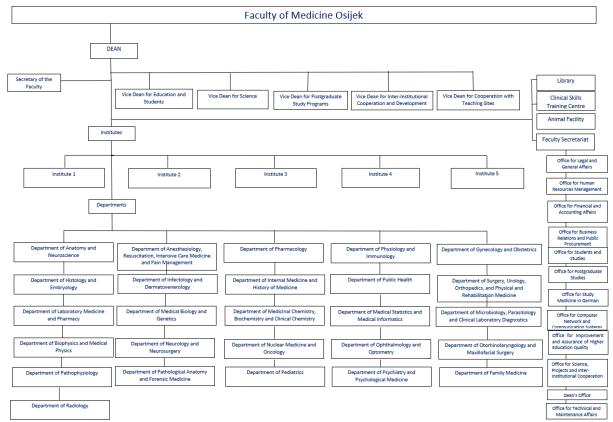
SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: Faculty of Medicine Osijek

ADDRESS: Josipa Huttlera 4, Osijek

DEAN: Ivica Mihaljević, Full Professor, MD

ORGANISATIONAL STRUCTURE (Self-evaluation report, page 2,3):



STUDY PROGRAMMES

Analytic Supplement, page 2, table 3.1:

- Medical Laboratory Diagnostics, undergraduate university study programme
- Medical Laboratory Diagnostics, graduate university study programme
- Medicine, integrated undergraduate and graduate university study programme
- Ophthalmology and Optometry, postgraduate specialist university study programme
- Anesthesiology, reanimatology and intensive care medicine, postgraduate specialist university study programme

• Biomedicine and Health, postgraduate (doctoral) university study programme.

University (postgraduate) specialist study programmes for which the Faculty of Medicine Osijek requested to be marked as inactive in MOZVAG2 tables: Neurology

Psychiatry Transfusion Medicine Clinical Epidemiology Ultrasound in Clinical Medicine; Specialisation in: Ultrasound in Cardiology General Internal Medicine Cardiology

Study programme enlisted in the Register of Study Programmes in December 2022, and in the syllabus for the academic year 2023/2024:

Pharmacy, integrated undergraduate and graduate university study programme

Study programme held by the Faculty of Food Technology Osijek, University of Josip Juraj Strossmayer in Osijek, and co-delivered by Faculty of Medicine Osijek:

Biotechnology, graduate university study programme in English

NUMBER OF STUDENTS (Analytic Supplement, page 2):

Table 3.1. Number of students per study programme for the evaluated academic year

Study programme name	Full-time students	Part-time students	
Ophthalmology and Optometry (869), postgraduate specialist university study programme, Osijek	0	18	
Medicine (1777), integrated undergraduate and graduate university study programme, Osijek	508	0	
Biomedicine and Health (1781), postgraduate (doctoral) university study programme, Osijek	0	276	
Medical Laboratory Diagnostics (1783), undergraduate university study programme, Osijek	89	0	
Anesthesiology, reanimatology and intensive care medicine (1784), postgraduate specialist university study programme, Osijek	0	42	
Medical Laboratory Diagnostics (1787), graduate university study programme, Osijek	43	11	
Total	640	347	

NUMBER OF TEACHERS (Analytic Supplement, page 7):

Staff*	Full-time staff		Cumulative employment		External associates	
	Number	Average age	Number	Average age	Number	Average age
Full professors with tenure	5	53,75	13	60,23	7	69,17
Full professors	5.42	-	13	57	11	60,64
Associate professors	6	49	31	57,52	19	56,31
Assistant professors	12	41,42	48	52,6	85	51,01
Scientific advisor (permanent/ with tenure)		-	-	-		-
Scientific advisor	엄마님	-	8 5 3		1992)	-
Senior Research Associate					620.	-
Research Associate	-	-	•		-	
Teaching grades	1	59	3	49,33	2	51
Assistants	9	33,33	31	39,03	121	29,87
Postdoctoral researcher	2	38,5	16	41,33	36	56,45

Table 4.1.a Staff Structure - FOR UNIVERSITIES in the evaluated academic year

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

The Faculty of Medicine of the Josip Juraj Strossmayer University of Osijek was founded in 1998. The Faculty was created from the off-site Study of Medicine in Osijek organised by the School of Medicine, University of Zagreb, which started in Osijek in 1979. Since then, and especially in the last five years, the number of scientific research laboratories has increased, the scope of professional work has broadened, and so has the number of study programmes and students studying at the Faculty of Medicine Osijek. It is the only medical faculty in the area of Slavonia and Baranja. The Faculty of Medicine Osijek has 9 institutes, 26 departments, 9 laboratories, a library and a Secretariat consisting of 12 offices.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

- 1. MEFOS is a small Faculty that enables close and personal contact with the students.
- 2. Students at MEFOS in general are very satisfied and motivated.
- 3. MEFOS is the only Medical Faculty in the region and the only one with a study program in German.
- 4. MEFOS has a close collaboration with the nearby Clinical Hospital Centre Osijek.
- 5. MEFOS efficiently established European standards for quality assurance.
- 6. MEFOS has a devoted and proactive quality management team.
- 7. MEFOS has great IT support as well as it is well equipped with digital technologies.
- 8. MEFOS has a research fund that is remarkable support to younger researchers.

DISADVANTAGES OF THE INSTITUTION

- 1. The international visibility of MEFOS in teaching and research is low.
- 2. The workload of teachers is high and with unbalanced distribution.
- 3. The position and influence of the Quality Committee is low.
- 4. The feedback loop for quality control of teaching is rather weak.
- 5. The mobility of teachers and students is low.
- 6. Teaching practical skills is low in the study programmes.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

- 1. The strategies and action plans of the Faculty are harmonized with the general strategies of the University of Osijek.
- 2. The Research Fund is a relevant, valuable, and effective measure to support new projects of young researchers.
- 3. Very enthusiastic students are involved in various activities.
- 4. The Faculty supports extracurricular activities.
- 5. The system of mentoring and advising students is well accepted by the Faculty.
- 6. The Faculty established very good collaboration with the local community.

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution Analysis

The HEI implemented a Quality Commission and Quality Office to provide a quality assurance system according to European standards. A development strategy and action plan for the period 2022–2030 was implemented by the HEI. Ethical standards are defined in ordinances harmonized with the Code of Ethics of the University of Osijek. Information is provided to the public predominantly via the MEFOS website. Lifelong learning programmes for teachers are currently at a minimum level.

Recommendations for improvement

- The impact of quality assurance should be increased by the introduction of a Vice Dean for Quality assurance.
- The transfer of information and news from MEFOS to the public should be organized by an Office for Public Relations and intensified using social media platforms.
- A lifelong learning program for teachers on different focus topics, such as teaching methods and skills, should be established.

Quality grade SATISFACTORY LEVEL OF QUALITY

II. Study programmes

Analysis

The study programmes at MEFOS are well defined and aligned with other medical faculties in Croatia and HEIs in the EU. The admission quotas are based on the needs for educated experts according to the recommendations of the Croatian Employment Service, except for the Medical Laboratory Diagnostics study program, given that the Croatian system does not recognize the level of education of graduated experts. The quality of study programmes is evaluated based on surveys of students and external stakeholders. However, it is not clear how the feedback is implemented to improve the study programmes. Student practice is an integral part of the study programmes, and is defined in the Ordinance on professional clinical student practice. Nevertheless, the teaching of practical skills could be increased and improved.

Recommendations for improvement

- The feedback from students, external stakeholders, and alumni on learning outcomes should be improved.
- Continuous revisions of study programmes should be established.
- Teaching of practical skills and practical work in smaller groups of students should be increased and improved.

III. Teaching process and student support

Analysis

Admission and continuation criteria follow requirements of the study programme, and are updated regularly. The Faculty encourages student-centered learning. Student support is adequate on every level for a diverse student population, as well as students from vulnerable and underrepresented groups. Students are informed about the opportunity for completing part of their study abroad. Upon the completion of their studies, students are issued appropriate documents (Diploma and Diploma Supplement) in Croatian and English, free of charge.

Recommendations for improvement

- Revise the adequacy of obligatory literature, some of it is already obsolete or too demanding for students.
- It is advised to have a questionnaire on all students' satisfaction with student support at the end of every academic year, and in accordance with suggestions, give feedback to students and make changes.
- Make a document with procedures which should be followed when a student from a vulnerable or underrepresented group has an expected problem regarding education.
- Recognise ECTS credits obtained by students on Erasmus.

Quality grade SATISFACTORY LEVEL OF QUALITY

IV. Teaching and institutional capacities

Analysis

MEFOS provides adequate teaching capacities, however, some teachers are highly overloaded. Additionally, a significant number of teachers are employed as external associates. The MEFOS process of recruitment, advancement and re-appointment are transparent and set to select the best candidates and to stimulate individual advancement. The MEFOS does provide some opportunities for the life-long development of teachers, and the panel provided with some constructive suggestions on how to improve the feedback loop between the student surveys and teachers work. The MEFOS infrastructure is at a satisfactory level, and laboratory spaces could be expanded. The MEFOS library is effective, but could gain from being more attractive to students. The financial state at MEFOS seems stable and net positive, and the panel recognized the MEFOS efforts aimed at local funding as well as funding from scientific excellence.

Recommendations for improvement

• Redistribute teacher workload

- The Panel recommends to the HEI to cumulatively employ a part of external associates
- Increase life-long learning activities at MEFOS
- Improve feedback loop for the teachers' work
- Increase the availability of up-to-date literature and prolong library opening hours

V. Scientific/artistic activity

Analysis

The Faculty has made various efforts to improve the quality and quantity of their scientific research and professional activities. The number of published papers has increased significantly over the past five years, and the quality of publications has also improved. The Faculty developed a plan for its scientific-research and scientific-methodical activities, which is in line with the Strategy of the University of Osijek. The plan contains five main strategic objectives or scientific-research directions that express the research interests of the MEFOS. However, there is no action plan to develop major, specific research areas or research clusters. There are many teachers, associates, and professional staff members who are recognized as experts at a national and international level. The Faculty has a large number of institutional projects and an active international project. Nevertheless, it needs more funds to increase the number of national and international projects and the level of excellence. Postgraduate and graduate staff and young researchers should spend less time on administrative tasks and more time on their research activities. However, it is not clear how their reduced teaching engagement is going to be compensated. Teachers and associates of the Faculty actively promote scientific achievements at national and international meetings and conferences. Strong support from various external stakeholders is identified as one of the institution's strong points. Even though the Faculty needs to strengthen its social impact by increasing the number of industrial projects and other collaborations to transfer knowledge and technology. The MEFOS has a high level of IT infrastructure, while the level of research infrastructure could be improved.

Recommendations for improvement

- Professors and researchers need to establish more collaborations with highly qualified international researchers.
- Strengthen the Office for Science, Projects and Inter-Institutional Cooperation.
- The Faculty should encourage and strengthen research-based technology transfer of knowledge to industry and/or the public sector.
- Encourage the writing of doctoral dissertations in English.

- Stimulate more collaboration and integration among researchers, particularly those who do not have sufficient financial support.
- Increase supervision of PhD students' during postgraduate studies, especially the monitoring of research activities related to their doctoral theses.

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1. The higher education institution has established a functional internal quality assurance system.

Analysis

An internal quality assurance system is implemented according to European standards (ESG) and evaluates all activities of MEFOS. The system is carried out by the Committee for Monitoring and Assurance of Higher Education Quality and the Quality Office. Strategy and policy documents, as well as survey results and statistics, are available on the Faculty website. However, many documents were only available in Croatian and not in translatable file formats. The quality assurance system involved all stakeholders of MEFOS by feedback surveys. Surveys were performed for students, employees and graduates. According to the feedback from the last five years, the quality assurance policy and the research strategy were adopted. The Faculty performed SWOT analysis and implemented strategies for the improvements. The human resource management of MEFOS is in accordance with professional principles and standards. The procedures for recruiting employees are clearly defined and are in line with the development strategies of MEFOS.

Recommendations for improvement

- In order to increase the position and influence of the Committee for Monitoring and Assurance of Higher Education Quality, the introduction of a Vice Dean for Quality Assurance is recommended.
- Strategies to increase the number of completed surveys should be developed, and thresholds and intervention criteria for the analysis of survey results should be defined.
- The completion of survey questionnaires could be mandatory, at least for the employees. An electronic document management system and standardization of documents could be introduced.

- The Faculty should develop a mechanism for reporting on the follow-up process after the surveys are conducted.
- The Faculty should ensure that students in other study programmes, including students from MLD, Biotechnology, PhD, or Medicine programme in German, are proportionately represented in Faculty committees.

1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

The quality procedures at MEFOS were performed according to ISO 9001:2015 standards, and in 2022 a complete adoption to ESG standards was achieved. The results from previous evaluations were analized, and recommendations for improvement were implemented. E.g., the study programmes were registered in the Directory of Study Programmes, the heads of all departments at MEFOS were appointed in accordance with the Statute of the Faculty, and the Ordinance on the work of institutes and departments of the Faculty was adopted. Furthermore, recommendations for improvement were implemented into action plans for the next years. MEFOS continuously analyses improvements and adopts strategies when recommended. Action plans and reports on the implementation are available.

Recommendations for improvement None.

Quality grade HIGH LEVEL OF QUALITY

1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

Ethical standards and rules of procedure of the Ethics Committee are clearly defined. In order to prevent all types of unethical behaviour or intolerance, the Faculty has mechanisms and procedures outlined in eight documents, as well as the Ethics Committee that addresses the dignity of students and faculty staff, academic freedom, and the ethical aspects of research conducted on animals and patients. Students are taught about the ethical standards in medicine and science. Standard procedures for reporting irregularities are implemented, and there is an elected Student Ombudsperson. Rules for plagiarism detection are defined, and tools are available. The Expert Panel noted that there are a few examples of negative behaviors in the last five years, which were solved according to the prescribed procedures.

Recommendations for improvement None.

Quality grade HIGH LEVEL OF QUALITY

1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic, and social).

Analysis

Information about the study programmes at MEFOS is available in Croatian, English, and partially in German. Admission criteria, enrolment quotas, and learning outcomes for the study programmes are clearly defined and mostly available on the MEFOS website. The Student Administration Office, The Office for Postgraduate Studies, and the Office for the Study of Medicine in German provide additional support of students. The social role of MEFOS is continuously highlighted by public health activities and regular reports available to the public. Information about pass rates, drop-out rates, and employment after graduation can be obtained from the MEFOS website and the corresponding offices.

Recommendations for improvement

- An Office for Public Relations should be installed to organize and increase information exchange with the stakeholders and the public.
- In cooperation with the IT service at MEFOS, the use of social media platforms could be developed.

Quality grade SATISFACTORY LEVEL OF QUALITY

1.5. The higher education institution understands and encourages the development of its social role.

Analysis

By implementation of cooperation projects between the Clinical Hospital Centre Osijek and the industry, the MEFOS underlines its social role and contributes to the economic development of the region. MEFOS provides undergraduate and graduate study programmes in the field of medicine. Together with the Clinical Hospital Centre Osijek, the Faculty contributes to the development of the local community. Teachers and scientists at MEFOS are members of various international, national, regional and local bodies, and thereby contribute to the development of society. The continuous development of the social role is a part of both the University Strategy and the Mission of MEFOS.

Recommendations for improvement

• The social role of the MEFOS should be further developed by the implementation of more specific procedures and activities. E.g., activities related to elementary, secondary, and high schools could be an option.

Quality grade SATISFACTORY LEVEL OF QUALITY

1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Analysis

Lifelong learning programmes are implemented in the action plan for 2022. A continuous medical education programs were organized by MEFOS in 2017–2022. The Faculty has the Ordinance on Conditions of Registration and Scoring of Lifelong Learning programmes, which is available on the Faculty website. Although MEFOS plans the lifelong learning programmes in accordance with the labour market and the Ordinance, it is not clear how the proposed programmes are accredited and further evaluated since the Faculty doesn't have an office nor a committee for lifelong learning, nor does it have participants feedback on a particular program.

Recommendations for improvement

- The lifelong learning programmes for teachers should be significantly extended.
- The outcome of the lifelong learning programmes should be evaluated on a regular basis and the evaluation results should be used to adapt the programmes.

Quality grade MINIMUM LEVEL OF QUALITY

II. Study programmes

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.

Analysis

The strategic goals of the MEFOS are defined in the Strategy of the Faculty of Medicine Osijek 2022-2030. Each study program has a well elaborated Study Programme Proposals, which prove the compatibility of the general goals of each study program with the mission and strategic goals of the higher education institution. The strategic goals of MEFOS are in accordance with the strategic directions of the Unversity documented in the J. J. Strossmayer University of Osijek 2021–2030 Strategy. The study programmes are aligned with other medical faculties in Croatia and higher education institutions in the EU that deliver similar programmes, which enables recognition of professional qualifications for students who complete MEFOS. The justification for conducting study programmes and admission quotas are based on the needs for educated experts in the community and the economy, according to recommendations of the Croatian Employment Service. The only question that arises is justification of the education of experts at the graduate study of Medical Laboratry Diagnostiocs, given that the Croatian system does not recognize the level of education of graduated experts. MEFOS conducts an analysis of the execution and quality of study programmes based on a survey of students at the end of their studies and an analysis of the quality of graduate students from external stakeholders.

Recommendations for improvement

• It is necessary to assess the justification of admission quotas for graduate university study programme Medical Laboratory Diagnostics.

Quality grade SATISFACTORY LEVEL OF QUALITY

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

MEFOS has clearly defined the learning outcomes, which is visible in the Faculty's documents for each study program, as well as specific learning outcomes for each subject. The learning outcomes reflect the necessary competencies that the student obtains upon completion of the studies. The learning outcomes of MEFOS study programs are fully aligned and comparable with the learning outcomes of similar studies in the Republic of Croatia, they are also aligned with the requirements of the European directive (Directive 2005/36/EC on the recognition of professional qualifications). Learning outcomes are appropriately valued through ECTS credits, and are clearly presented in the Diploma

Supplement upon completion of studies. The rules on the verification of learning outcomes are clearly defined in the Study Regulations. The monitoring of the successful mastering of learning outcomes and students' passing is transparent through the ISVU system. The assessment of fulfilment of learning outcomes is also based on the students' feedback from the survey before enrolling in the next year. Student surveys at the end of each course are not mandatory, and do not provide enough information. Also, there is a lack of Alumni feedback.

Recommendations for improvement

• Improve the collection of feedback from students, external stakeholders, and alumni on learning outcomes, and implement their suggestions in the study program and the implementation plan.

Quality grade SATISFACTORY LEVEL OF QUALITY

2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

MEFOS monitors the achievement of intended learning outcomes through the methods defined in the Regulations.

MEFOS evaluates the achievement of the intended learning outcomes by student exams which are written in pre-clinical subjects, and in clinical subjects they consist of a written and an oral part.

Considering that practical work is an integral part of study programs, the assessment of practical skills is carried out by the leaders of the exercises and mentors, which is a condition for taking the subject exam after the lessons had been completed.

There are clearly defined obligations of students according to learning outcomes, and the method of taking exams for each subject, which is available to students in written form and on the faculty's website.

There is insufficient evaluation of achievement of the intended learning outcomes by students, alumni and external stakeholders who employ students after graduation.

Recommendations for improvement

• Establish student surveys expediently, and after the end of classes of a particular course assess the quality of learning outcomes.

Quality grade SATISFACTORY LEVEL OF QUALITY

2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing, and approving new programmes, and revising or closing the existing programmes.

Analysis

MEFOS has planned activities on the development, planning, and proposing new programmes. But in practice, the standard procedure of systematic analysis of the study programmes, their changes, and improvements is not being carried out. In the previous period, there were changes in the study programmes, but there was no sufficient analysis of the study programmes by students and external stakeholders.

Recommendations for improvement

- Introduce a data collection system on the implementation of study programmes, a system for analyzing the learning outcomes of study programmes from data obtained from students, alumni, and external stakeholders who employ graduated students.
- Plan revisions of study programmes on the basis of the data obtained through such systematic monitoring.

Quality grade MINIMUM LEVEL OF QUALITY

2.5. The higher education institution ensures that ECTS allocation is adequate.

Analysis

The total number of contact hours, as well as the share of clinical and theoretical classes by subjects and study programmes, is defined by the study programme and descriptions of study programmes. The representation of theoretical and practical classes is adequate, and improvements have been made according to the recommendations of the previous analysis.

Recommendations for improvement

• Continue to monitor feedback on the intended learning outcomes and the actual teaching load of students.

Quality grade SATISFACTORY LEVEL OF QUALITY

2.6. Student practice is an integral part of study programmes (where applicable).

Analysis

It is evident from the study programmes that student practice is an integral part of those programmes. It is regulated by the Rulebook on professional clinical practice of students. It can be seen that the share of practical work in certain study programmes has been increased, and that the ECTS credits are adequately valued.

Recommendations for improvement

• It is necessary to continue activities to increase student practice and encourage practical work in smaller groups of students.

Quality grade SATISFACTORY LEVEL OF QUALITY

III. Teaching process and student support

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.

Analysis

All the criteria for admission and continuation of studies can be found on MEFOS webpage. These criteria are displayed for anyone to see at any time, and are clearly defined and easily understood. They are in accordance with the Croatian legislative acts, as well as the requirements of the study programme. Criteria for the admission to the Faculty follow the basic rules of Croatian state graduation exams (*Državna matura*), which is secondary school leaving examination. Criteria for the continuation of studies are consistently applied and the Faculty has effective mechanisms for recognising prior learning.

Recommendations for improvement

• Analyse students' performance on the study programme and adjust admission criteria and criteria for continuation of the studies to their performance.

Quality grade HIGH LEVEL OF QUALITY

3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

The Ordinance on studies and studying of the University J. J. Strossmayer of Osijek and MEFOS clearly defines procedures for monitoring and progressing students. The achievement of the planned ECTS points is also monitored. Good monitoring of student progress through ISVU is visible. But there are only general measures to increase students' pass rates and completion rates (for example, improving the quality of teaching, increasing the share of practical classes and mentoring) and no clearly defined measures to increase student pass rates.

Recommendations for improvement

• Define clear measures to increase the pass rates of students (for example, monitoring attendance at classes and exercises, encouraging active participation in discussions during seminars, encouraging independent preparation of seminars, implementing theoretical knowledge in practical work and improving practical skills, analyzing exam results with students and discussing questions, objecting, and harmonizing pass criteria in exams as well).

Quality grade SATISFACTORY LEVEL OF QUALITY

3.3. The higher education institution ensures student-centred learning.

Analysis

The Faculty encourages various modes of programme delivery. Prior to Covid-19 pandemic, the main way of teaching was by giving lessons to students in person. Online classes were held during the whole period of Covid-19 pandemic, and students were satisfied with that. After the stabilisation of the public health situation with Covid-19, teaching was returned to original mode of delivering lessons in classrooms. The implementation of all study programmes includes the following forms of teaching: lectures, seminars and practicals. Teaching methods are adapted to a diverse student population (e.g., athletes, students from underrepresented or vulnerable groups...). There are a lot of classrooms with computers for each student, and some practicums have very modern technology to help students with learning, for example the one for Anatomy. Teachers try to motivate students by involving them in scientific research and clinical practice, but also by encouraging their autonomy and responsibilities. One problem is the adequacy of obligatory literature. A lot of courses use literature that was published more than 15 years ago. While we have a national issue of lack of medical literature in Croatian, it is unacceptable that students are referred to study from 15-year-old books, which are mostly obsolete. This issue could be solved by using student-oriented foreign literature, and possibly translating it into Croatian. More recent and relevant student-oriented books would largely improve the quality of student education. From this point of view arises the opportunity to collaborate with other Croatian medical faculties in the process of translation. It would also be praiseworthy to include students interested in the process of translation, which could be also rewarded.

Recommendations for improvement

- Provide students with more interactive learning material that they can use at home.
- Revise the adequacy of obligatory literature, some of it is already obsolete or too demanding for students.
- The Faculty is encouraged to be included in translation of well-written foreign literature, which is student-oriented and recent.

Quality grade SATISFACTORY LEVEL OF QUALITY

3.4. The higher education institution ensures adequate student support.

Analysis

Student support is adequate on every level for a diverse student population. First year students have all the information about Faculty organisation they may need on the webpage. Also, on the first day of the first semester, an Academic class (*Akademski sat*) is organised for students, during which they are shown everything they are going to need as students of the Faculty. On the MEFOS webpage, all email addresses of teachers are listed, if needed for any reason. Also, Vice Dean for education and students meets with student representatives of all study years every Thursday at 7 p.m. The library is open every work day from 7 a.m. to 6 p.m. All the books that are obligatory literature are available for students to read in the library, or to rent. Osijek University offers support for students' mental health issues, and support for students with disabilities. The Faculty employs an adequate number of qualified and committed professional, administrative, and technical staff.

Recommendations for improvement

• It is advised to have a questionnaire on all students' satisfaction with student support at the end of every academic year, and in accordance with suggestions, give feedback to students and make changes.

Quality grade HIGH LEVEL OF QUALITY

3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

Currently, there are five students from vulnerable and under-represented groups on MEFOS. At the University level, those students are provided with professional help at a the office for students with dissabilities and an office for psychological consultations. Also, the infrastructure on the Faculty is accessible to students in the wheelchair. MEFOS has a few students who are semi-professional or professional athletes. If a student is having a championship or other obligations regarding sports, that student's obligations are rearranged at the Faculty (e.g. that student writes the exam before other students). Also, MEFOS encourages students to play different sports on the Faculty team, by sponsoring UniSport and Humanijada events. The problem is that, although satisfactory, the procedures followed in each case are not universal, but agreed upon once they appear.

Recommendations for improvement

• Make a document with written procedures that should be followed when a student from a vulnerable or underrepresented group has an expected problem regarding education.

Quality grade SATISFACTORY LEVEL OF QUALITY

3.6. The higher education institution allows students to gain international experience.

Analysis

The Faculty is participating in Erasmus and CROMSIC mobility programmes. It is important that the Faculty recognises ECTS credits obtained by the student at another higher education institution in accordance with the Faculty guidelines for outgoing Erasmus students. However, there are no published written instructions for students which would specify courses that allow recognition of ECTS points obtained during the mobility programme. This shortcoming makes the decision to spend a part of education abroad more complicated, since students have no insight into possible outcomes of their mobility when it comes to finishing a particular course and recognising the exams passed at other institutions. Students interested in going to the Erasmus programme have an Erasmus coordinator who they can ask everything they want to know, but they have no system to connect a student with other students who went to Erasmus and have experience which would be helpful if shared.

Recommendations for improvement

- The Faculty is advised to publish in advance which courses are compatible with their curriculum, and therefore which ECTS points will be obtained by students who pass exams during their Erasmus exchange.
- To make a platform on which students who went on Erasmus programme comment and evaluate their experience.

3.7. The higher education institution ensures adequate study conditions for foreign students.

Analysis

MEFOS has two foreign language degree programmes. The first one is the integrated undergraduate and graduate university study of Medicine in German, established in 2018, while the second one is the graduate university study of Biotechnology (in English), which was established in 2020. Incoming mobility is carried out through the ERASMUS exchange program. The number of incoming students is low, the decline in the number of incoming students has been the most prominent in the last two years. According to the Vice-Dean for Education and Students, the main reason was the pandemic COVID-19 and travel restrictions. The incoming mobility process is well organized, MEFOS provides all organizational requirements for hosting international students. The collection of feedback does not proceed. Each incoming student is assigned a mentor. The student is placed in a group whose leader speaks English well. Incoming students have the opportunity to take courses in English. Throughout the meeting with the Vice-Dean for Education and Students, the Expert Panel members found out that 15 courses can be delivered in English under the condition that at least 5 students are enrolled. The list of courses can be found on the Faculty's website. Individual classes are also organized. Croatian language courses are offered at MEFOS as elective course.

Recommendations for improvement

- Increase mobility in general, especially the number of incoming students.
- To increase incoming mobility, it is recommended that new agreements be signed with other student exchange networks.
- Conduct surveys on student satisfaction with the mobility program.
- Create an information guide for foreign students, which would contain the most important information as well as frequent questions and answers from students.

Quality grade SATISFACTORY LEVEL OF QUALITY

3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

The methods for evaluation and grading are defined in the Ordinance on studies and studying at the J. J. Strossmayer University of Osijek and in the Statute of the Faculty of Medicine Osijek. For each course at MEFOS the criteria and methods are clearly defined and available to students. The teaching methods correspond to the methods for evaluation and grading. MEFOS established different types of exams including written, oral, and practical exams. For clinical subjects the objective structured clinical examination (OSCE) is used. Teachers and associates attend education classes organized at the University in cooperation with the Faculty of Humanities and Social Sciences in order to establish basic skills of educators. Feedback on the outcome of exams is mostly organized by the departments. In principle, the evaluation procedures and examination methods also consider the special circumstances of students with disabilities according to the ordinance on studies and studying.

Recommendations for improvement

- The outcome of OSCEs should be evaluated continuously.
- The evaluation results should be used to further develop end extend OSCEs in the study programmes.
- The outcome of exams could be compared with other Medical Faculties in Croatia by networking of the Vice Deans of Education and Students.

Quality grade SATISFACTORY LEVEL OF QUALITY

3.9. The higher education institution issues diplomas and diploma supplements in accordance with the relevant regulations.

Analysis

The Faculty issues a diploma and diploma supplement in accordance with the current Croatian legislative acts. Upon completion of their studies, students are issued appropriate documents (diploma and diploma supplement) in Croatian and English, free of charge.

Recommendations for improvement None.

Quality grade HIGH LEVEL OF QUALITY

3.10. The higher education institution is committed to the employability of graduates.

Analysis

Admission quotas for the study of Medicine are perfectly aligned with the need as the numbers of MDs in Croatia and region are sparse (confirmed by the County

representative at the meeting), therefore the unemployability of MDs following the study at MEFOS is virtually zero (less than 2% during 2019–2021, MOZVAG analytics supplement). Students from the undergraduate study of Medical Laboratory Diagnostics (MLD) have a larger unemployability. However, most of them (according to the Self-Evaluation Report) continue their studies on the graduate level of MLD. In the latter case, the numbers of unemployed students who graduated at MLD were increasing from 2019 to 2021 (from 0 to 19). The MEFOS recognized the issue and is continuously trying to tackle this issue. The reason lies in the fact that the master of medical laboratory diagnostics is still not in the occupational nomenclature of the Ministry of Health, and this should be changed by passing the Act on Amendments to the Health Care Professions Act. The fact that there is extremely large interest for undergraduate study programme of MLD (an average of 223 applicants per 35 places) is also in favour of the alignment of the admission quotas in the MLD. The MEFOS prospectively informs students about their educational and employment opportunities and provides support for future career planning with events such as "Carrer Week" and other, as confirmed also on the interview with the students. MEFOS does analyses of their student's employability (Self-Evaluation Report). However, there seems to be low communication between the alumni and MEFOS, and the number of alumni members is low.

Recommendations for improvement

- Continue effort for accepting the nomenclature of the Ministry of Health for the master of medical laboratory diagnostics.
- Improve feedback with alumni.

Quality grade SATISFACTORY LEVEL OF QUALITY

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

The number of teachers (table 4.1a MOZVAG Analytical Supplement) and their qualifications (Table 4.4. MOZVAG Analytical Supplement) are sufficient for delivery for the study programmes of high quality, supported by the high students' opinion during the interviews and student surveys completed after the end of the studies, resulting in more than 50% MEFOS teaching coverage across study programmes and an 11.54 student-to-teacher ratio (MOZVAG analysis report). An obvious fact, either from MOZVAG analytical supplement or the employed teachers survey, is that some (but not all) teachers are much overloaded (reaching 585 norm hours/year or almost twice the workload). The MEFOS recognized the issue (Self-Evaluation Report and interviews), and are tackling it by employing new assistants (included in MEFOS Action Plan 2014-2020, partially realized in the evaluated period) and negotiating new teaching positions from the Ministry (interview with the MEFOS). In general, the distribution of teacher workload is defined by the Collective Agreement, and its correct implementation was confirmed during interviews with the teachers. Tables 4.3. and 4.4. of the Analytical Supplement demonstrate that the teachers have adequate qualifications. The Expert Panel noticed that a significant number of associates are external (Table 4.1.a MOZVAG Analytical Supplement), mostly MDs employed by the Osijek Hospital.

Recommendations for improvement

- Decrease the workload of teachers and improve the distribution of workload.
- Transform external associates to at least partially cumulative employment.

Quality grade SATISFACTORY LEVEL OF QUALITY

4.2. Teacher recruitment, advancement, and re-appointment is based on objective and transparent procedures which include the evaluation of exellence.

Analysis

MEFOS has established a transparent and clear system for teacher recruitment, advancement and re-appointment. All the documents regarding procedures are available on their webpage, and examples of advancement and re-appointments confirmed that procedures are based on evaluation and rewarding excellence, they take into account a teacher's previous work, its excellence, publications, as well as teaching and professional work achievements, reflecting strategic goals of MEFOS. MEFOS has effective additional criteria for promotion of teachers that reflect strategic goals of MEFOS. The procedure for recruiting new teachers is clearly defined and includes mechanisms for selection of the best candidate for each position based on competitive

criteria, reflecting development goals of MEFOS, and are aligned with legislations/regulations. Open vacancies are transparently published on MEFOS webpage and reflect development goals of MEFOS.

Recommendations for improvement None.

Quality grade HIGH LEVEL OF QUALITY

4.3. The higher education institution provides support to teachers in their professional development.

Analysis

MEFOS provides support to teachers for their life-long learning. It does so by organizing workshops (advertised on MEFOS webpage), and MEFOS provided evidence for workshops they organized in the evaluated period (in 2018, 2019, and 2022). Additionally, the MEFOS encourages teachers for courses on life-long learning at the Faculty of Education J. J. Strossmayer in Osijek. In 2022 MEFOS adopted a system of rewards for scientific and educational achievements. However, the Expert Panel recognized that the efforts for life-long learning could be increased (e.g., providing the teachers monthly education opportunities, teachers could share examples of goodpractices based on student satisfaction surveys, etc.). MEFOS annually collects Student Satisfaction Surveys and provides feedback to teachers and heads of departments. However, the Expert Panel recognized that: (i) the number of students that take part in the surveys is relatively low, and therefore the results of student surveys may not be representative; and (ii) MEFOS has no system of active implantation of the surveys (e.g., annual interviews with the best graded and the worst graded teachers, retrospective analysis of the improvement of the worst graded teachers over a period of time). Involvement of teachers in international mobility programmes is relatively low (there are some short term visits, but no visit longer than 3 months, MOZVAG Analytical Supplement, Table 4.5. and 4.6.). The MEFOS has recognized the issue, included it in the action plan, and is actively promoting the Erasmus mobility.

Recommendations for improvement

- Increase activities involved in life-long learning opportunities for teachers provided by MEFOS (e.g., examples of good practices identified by student surveys presented on seminars).
- A program on teaching methods and skills could improve the quality of teaching in all study programmes.
- Improve the system so that it would make student surveys more representative (e.g., surveys to be compulsory).
- Improve feedback loop from student surveys to teacher response.
- Increase international mobility.

Quality grade MINIMUM LEVEL OF QUALITY

4.4. The space, the equipment, and the entire infrastructure (laboratories, IT services, work facilities, etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.

Analysis

MEFOS has adequate space (classrooms, laboratory practicums, computer classrooms, rooms for student activities) on account of space provided at the MEFOS and at the Hospital (Table 4.8. MOZVAG analytical supplement, confirmed by on-site visit and student feedback during interviews). Furthermore, MEFOS is dedicated to improving its infrastructure in line with MEFOS strategic goals, as they already renovated the basement (confirmed on-site), the MEFOS also plans for a new building dedicated to teaching (no laboratory space). Due to historical reasons, the organization of MEFOS building provides mixed space dedicated to laboratories and to teaching, which may be mutually interfering. The infrastructure at MEFOS is appropriate for implementation of scientific and teaching activities, as evidenced by the number of lecture rooms and numbers and equipment in the laboratories (evidenced on site and in MOZVAG Analytical Supplement Table 4.8.).

Recommendations for improvement

- Strategic planning for a new laboratory space is needed.
- Spatial reorganization of the MEFOS building to separate scientific and teaching space.

Quality grade SATISFACTORY LEVEL OF QUALITY

4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research, and teaching.

Analysis

The library provides resources that support study of both the Medicine and the MLD, providing space to study and textbooks. Working hours are 7:00–18:00. The number of textbooks is adequate (20% of enrolled students). However, during interviews with the students, the Expert Panel recognized that the students are not keen on studying at the library, nor referring to library textbooks. The students need to make a reservation in advance for a textbook (apart for a single copy available at the library), and the Panel recognizes that at least some textbooks available in the library can be upgraded to newer versions (e.g., physiology), while electronic versions of books are not available. Some databases for scientific papers are available at the library (described in Self-Evaluation

Report), providing strong support for scientific-teaching activities, which was confirmed during interviews with scientists at MEFOS.

Recommendations for improvement

- Increase the number of textbooks for students and for library.
- Increase the number of licences for electronic books.
- Prolong opening hours providing more opportunities for students to study.
- Develop a plan to make the library more attractive to students.

Quality grade MINIMUM LEVEL OF QUALITY

4.6. The higher education institution rationally manages its financial resources.

Analysis

The financial revenue and expediture are transparent (MOZVAG Analytical Supplement), they are transparently presented during the interviews, and are managed efficiently and appropriately, supporting MEFOS financial sustainability and efficiency. The main source of income is from state budget, and the MEFOS has a relatively substantial income from tuition fees and other incomes (DNA laboratories, the County of Osijek). The outcomes are relatively well balanced so that the net is positive (in 2021, MOZVAG Analytical Supplement, Tables 4.11. and 4.12.). Additional resources are used by MEFOS for funding several smaller scientific projects, which is well perceived by teachers (confirmed during interviews) as they provide good and realistic scientific opportunities. The MEFOS has been awarded some national projects and one EU funded Centre of Excellence project. The Panel recognizes that the MEFOS puts a large effort to financial stability of the HEI, to providing additional funds through the County of Osijek, and to additional funding through scientific excellence.

Recommendations for improvement

• Increase additional funding through national and EU scientific grants.

Quality grade HIGH LEVEL OF QUALITY

V. Scientific/artistic activity

5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.

Analysis

The goals for the development of scientific activities are defined by the Strategic Research Plan. In the last five-year period, there has been a 20% increase in the number of publications, and the quality of published papers has also increased. Thus, in 2017 25% of the total number of publications were published in Q1 journals, while in 2022 those were 57% of the total number. From the previous re-accreditation, the citation rate increased by about 30%, and the institution achieved an H-index of 38. The Panel members have agreed that the Faculty is able to implement its research strategy and increase the number of high-quality publications. The precise research areas or research clusters are not defined, therefore the Faculty has several active research groups in all disciplines. The Panel felt that the collaboration between the researchers is very close and valuable. The Faculty has a reward system, and recently the Ordinance for awarding the excellent researcher has been established. In addition, the Faculty provides financial support through the Research Fund to encourage and support the development of new project ideas and increase the number of publications. As a result, the Faculty has been able to increase the number of projects and funded PhD theses. Researchers are affiliated with various institutions at the national, as well as at international level. The majority of papers are published in collaboration with other HEIs and scientific institutions (Analytic Supplement, Table 5.1.). Although the international connections have been established, the HEI has only one active international project.

Recommendations for improvement

- Financial support through Faculty funds should be continued.
- A strategic agenda should be created to enhance international visibility, establish new international collaborations, and thus increase the number of international projects.
- Efforts should be made to increase the number of high-quality papers, especially those published in excellently rated journals.
- Provide a list of competitive and recognized research groups at MEFOS.
- Increase the visibility of research groups and projects among MEFOS internal and external stakeholders and the public.
- In order to increase the quality of doctoral theses and the number of papers published in collaboration with the supervisors, introduce the role that the student is obligated to publish a paper in Q1 or Q2 journal in collaboration with the mentor before the defence of doctoral theses.

Quality grade SATISFACTORY LEVEL OF QUALITY

5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research, and the transfer of knowledge.

Analysis

The Faculty of Medicine in Osijek maintains close relations with local authorities and the community, and enjoys a strong social as well as financial support. In addition, external stakeholders have expressed their clear support. The Faculty has the Research Fund, which is financed through donations from business entities. In order to increase research capacity, the Faculty also provides financial support for various activities, including reconstruction of rooms, improvement of scientific infrastructure, as well as laboratory and digital technology equipment. Throughout the meetings with the external stakeholders and researchers, it became evident that external stakeholders are not involved in the process of setting research priorities and that research topics do not follow the needs of the labour market. Although the HEI is strongly supported by the private sector and the industry, there are no active projects or collaborations that enable knowledge and technology transfer. It is valuable to mention that one of the researchers is the holder of an international patent. The teachers and students participate in the Science Festival, and are involved in the organisation of workshops and events, and thus supporting the popularisation of science. Employees are members and chairmen of various professional, public, and advisory bodies, promoting all forms of science popularisation. The Expert Panel noted that the Faculty is not active on social media platforms, such as Facebook or Instagram, and that the website lacks a corresponding section where the internal and especially the external stakeholders can leave their comments and suggestions.

Recommendations for improvement

- External collaborations and projects with the private sector and the industry that enable the transfer of knowledge and technology should be improved.
- Activities on social media platforms need to be improved, including the corresponding section on the website.
- Clinicians should stimulate and increase the visibility of applied research related to their clinical work.

Quality grade SATISFACTORY LEVEL OF QUALITY

5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.

Analysis

From the discussions with the Faculty staff, students, and stakeholders, it is clear that they are affiliated with various institutions and researchers at the regional, national and international levels. This is evidenced by the data provided in Analytic Supplement, Table 5.1. In the last five years, the Faculty published total number of 626 scientific papers, 602 papers have been published in collaboration with other institutions (Analytic Supplement, Table 5.1.). During the observed period, 109 scientific projects were carried out at the HEI and almost 85% of the projects were supported by the University J. J. Strossmayer in Osijek (Analytic Supplement, Table 5.3.). Although international links have been established, the HEI has only one active international project. The international outline of the Faculty is not at the level it could be, neither educationally nor in terms of scientific research. Therefore, as mentioned above, further efforts are required to increase international visibility and competitiveness. A number of staff members are well recognized as experts at a national level and have received numerous recognitions and awards (Analytic Supplement, Table 5.1.2.). Two employees are editors-in-chief of a national scientific journal and one of an international scientific journal (Analytic Supplement, Table 5.5).

Recommendations for improvement

- International collaboration should be strengthened.
- Increase the number of international project proposals.
- Establish new research priorities, better define the established ones, and promote their scientific achievements to increase the international recognition of their work.
- Signing new bilateral inter-institutional cooperation agreements with other EU universities for joint research opportunities within the network of global programmes.
- Establish new activities with some of the current partner institutions.
- Consistent with the previous re-accreditation, the Faculty must establish a system to motivate, encourage and support research staff to establish new international collaborations and to more actively apply for large project grants funded by both the domestic and international sources, including EU research programmes.

Quality grade MINIMUM LEVEL OF QUALITY

5.4. The scientific / artistic activity of the higher education institution is both sustainable and developmental.

Analysis

The Faculty has the Strategic Research Agenda for the next period which is harmonized with the MEFOS development plan, as well as with the strategic plan of the University of Osijek. The Strategic Plan has well-defined objectives and a monitoring system, while the main research areas are not well defined. The strategic plan for the previous 5-year period is being implemented and, in comparison with the previous evaluation, it is evident that the Faculty is constantly improving its scientific-research and activities. Based on discussions with the teachers and project leaders, the Expert Panel concluded that there are as many as ten research groups that are competitive, and recognized at the national and international level, and that the leaders of those research groups have high citation rate and a high H-index. Possible reasons why other research groups are not as competitive are insufficient financial resources and teaching overload. MEFOS continuously funds the scientific work of its staff from the Research Fund, which is not very substantial. Furthermore, significant financial resources have been invested in maintaining and upgrading the scientific-research infrastructure. The research projects are developmental and sustainable because they meet the social needs, require cooperation between actors from very different sub-systems, and are aimed at the wellbeing of society as a whole. An ordinance for the rewarding of excellent researchers has been established recently. Moreover, throughout the meeting with the teaching assistants and postdoctoral researchers, it turned out that they are not aware of the existence of the Ordinance.

Recommendations for improvement

- It is recommended to clearly define the research areas that are developmental and sustainable.
- In order to increase visibility of the research groups among the internal and external stakeholders of the MEFOS, it is recommended to create a list of research groups and publish the data and the main publications on the Faculty website.
- Rewarding of excellent researchers should be implemented.
- To support the dissemination of results, the Faculty should also increase its efforts to attract distinguished foreign professors and senior researchers to visit the Faculty and contribute to research courses and doctoral programmes in general.

Quality grade SATISFACTORY LEVEL OF QUALITY

5.5. Scientific/artistic and professional activities and achievements of the higher education institution improve the teaching process.

Analysis

There is direct evidence of the positive impact of professional and scientific activities on the teaching process. The faculty has several laboratories equipped with modern and new equipment. The laboratories are mainly used for preclinical scientific work and professional activities. Based on discussions with the teachers, the Panel members have concluded that the laboratories are available to students and that the equipment is used in teaching at all study levels, undergraduate, graduate, and postgraduate. Although the scientific equipment is available to all students, the majority of involved students are postgraduate (doctoral) students. According to the provided statistical data, 115 PhD students were directly involved in active scientific projects in the last 5-year period. The total number of doctoral theses resulting from the mentioned projects is 21 (Appendices to Self-evaluation report, Table 5.3.2.1.). Furthermore, the faculty has a Scientific Center of Excellence for Personalized Health Care, which is an excellent example of intertwining the scientific work with the teaching process at all study levels. The implementation of modern technology in the teaching process at the Department of Anatomy and Neuroscience is also worth mentioning. The Faculty is aware of the importance of modern technology in the educational process, and therefore, constantly invests in the improvement of digital technology. The Faculty has two computer classrooms which are available to students. The HEI encourages and stimulates undergraduate, graduate, and postgraduate students to do scientific work by supporting the actions, awards, and organizing certain student congresses with the assistance of the Student Organization. A good example is the internationally recognized Osijek Student Congress (OSCON), the main goal of which is to develop the research skills of students and encourage them to write scientific papers.

Recommendations for improvement

- It is encouraged to maintain the current level of interaction between research and teaching at the undergraduate, and graduate levels.
- Increase the supervision of doctoral students during their research activities, and preparation of the doctoral thesis to increase the number of defended dissertations and shorten the time between being involved in scientific research work and dissertation defence.

Quality grade HIGH LEVEL OF QUALITY

APPENDICES

1. Quality assessment summary – tables

Quality grade by assessment area				
Assessment area	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
I. Internal quality assurance and the social role of the higher education institution			x	
II. Study programmes			X	
III. Teaching process and student support			X	
IV. Teaching and institutional capacities			X	
V. Scientific/artistic activity			X	

Quality grade by standard				
I. Internal quality				
assurance and the social	Unsatisfactory	Minimum level	Satisfactory level	High level of
role of the higher	level of quality	of quality	of quality	quality
education institution				
1.1. The higher education			v	
institution has established a			X	
functional internal quality				
assurance system.				
1.2. The higher education				х
institution implements				
recommendations for quality				
improvement from previous				
evaluations.				
1.3. The higher education				Х
institution supports academic integrity and freedom,				
prevents all types of unethical				
behaviour, intolerance and				
discrimination.				
1.4. The higher education			X	
institution ensures the			A	
availability of information on				
important aspects of its				
activities (teaching,				
scientific/artistic and social).				
1.5. The higher education			Х	
institution understands and				
encourages the development of its social role.				
1.6. Lifelong learning				
programmes delivered by the		X		
higher education institution				
are aligned with the strategic				
goals and the mission of the				
higher education institution,				
and social needs.				

Quality grade by standard				
II. Study programmes	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.			x	
2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.			x	
2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.			x	
2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.		x		
2.5. The higher education institution ensures that ECTS allocation is adequate.			X	
2.6. Student practice is an integral part of study programmes (where applicable).			X	

Quality grade by standard				
III. Teaching process and student support	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.				X
3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.			X	
3.3. The higher education institution ensures student- centred learning.			X	
3.4. The higher education institution ensures adequate student support.				Х
3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.			X	
3.6. The higher education institution allows students to gain international experience.			X	
3.7. The higher education institution ensures adequate study conditions for foreign students.			X	
3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.			Х	
3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.				X
3.10. The higher education institution is committed to the employability of graduates.			Х	

Quality grade by standard				
IV. Teaching and institutional capacities	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
4.1. The higher education institution ensures adequate teaching capacities.			X	
4.2. Teacher recruitment, advancement and re- appointment is based on objective and transparent procedures which include the evaluation of exellence.				Х
4.3. The higher education institution provides support to teachers in their professional development.		X		
4.4. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.			X	
4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.		х		
4.6. The higher education institution rationally manages its financial resources.				X

Quality grade by standard				
V. Scientific/artistic	Unsatisfactory	Minimum level	Satisfactory level	High level of
activity	level of quality	of quality	of quality	quality
5.1. Teachers and associates			X	
employed at the higher			X	
education institution are				
committed to the achievement				
of high quality and quantity of				
scientific research.				
5.2. The higher education			X	
institution provides evidence				
for the social relevance of its				
scientific / artistic /				
professional research and				
transfer of knowledge.				
5.3. Scientific/artistic and		X		
professional achievements of				
the higher education institution				
are recognized in the regional,				
national and international				
context.				
5.4. The scientific / artistic			Х	
activity of the higher education				
institution is both sustainable				
and developmental.				
5.5. Scientific/artistic and				x
professional activities and				
achievements of the higher				
education institution improve				
the teaching process.				

2. Site visit protocol

Reakreditacija Medicinskog fakulteta Sveučilišta Josipa Jurja Strossmayera u Osijeku Re-accreditation of the Faculty of Medicine Josip Juraj Strossmayer University of Osijek

Edukacija članova Stručnog povjerenstva / Education of Expert Panel members

	Utorak, 21. ožujka 2023.	Tuesday 21 March 2023
13:50-14:00 CET	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
14:00-16:00 CET	 Predstavljanje AZVO-a Predstavljanje sustava visokog obrazovanja u RH Postupak reakreditacije Standardi za vrednovanje kvalitete Kako napisati završno izvješće 	 Presentation of ASHE Overview of the higher education system in Croatia Re-accreditation procedure Standards for the evaluation of quality How to write the final report

Preliminarni posjet stručnog povjerenstva visokom učilištu Preliminary site-visit of expert panel members to HEI

	Ponedjeljak, 27. ožujka 2023.	Monday, 27 March 2023
9:20-9:30 CET	Spajanje dijela članova povjerenstva na poveznicu ZOOM	Joining the part of the expert panel members to the ZOOM meeting
9:30-10:30 CET	Sastanak s dekanom i prodekanima	Meeting with the Dean and Vice-Deans
10:30-10:45 CET	Pauza	Break
10:45-11:45 CET	Sastanak s Povjerenstvom za praćenje i osiguravanje kvalitete visokog obrazovanja	Meeting with the Committee for Monitoring and Assurance of Higher Education Quality
11:45-12:45 CET	Analiza dokumenata	Document analysis
12:45-14:45 CET	Obilazak fakulteta (predavaonice, informatičke učionice, knjižnica, studentske službe, odjeli, zavodi, klinike i laboratoriji) i prisustvovanje nastavi	<i>Tour of the Faculty</i> (classrooms, computer classrooms, library, student services, divisions, departments, clinics and laboratories) and participation in <i>teaching classes</i>
14:45-16:00 CET	Ručak	Lunch break

Medicinski fakultet, lokacija: Josipa Huttlera 4, Osijek

Sastanak članova stručnog povjerenstva / Meeting of expert panel members

	Utorak, 28. ožujka 2023.	Tuesday, 28 March 2023
12:00-12:05 CET	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
12:05-14:00 CET	Interni sastanak članova stručnog povjerenstva, diskusija o zapažanjima i impresijama, pripreme za sastanke s dionicima visokog učilišta	Internal meeting of members of the expert panel, discussion of observations and impressions, preparation for meetings with stakeholders of the higher education institution

Prvi dan reakreditacije u virtualnom okruženju / First day of re-accreditation in virtual form

	Srijeda, 29. ožujka 2023.	Wednesday, 29 March 2023
9:50-10:00	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
10:00-11:00 CET	Sastanak s nastavnicima u stalnom radnom odnosu (nisu na rukovodećim mjestima)	Meeting with full-time teachers who do not have managerial positions
11:00-11:15 CET	Pauza	Break
11:15-12:15 CET	Sastanak s pročelnicima katedri	Meeting with the Heads of Chairs
12:15-12:30 CET	Pauza	Break
12:30-13:30 CET	 Sastanak s Prodekanom za nastavu i studente voditeljima studijskih programa; Medicina na njemačkom jeziku Medicinsko laboratorijska dijagnostika, preddiplomski studij Medicinsko laboratorijska dijagnostika, diplomski studij 	 Meeting with the Vice-Dean for Education and Students Heads of Study Programme; Medicine on German language Medical Laboratory Diagnostic, undergraduate study programme Medical Laboratory Diagnostic, graduate study programme
13:30-14:15 CET	Ručak	Lunch
14:15-14:45 CET	Sastanak s prodekanom za nastavu i studente	Meeting with Vice Dean for Education and Students
14:45-15:15	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions - if needed

Drugi dan reakreditacije u virtualnom okruženju / Second day of re-accreditation in virtual form

	Četvrtak, 30. ožujka 2023.	Thursday, 30 March 2023
9:50-10:00 CET	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
10:00-11:15 CET	Sastanak s: Etičkim povjerenstvom Voditelj knjižnice Erasmus koordinator ECTS koordinator	Meeting with: • Ethical Committee • Head Librarian • Erasmus coordinator • ECTS coordinator
11:15-11:30 CET	Pauza	Break
11:30-12:30 CET	 Sastanak sa studentima – otvoreno za sve studente Integriranog studija Medicine Preddiplomskog i diplomskog studija Medicinsko laboratorijske dijagnostike 	 Meeting with the students - open meeting for all students Integrated study programme of Medicine Undergraduate and graduate study programme of Medical Laboratory Diagnostics
12:30-13:00 CET	Sastanak sa studentima integriranog studija Medicina na njemačkom jeziku	Meeting with students of Integrated study programme of Medicine on German Language
13:00-13:15 CET	Pauza	Break
13:15-14:00 CET	Sastanak s alumnijima (bivši studenti koji nisu zaposlenici visokog učilišta)	Meeting with the alumni (former students who are not employed by HEI)
14:00-14:15 CET	Pauza	Break
14:15-15:15 CET	Sastanak s vanjskim dionicima (nenastavnim) s kojim visoko učilište surađuje	Meeting with external stakeholders
15:15-15:45 CET	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting with HEI on open questions - if needed

Treći dan reakreditacije u virtualnom okruženju / Third day of re-accreditation in virtual form

	Petak, 31. ožujka 2023.	Friday, 31 March 2023
9:30-10:30 CET	Sastanak s prodekanom za znanost	Meeting with Vice Dean for Science
10:30-10:45 CET	Pauza	Break
10:45-11:30 CET	Sastanak s asistentima i poslijedoktorandima	Meeting with teaching assistants and postdoctoral researchers
11:30-11:45 CET	Pauza	Break
11:45-12:45 CET	Sastanak s voditeljima znanstvenih projekata	Meeting with the heads of research projects
12:45-13:00 CET	Pauza	Break
13:00-13:30 CET	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions - if needed
13:30-14:00 CET	Interni sastanak članova stručnog povjerenstva	Internal meeting of the expert panel members
14:00-14:15 CET	Završni sastanak članova stručnog povjerenstva s dekanom i prodekanima	Exit meeting of expert panel members with the dean and vice-deans
14:15-15:00	Pauza za ručak	Lunch break
15:00- CET	Interni sastanak članova stručnog povjerenstva – ocjenjivanje prema standardima kvalitete	Internal meeting of the expert panel members – assessment according to quality standards

SUMMARY

The Faculty of Medicine at the Josip Juraj Strossmayer University of Osijek (MEFOS) was evaluated by the Expert Panel according to standards for the evaluation of quality of universities and university constituents in the procedure of re-accreditation of higher education institutions. The evaluation referred to the academic years 2017 to 2022, and was performed in March 2023 on the basis of the Self-Evaluation Report and its appendices, a site visit and online meetings with the stakeholders. In all meetings, the questions of the Panel members were well answered.

The quality in all five assessment areas was at the satisfactory level with 19 (58%) of the standards at this quality level. In 6 (18%) standards there was a minimum level of quality, and in 8 (24%) standards a high level of quality was identified. Recommendations for improvement by the Expert Panel addressed the weaker quality characteristics of MEFOS. The major recommendations for improvement are:

- strengthen the quality assurance system by introducing a Vice Dean for Quality Assurance
- develop a strategy to increase the international visibility of MEFOS
- increase the mobility of teachers and students
- intensify the lifelong learning programmes
- increase the teaching of practical skills in smaller groups of students
- improve availability of learning materials
- lower the teachers' workload and improve the distribution of workload
- continuously revise the study programmes on the basis of feedback from stakeholders
- strengthen international research collaborations.

The Expert Panel was grateful for providing a deeper insight into MEFOS as well for the open and respectful discussions with the stakeholders. The Panel members congratulate all members of the Faculty for all achievements to establish the quality assurance system. Taking the recommendations for improvement into account, a further increase of quality at MEFOS is expected.