Sveučilište u Rijeci
University of Rijeka

MEDICINSKI FAKULTET - FACULTY OF MEDICINE

MEDRI

UNIVERSITY OF RIJEKA
FACULTY OF MEDICINE

Self-Evaluation Report

UNIVERSITY OF RIJEKA

FACULTY OF MEDICINE

Self-Evaluation Report

Name of the evaluated higher education institution: **Faculty of Medicine, University of Rijeka**

Name of the university of which the HEI is a member: **University of Rijeka**

Year of establishment: **1955**

Address: **Braće Branchetta 20**

Telephone: **+ 385 51 651 111**

Fax: **+ 385 51 675 806**

Web address: **www.medri.uniri.hr**

E-mail: **dekanat@medri.hr**

Occupation, name and surname of the head of the HEI: **Assoc. Prof. Goran Hauser, MD, PhD**

HEI bank name and account number: **Zagrebačka banka d.d., IBAN: HR9323600001101410222**

Evaluated period: **October 1, 2016, to September 30, 2021**

Self-Evaluation Committee:

Prof. Ivana Marić, MD, PhD, coordinator and member

Assoc. Prof. Sandra Pavičić Žeželj, PhD, member

Prof. Marina Šantić, PhD, member

Prof. Goran Palčevski, MD, PhD, member

Prof. Josip Španjol, MD, PhD, member

Prof. Jasenka Mršić Pelčić, MD, PhD, member

Assist. Prof. Tanja Ćelić, MD, PhD, member

Assoc. Prof. Ivana Gobin, PhD, member

Nadija Surać, LLM, member

Mamaja Jančić

Valentina Miloš

Paola Car, MOZVAG coordinator

The Self-Evaluation Report was adopted at the 6th Faculty Council session held in electronic form from March 3 to March 8, 2022.

SVEUČILIŠTE U RIJECI - MEDICINSKI FAKULTET
UNIVERSITY OF RIJEKA - FACULTY OF MEDICINE

Ured dekana
Dean's office
Dekan: izv. prof. dr. sc. Goran Hauser, dr. med.
Dean: Assoc. Prof. Goran Hauser, MD, PhD

Braće Branchetta 20 | HR - 51000 Rijeka
e-mail: dekanat_medri@uniri.hr
www.medri.uniri.hr
Tel: +385 (0)51 651 203 | Fax: +385 (0)51 675 806

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ODLUKU
o usvajanju Samoanalize u postupku reakreditacije Sveučilišta u Rijeci, Medicinskog fakulteta u 2022.

I.

Ovom Odlukom usvaja se dokument Samoanaliza Sveučilišta u Rijeci, Medicinskog fakulteta sačinjen u postupku reakreditacije u 2022.

II.

Dokument Samoanaliza Sveučilišta u Rijeci, Medicinskog fakulteta čini sastavni dio ove Odluke.

III.

Odluka stupa na snagu danom donošenja.

DEKAN
izv. prof. dr. sc. Goran Hauser, dr. med.

Goran Hauser
Elektronički potpisao : Goran Hauser

Content

A. Introduction

The Faculty of Medicine in Rijeka (hereinafter: the Faculty) is a public institution registered to perform the following activities: higher education in the scientific field of Biomedicine and Health, which includes the organization and implementation of undergraduate, graduate, integrated undergraduate and graduate, and postgraduate university (doctoral) and postgraduate specialist studies, the organization and implementation of lifelong learning programs; scientific research and development in the biomedical sciences; expert evaluation and expertise; professional services in the health sector; research and professional work; publishing and printing services and reproduction of recorded media; library services for the Faculty; establishment of the Doctoral School program, professional training based on the concept of postgraduate specialist studies and lifelong and adult education (in accordance with the entry in the Court Register of the Commercial Court in Rijeka).
The Faculty is registered in the Register of Scientific Organizations under registration number 62 in the scientific field of Biomedicine and Health and under registration number 62 in the Register of Higher Education Institutions.

A. A.1 Brief history of the Faculty of the Medicine in Rijeka

The Faculty of Medicine of the University of Rijeka was officially founded on November 21, 1955, at the instigation of health professionals in Rijeka and with the great help of the Faculty of Medicine in Zagreb. The first academic year of medical studies at the oldest faculty in Rijeka officially began with an inaugural lecture by the Acting Dean Prof. Silvije Novak, MD, entitled “Current Significance of Internal Medicine”. It was intended for 6 fifth-year students and 12 graduates and for teachers and numerous notables from Rijeka and Zagreb at the City Hall in Rijeka. Each following year, the study was expanded by one year until the official decision on the independence of the faculty, made on June 20, 1957, by the Executive Council of the People’s Republic of Croatia, determining the number of 100 students for admission in the first year. This completed all the years of medical studies, making the Faculty of Medicine in Rijeka the first faculty in Croatia to be established outside Zagreb. The proposal to transfer the Branchetta brothers’ building, which the famous Rijeka benefactors intended for abandoned children and the elderly in 1908, to the Faculty of Medicine was also supported by the Parliament of the People’s Republic of Croatia. After extensive reconstruction, the building housed preclinical departments. Therefore, enrollment in the first year of the five-year study of medicine began in the academic year 1957-1958. In the first years of operation of the Faculty of Medicine in Rijeka, great help in teaching was given by teachers of the Faculty of Medicine in Zagreb. However, habilitated teachers from Rijeka and scientific and teaching experts from other medical centers in the country, who became the first heads of preclinical departments, had immeasurable merits for establishing and further developing certain departments. With a minimum number of teaching assistants available, the foundations for the first departments were gradually created.

Since 1961, postgraduate studies have been organized parallel to undergraduate studies at the Faculty of Medicine. Starting from the academic year 1961-1962, teachers and associates of the Faculty of Medicine in Rijeka also teach at the Community College of Dental Medicine. In June 1966, the Assembly of the Rijeka Municipality decided to establish the Department of Dental Medicine at the Faculty of Medicine in Rijeka, but the first generation of 45 dental students didn't enroll before the academic year 1973-1974. The launching of dental studies was preceded by the organization of a special form of full-time study for graduates of the Community College of Dental Medicine, which was abolished in September 1968. The development of the Faculty was followed by the opening of professional studies (1978-1979 – Study for Senior Nurses/Medical Technicians, 1985-1986 – Study for Medical Imaging Engineers, 1986-1987 – Study for Senior Physical Therapists, 1987-1988 – Study for Medical Laboratory Engineers). In the academic year 1988-1989, the Study of Dental Medicine began with work, and teaching was also conducted in the Italian language. From the academic year 1994-1995, it became a full-time Undergraduate study of Dental Medicine for international students. From the academic year 1990-1991, a full-time four-year Graduate study of Environmental and Public Health began, which was organized as a new university study. The first curricula and course syllabi for that study, at the proposal of the Union of the Society of Sanitary and Laboratory Technicians in 1991, were developed by the Republic Sanitary Inspectorate based on similar international programs.

The curricula of university studies of medicine, dental medicine, environmental and public health, and professional studies have changed several times since then in order to modernize the teaching process, relieve overburdened curricula and increase the pass rate and study efficiency. The study of medicine at all medical faculties was turned into a six-year study. Teaching began in Rijeka in the academic year 1990-1991 and was based on a new program, which was in line with the program of the Faculty of Medicine in Zagreb.
During 1996, the Faculty of Medicine in Rijeka was included in the Central European Exchange Program for University Studies (CEEPUS). This opportunity was used by several teachers and young researchers to stay at top European universities.

The development of the Faculty was marked by the two most significant milestones. Based on the progress of health professions, the Faculty of Health Studies was established in 2015 and took over the university-level training of non-medical health professionals, while the Faculty of Dental Medicine became independent in 2020. Although separate University constituents, these faculties are still strongly connected with the Faculty of Medicine in Rijeka. These three faculties cooperate in undergraduate and postgraduate teaching, scientific programs, infrastructure sharing and teaching and professional staff sharing.

B. A.2 Faculty – current state review

The Strategic Development Plan of the Faculty is the basis of our current operations.
The mission of the Faculty of Medicine as a public teaching and scientific institution is to educate students of medicine, dental medicine, environmental and public health, as well as other professionals in the field of biomedicine and health and other interdisciplinary areas to

acquire knowledge and skills necessary for disease prevention, health preservation and improvement, patient treatment and rehabilitation, and sustainable development of the society as a whole. The basis for further development is the Faculty's permanent commitment to investing in the quality of the education process, scientific research and professional work in the scientific field of biomedicine and health, but also in interdisciplinary scientific areas. The close connection of core activities will contribute to integrating scientific and professional results and findings in the education process to achieve better, faster, complete and sustainable development of the society we live in.

The vision of the Faculty of Medicine is to position itself in a national and international area as a leading, recognizable, and competitive higher education, scientific, and professional institution that is closely connected with and adjusted to the needs of the local and wider community. In terms of education, the Faculty is continuously developing as a higher education institution recognizable primarily by the education of its staff that poses a high level of moral values and a set of skills and knowledge based on learning outcomes. In the scientific and research field, the Faculty is continuously positioned as a recognizable scientific center for biomedical and interdisciplinary research that is in line with the European concept of "smart specialization", with a more powerful orientation towards applied and applicable science, especially in the field of translational research to introduce modern scientific findings into everyday practice. On the professional, scientific and teaching platform, there is maximum cooperation and connection of the Faculty of Medicine with other constituents of the University in the field of biomedicine.
Thanks to the reconstruction of the main building in the academic year 2001-2002, as part of the large investment program of the University of Rijeka, the premises were greatly expanded, old lecture rooms were renewed, and new lecture halls were equipped with the latest teaching aids, while electronic networking of all departments became the basis for further improvement of teaching.

In 2017, based on the tender for the energy renovation, a contract was signed in February 2018, and renovation works on the Faculty's main building started in July 2018. The main building's facade and roof were also renovated within this project. Given the lack of adequate space in the main building, there was a need for additional lecture rooms. Therefore, a project was prepared to construct a multifunctional building and hall within the Faculty complex. A building permit was obtained at the end of 2021, and we are currently receiving construction proposals. The construction of this building would solve the shortage of lecture rooms and accompanying facilities in the long run.

Based on the requirements of the Bologna Process, all study programs were modernized. The Graduate study of Environmental and Public Health was regulated as the study of Environmental and Public Health on two levels: the three-year Undergraduate university study of Environmental and Public Health and the two-year Graduate university study of Environmental and Public Health. After many years of preparation and in response to the needs of the real sector, Integrated graduate study of Pharmacy was accredited in 2021. In addition to academic institutions (the University of Rijeka, Faculty of Pharmacy and Biochemistry of the University of Zagreb), a great role in establishing and initiating the study was played by

professional assistance from the real sector – JGL d.d. Rijeka, pharmacies Jadran Rijeka and Medika d.d. Zagreb – which are also our professional bases (Appendix A.1.1.).
After an eight-year break, the study of Medical Laboratory Diagnostics was relaunched in 2021 as a university undergraduate study.
To align with the European trends in educating health professionals, but also to meet the growing, realistic needs of the Croatian labor market, during the last several years, the Faculty has coordinated the curricula of the study of Medicine with the Directive 2005/36 EC of the European Parliament and the Council, as well as with the Act on Regulated Professions and the Recognition of Foreign Professional Qualifications (124/09 and 45/11). It has also launched a series of new study programs at the undergraduate, graduate, and postgraduate levels. Thus, a total of 35 study programs were entered into the register of study programs at all levels of the Croatian Qualifications Framework (CROQF). In addition, a new curriculum has been developed for the postgraduate doctoral school program, which aims to combine the doctoral-level training of scientific professionals, taking into account the specificities of individual scientific fields within the scientific field of biomedicine and health (basic sciences, clinical sciences, public health and health care, dental medicine, etc.) at the Doctoral School. Furthermore, numerous postgraduate specialist study programs have been accredited and conducted at the Faculty of Medicine to implement many specializations that require theoretical training. The Faculty also offers lifelong learning programs, which meet the specific needs of health professionals' narrow segment in a particular field. We implement such programs in cooperation with business entities, Medical Esthetic Institute (MEI), or independently. Some teaching and professional bases of the Faculty are highly active in providing professional and educational services to specific segments of society, such as athletes and sports clubs, Thalassotherapia Opatija and preventive health programs of the Specialty Hospital Medico.

With the introduction of the state matura system in the Republic of Croatia, since the academic year 2010-2011, enrollment into all undergraduate and integrated study programs of the Faculty of Medicine are performed based on the state matura results after the completion of high school education (National IT System of Applications to Higher Education Institutions – NISpVU system or Become-a-student).

In 2012, the Faculty of Medicine in Rijeka was given for usage part of the facility at the University Campus on Trsat for stationing the Skills Lab, Biobank, Stool Biobank and Laboratory for Molecular Epidemiology of the Faculty of Medicine. The Skills Lab is a simulation center that represents an educational training ground for practicing medical procedures as students don't have the opportunity to learn these procedures on patients. Therefore, it is necessary to enable students to practice procedures on sophisticated models (so-called dolls or mannequins) in an adequate classroom or lab designed exclusively for this purpose. In the Skills Lab, participants acquire certain medical skills and knowledge necessary for future physicians and other medical staff, which cannot be fully mastered during their stay at appropriate departments or during clinical classes. The Skills Lab also conducts courses for citizens to raise awareness of administering first aid (police, firefighters, members of the Croatian Mountain Rescue Service, etc.). The Biobank was established within the EU-funded project called TransMedRi under the Department of Pathology of the Faculty of Medicine. It implies collecting human biological

samples to create the preconditions for translational research in medicine. In 2021, the Biobank was moved to the Faculty premises. In addition, the first Stool Biobank was established as a basis for improving the fecal transplantation procedure, which is carried out in the teaching base of the Faculty, CHC Rijeka. Fecal samples are also available to other interested hospitals in Croatia, thus representing a unique database of samples available at all times. In 2021, the Laboratory for Molecular Epidemiology was repurposed into a room for practical exercises in chemistry for the needs of the study of Pharmacy.
A significant step forward has been made in the field of library services. In cooperation with our largest teaching base, the CHC Rijeka, and related faculties in the field of biomedicine and health from our University of Rijeka (Faculty of Health Studies, Faculty of Dental Medicine), we established in 2021 the Biomedicine and Health Library. Although the Library provides regular services and activities, in the last two years, the activity has been expanded with access to the most significant e-resources in the field of biomedicine and health, for which substantial funds are allocated.

In parallel with the development of curricula began the development of scientific research activity, and in 1959, the first PhD thesis was defended at the Faculty of Medicine in Rijeka. To date, 747 PhD theses and 717 master's theses have been defended at the Faculty. The rapid development of basic medical sciences is the cornerstone of scientific research activity and professional development of clinical medical sciences. Many eminent clinicians have made their first scientific steps in preclinical laboratories. Numerous research groups have achieved enviable international recognition through their work. Faculty teachers have been organizing numerous scientific meetings, lectures, congresses, conferences, and symposia. Scientists have received numerous national and international recognitions and awards for their work and the most prestigious state science awards in the Republic of Croatia. There is a visible increase in the number of scientific papers, especially papers published in the highest quality journals (Q1 and Q2) whose authors are teachers and associates of our Faculty. The majority of scientific research activities are organized through national projects funded by the Croatian Science Foundation, university grants, international projects, and Faculty's Researcher Support Fund, established in 2020. In the last 15 years, the Faculty has developed significant international cooperation. Many foreign scientists teach at our postgraduate doctoral studies or deliver invited lectures at the Faculty. The development of scientific research work is accompanied by large investments in much-needed scientific equipment, mainly procured by earmarked funds from the Croatian Ministry of Science and Education, funds from international projects, and the Faculty's revenues. For the last 25 years, the Faculty has had a modernly equipped facility for housing experimental animals, Laboratory of Mouse Engineering and Breeding Facility (LAMRI). It was completely renovated in 2003 with the funds of the University of Rijeka, so today, it is possible to breed laboratory animals in strictly controlled conditions.

Thanks to the quality development of immunology and experience in monoclonal antibody production, conditions were created to implement a technological project for mass production of monoclonal antibodies and establish the Center for Proteomics (2005) in a building built with earmarked funds of the University of Rijeka.

This was followed by establishing other centers that cover specific areas of medicine and medical education.

C. A.3 Professional administrative activity

The entire development of the Faculty would not be possible without the parallel development of professional services. Intensive work is being done on the computerization of office management systems. The digital office management system and Diar digital archive were launched in 2020 and were fully implemented in 2021, making us the first constituent of the University of Rijeka with implemented digital office system. Also, we joined the Center for Shared Services (*State Cloud*) system within the Central State Office for Development of the Digital Society, which ensured the stability and security of our databases. In 2021, the development of the INP application started, which is intended for students and teachers to facilitate the monitoring of course obligations, teaching and checking attendance. INP is a unique application that enables controlling the teaching process, planning obligations and storing curricula. It also contains the Clinical Skills e-Book, enabling the dynamic entry and monitoring of students' practical knowledge acquired throughout their studies. Full implementation is expected in 2022.
In parallel with the above, business processes have been altered and adjusted by concluding one-year lease agreements for printers, computer equipment, and commercial vehicles to optimize and improve cost management. Furthermore, a system for procurement planning has been introduced to achieve more favorable market conditions. An e-biding system will also be introduced soon.

D. A.4 Organizational units

The organizational structure of the Faculty is based on the Ordinance on Internal Organization and Workplaces at the Faculty and is adapted to the tasks arising from scientific, teaching and higher professional activities performed in:

- scientific and teaching organizational units
- professional administrative services
- Biomedicine and Health Library.

The Appendixes contain pictures of schemes of organizational structure according to the Ordinances from 2019 (Figure A.1.1) and from 2021 (Figure A.1.2).

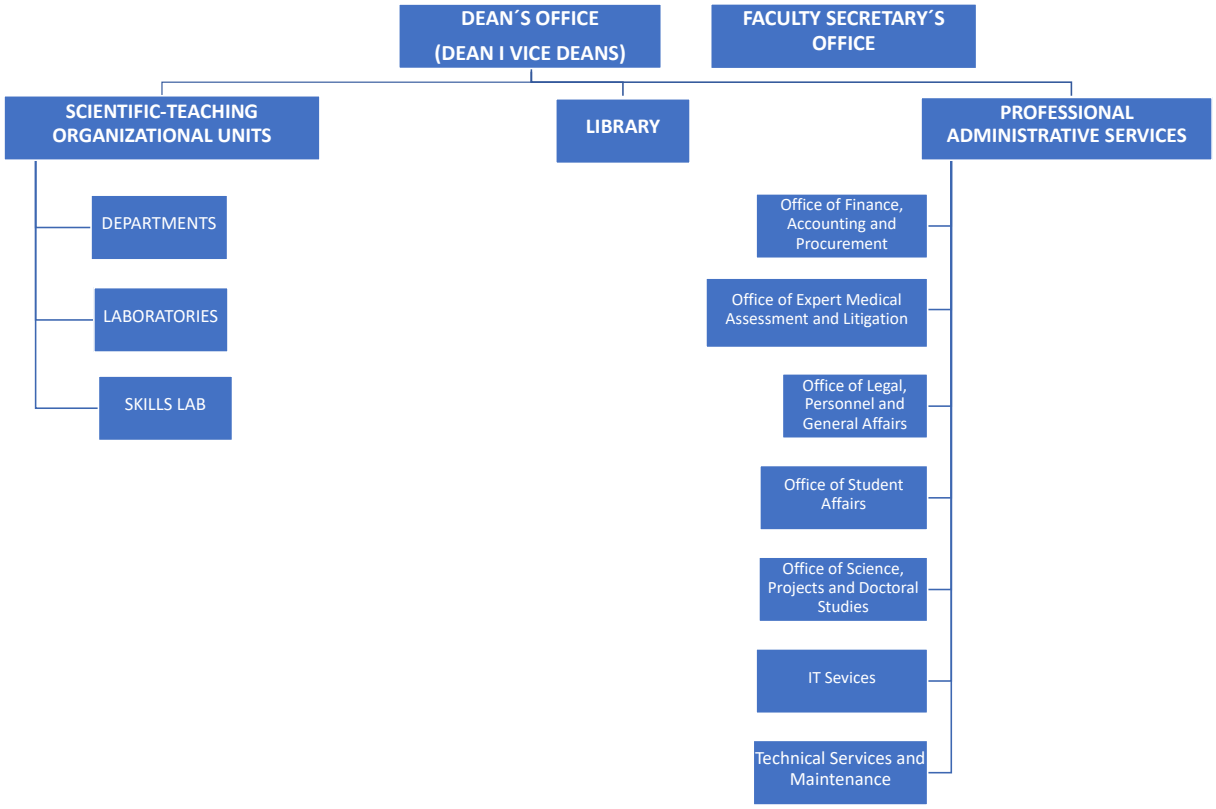


Figure A.1.1. Organizational structure of the Faculty.

Departments

Departments are the basic organizational form of teaching and scientific work at the Faculty, whose number and names are regulated by the General Act on Faculty Organization. Department's main role is the implementation and coordination of teaching in all study programs of the Faculty, participation in the improvement of the teaching process and selection and promotion of teachers. Department activities are managed by the head.

Clinics and clinical departments

Clinics and clinical departments are the basic organizational forms at the Faculty, determined based on the connection and homogeneity of scientific, professional and teaching work as a unique operating process. Clinics and clinical departments are organizational forms that represent a specificity in the education of health professionals and are organized within the Clinical Hospital Center and other teaching bases of the Faculty. Clinics and clinical departments are organized by meeting stringent requirements stipulated by health regulations. Activities of clinics and clinical departments are managed by the head. Heads of organizational units manage activities, chair meetings, coordinate and monitor employees' performance related to teaching or research work.

The Faculty of Medicine currently has 39 departments.

Teaching bases

Course teaching is organized and performed in healthcare institutions equipped with appropriate staff, premises and technical capabilities. Mutual rights and responsibilities in teaching in healthcare institutions are regulated by an agreement between the Faculty and the healthcare institution (teaching base) in accordance with the health and higher education regulations. If an institution does not have the prerequisites to be a clinical institution, the Minister of Health must give consent for teaching to be conducted. The Minister assigns these institutions the name "associate institution".

Table 1. List of Faculty's teaching bases.

Clinical Hospital Center Rijeka
Teaching Institute of Public Health of Primorje-Gorski Kotar County
Health Center of Primorje-Gorski Kotar County
Emergency Medical Service Rijeka
Lovran Orthopedic Clinic
Thalassotherapia Opatija
Thalassotherapia Crikvenica
Pula General Hospital
Karlovac General Hospital
Rab Psychiatric Hospital
Lopača Psychiatric Hospital
Vukovar County General Hospital and Croatian Veterans Hospital
Polyclinic Medico
Special Hospital for Ophthalmology Svjetlost, Zagreb
Radiochirurgia Zagreb

Centers

Centers are organizational forms at the Faculty that connect practice, science and higher education and in which students can also participate. The center's name and headquarters, activities, internal organization, funding, available premises, and other issues important for the center's performance are determined by the decision on the establishment of the center. Center activities are managed by the head.

Laboratories/Skills Lab

Laboratories are established to facilitate institutes and departments performing scientific and professional work and for the practical and demonstration part of teaching (to a lesser extent). Within its field, a laboratory is in charge of the study program implementation, procurement,

maintenance and development of laboratory equipment, improvement of the quality of teaching and learning, development of scientific and professional work, and organization of scientific and professional cooperation with business companies, scientific institutes and other external stakeholders.

Secretary's Office and professional administrative services (Services and Figure A.1.2)

The organizational unit for performing professional administrative services is the Secretary's Office, headed by the secretary of the Faculty. It consists of different professional administrative services. Job description for all professional administrative staff is determined by the Ordinance on Internal Organization and Workplaces at the Faculty.

Biomedicine and Health Library

The Faculty's Library is a communication center that provides scientific and professional information. Library activities are performed to facilitate the scientific work of teachers and associates and to meet students' needs. Library activities are managed by the head.

E. A.5 Academic administrative structure (Faculty Administration)

Dean

The dean manages the Faculty, represents the Faculty, is its chief and head. The dean organizes the Faculty's business and operations, convenes and chairs the Faculty Council's sessions, establishes working groups and temporary committees, approves teachers' engagements outside the Faculty, decides on the financial plan and statement of accounts, participates in the work of university bodies in accordance with the law and the University Statute, and performs all tasks for which he is authorized in accordance with the laws, the Statute and other core documents of the Faculty. The dean is elected by the Faculty Council for a three-year term of office. The same person may be elected dean no more than twice in a row. The Dean's Collegium is an advisory body composed of vice deans, the dean and the secretary of the Faculty. A student representative and a representative of the largest teaching base (CHC Rijeka) are also invited to the Dean's Collegium.

Vice Deans

A teacher with a scientific-teaching rank may be elected vice dean. The vice dean's term of office lasts three years. The vice dean's term of office is not limited to two consecutive terms, as in the election of the dean, but the same person can be re-elected. Vice deans are appointed by the Faculty Council on the proposal of the dean. Each vice dean is in charge of their scope of work. The dean gives authority to one of the vice deans (deputy) to replace him in absentia. Vice deans appointed for the current dean's term of office (from October 1, 2020) are:

• Vice Dean for Teaching
• Vice Dean for Business Affairs
• Vice Dean for Scientific Research Activity
• Vice Dean for the Study of Environmental and Public Health and Study of Medical Laboratory Diagnostics
• Vice Dean for Postgraduate Studies and Lifelong Learning
• Vice Dean for Quality Assurance
• Vice Dean for the Study of Medicine in English and International Relations.

The head of the department manages the activities of the department. According to the procedure prescribed by the Faculty Statute, a teacher with a scientific-teaching rank may be elected head. The head's term of office is four years, and the same person can be elected head an unlimited number of times.

The secretary of the Faculty assists the dean in legal matters and supervises the legality of activities, prepares materials for Faculty Council sessions, participates in drafting the Statute, general acts of the Faculty and contracts concluded by the Faculty, supervises the correct application of laws, Statute and general acts of the Faculty, Ministry decisions and decisions and conclusions of the Faculty Council and the dean, gives legal and professional advice and opinions on regulations related to the work of the Faculty, Faculty bodies and employees, cooperates with the Scientific Field Committee in the procedures for appointment to scientific ranks, represents the Faculty before the court by the authorization of the dean, administrative and other bodies, supervises the improvement of business processes in which she participates, supervises whether data on the Faculty's website are published and updated within her respective area of work.

The Faculty Council is an expert council of the Faculty whose composition is determined by the Faculty Statute. It consists of: all heads of departments, all full professors, elected representatives of teachers with teaching ranks (senior lecturers and lecturers) and elected representatives of employees with associate ranks (research assistants, senior research assistants) who are not postgraduate students, and representatives of university students (15% of the total number of Council members on the day of their election – 5% of postgraduate students and 10% of students of other studies). The dean and vice deans are ex officio members of the Council. The Faculty Council establishes permanent and temporary committees.
The Faculty Council elects the heads of departments and the heads of other organizational units. At the beginning of their term of office, the heads of organizational units also appoint a deputy who is authorized to perform all affairs within the scope of their work and attend Faculty Council sessions in their absence.

Head of studies
Heads of studies also participate in the organization of teaching. They are appointed by the Faculty Council on the dean's proposal. In agreement with the course coordinators and the scheduler, the heads of studies determine the schedule of lectures, seminars and practicals, supervise the modernization of study programs, and harmonize the content and title of elective

courses. They participate ex officio in the section for Learning Outcomes within the Teaching Committee. There are 13 heads of studies at the Faculty of Medicine in Rijeka.

F. A.6 Study programs

The Faculty offers 6 undergraduate/graduate and integrated study programs, a Doctoral School, and 22 postgraduate specialist studies. The goal of all Faculty' study programs is to provide students with the competencies necessary for rapid and successful integration into the global labor market. The Faculty's study programs are based on the Faculty's and University's goals, thus achieving the Council of Europe's four purposes of higher education: preparing students for active citizenship and future careers (e.g., contribution to employability), supporting students' personal development, developing a broad and advanced knowledge base and encouraging scientific work and innovation. The required competencies are described by learning outcomes. The structure of learning outcomes for all undergraduate and graduate study programs can be found in Table 2.1. in the analytic supplement.

G. A.7 Self-evaluation process

Following the published 2022 Higher Education Institutions Re-accreditation Plan (ASHE), at the 2nd session held on November 9, 2021, the Faculty Council adopted a Decision on the appointment of the Self-Evaluation Committee (Appendix A.1.2.). Given the importance of the whole procedure, an additional expert panel was appointed as a dean's advisory body in this process (Appendix A.1.3.).
At the beginning of November 2021, the Faculty received a notification from the ASHE on the re-accreditation procedure with the deadline for submitting the self-evaluation report (March 28, 2022) and the approximate date of the expert committee's visit (April 25–29, 2022).
Since the spring of 2020, given that the re-accreditation procedure was initially planned for 2021, the Faculty has been conducting numerous activities related to in-depth analysis of study programs (analysis and alignment of learning outcomes, education on the development of student-oriented teaching methods, reviewing learning outcomes assessment, etc.) in accordance with ESG standards, as well as to detailed analysis of students' pass rates, all within a comprehensive preparation for the restructuring of study programs. In accordance with the decisions of the University of Rijeka, we have been developing new Faculty websites and a new SharePoint Portal (SPP) intranet. All these activities were also the basis for creating our self-evaluation report. A special undertaking was to submit data via the MOZVAG information system, especially regarding the redefined learning outcomes for study programs and individual courses.

In 2021, Faculty members, teachers and professional administrative services participated in several workshops related to the MOZVAG2 information system, thus preparing us for the upcoming re-accreditation.

All Faculty teachers participated in the mentioned activities, and all professional administrative services were in charge of the technicalities. Data on the Faculty structure and the number of employees, students and graduate students are presented for the period up to December 31, 2021. The Self-Evaluation Report was written from November 2021 to the end of February 2022. During this period, six meetings of the Accreditation Council and eight meetings of the Accreditation Committee were held.

The final text of the self-evaluation was completed in February 2022, after data consolidation for the academic year 2020-2021. The Self-Evaluation Report was adopted on the 6th session of the Faculty Council held on March 8, 2022.

The rest of the document presents detailed information on certain topics or standards for evaluation of the quality of the higher education institution.

I. INTERNAL QUALITY ASSURANCE AND SOCIAL ROLE OF THE HIGHER EDUCATION INSTITUTION (ESG1.1., ESG 1.7., ESG 1.8.)

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

The basic organizational and structural body for quality assurance at the Faculty of Medicine in Rijeka (hereinafter: the Faculty) is the Quality Assurance and Improvement Committee (hereinafter: the Quality Assurance Committee).

Article 7 of the Ordinance on Quality Assurance and Improvement System of the Faculty of Medicine in Rijeka regulates the areas of the quality management system, which relate to learning and teaching, scientific work, international cooperation, information system, and public exposure.
The Ordinance defines the number and composition of members of the Quality Assurance Committee. Members of the Committee are representatives of teachers, Faculty Administration, associates, students, non-teaching staff and external users. The results of the Quality Assurance Committee's activity are available on the Faculty's website.

In accordance with the provisions of the Ordinance on Quality Assurance and Improvement System of the Faculty of Medicine in Rijeka, the Quality Assurance Committee organizes, coordinates and implements procedures for the assessment and development of internal quality assurance and improvement mechanisms at the Faculty level, especially concerning the following elements: planning the strategy for quality improvement at the Faculty, implementing the assessment program and procedures for quality improvement at the Faculty, and coordinating the implementation of projects for professional development of employees (academic, administrative and technical) at the Faculty. Furthermore, the Quality Assurance Committee organizes, coordinates and implements assessment procedures and develops internal mechanisms for quality assurance and improvement at the Faculty level, especially concerning the following elements: developing quality indicators, self-evaluation, student participation in quality monitoring, training of administrative and technical staff, and defining and introducing standardization in the administrative field. Also, the Committee organizes, coordinates and implements procedures for monitoring and improving the quality of the teaching process and learning outcomes, especially regarding the following elements: analyzing students' academic success and causes of poor, inefficient and prolonged academic performance, exploring teachers' competencies, in-service training of university teachers (lifelong learning), evidence of the improvement of teaching and quality of general and specific competencies achieved by the study program.

The Faculty's Quality Assurance Committee carries out these activities in cooperation with the University of Rijeka's Quality Assurance and Improvement Committee, the University of Rijeka's

Quality Assurance and Improvement Center, the Faculty of Medicine's Center for Improvement of Teacher Competencies and Communication Skills (hereinafter: the Center), the Faculty of Medicine's Office of Quality Assurance and Improvement and other stakeholders.

The Center for Improvement of Teacher Competencies and Communication Skills of the Faculty of Medicine in Rijeka was established to provide continuous professional, methodological and pedagogical education and training of higher education teachers in acquiring and improving teacher competencies, especially in the field of medical education and traditional and advanced teaching methods. The Center's activities are focused on several target areas related to improving the quality of medical education, medical communicology, medical teaching in English, digital technologies in learning and teaching, and graphic design. The Center actively promotes cooperation with experts in medical education in Croatia (Croatian Association for Medical Education) and related centers abroad. The Center encourages teachers, especially young ones, to target inclusion and orientation towards scientific research in medical education, writing PhD thesis, and scientific profiling in medicine to provide the foundations of professional and scientific development. It is especially important to encourage and involve young teachers in the field of clinical medical disciplines to enhance the quality of clinical education, especially clinical skills, communication skills and the application and development of innovative educational programs.

All other employees of the Faculty and students are also responsible for the implementation of the quality policy through the work of the Faculty Administration, departments and other organizational units such as the Office of Student Affairs, the Office of Science, Projects and Doctoral Studies, the Biomedicine and Health Library, the Student Union, etc. (Figure 1.1.1).

Students and/or student representatives of all levels of study, scientific-teaching and non-teaching staff are members of the Committees, Board and the Faculty Council. They participate in data collection and analysis and decision-making. The Statute of the Faculty of Medicine in Rijeka defines the voting system in the Faculty's operational bodies. Involvement of external stakeholders in quality assurance is achieved by including them in teaching through guest lectures, projects and activities of the Faculty and operational bodies of the Faculty, such as the Quality Assurance Committee.

The Faculty's quality assurance and improvement system is based on the principles, criteria and methods for planning, monitoring, evaluating and proposing measures to improve the system, in accordance with the criteria specified in the Act on Quality Assurance in Science and Higher Education, ESG standards, Statute of the University of Rijeka and Statute of the Faculty of Medicine in Rijeka.

The internal processes and activities of the quality management system are stipulated by the Ordinance on Quality Assurance and Improvement System of the Faculty of Medicine in Rijeka and the Quality Assurance Manual of the Faculty of Medicine in Rijeka. The procedures set out in them clearly define the scope and sequence of activities, the associated responsibilities, authorities and verification methods required for internal quality assurance. The chairperson

of the Quality Assurance Committee and the representative of the Faculty Administration – Vice Dean for Quality Assurance are responsible for preparing, updating, and developing the mentioned documents.
All materials are available to students in professional administrative services, while all learning and teaching materials are available on the Merlin e-learning platform.

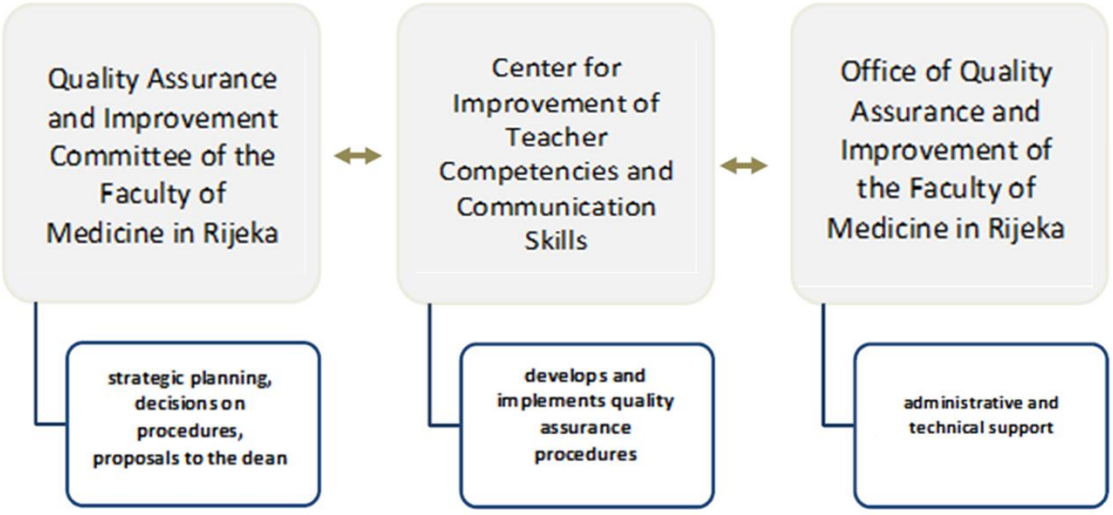


Figure 1.1.1. Quality management and coordination system of the Faculty of Medicine in Rijeka.

Improvement of the quality assurance system also ensures the collection and analysis of information on the quality of study programs and other activities. The information necessary for the decision-making process is:

- Results of teacher evaluations on undergraduate, graduate and integrated studies submitted to the evaluated teachers, their heads and the chairperson of the Quality Assurance Committee:
  - via e-mail
  - via SharePoint Portal intranet (hereinafter: SPP).
- Positive teacher evaluation by students is one of the prerequisites for scientific promotion.
- The course/teacher evaluations are active in the last week of teaching.
- Compulsory courses are evaluated every year, and elective courses every other year.
- The results of teacher evaluations on postgraduate specialist studies and doctoral studies are submitted by e-mail to the evaluated teacher, the head of postgraduate university (doctoral) studies and the head of the Doctoral School.
- Minutes from the Quality Assurance Committee sessions record the discussions and conclusions on individual points, which are discussed, as needed, at both regular or thematic Faculty Council sessions. This meeting minutes are:
  - submitted by e-mail to the members of the Quality Assurance Committee
  - can be found on the SPP intranet webpage of the Quality Assurance Committee and is

accessible to Quality Assurance Committee members.

- Average grades of course evaluation by departments are published at the Faculty Council once a year, at the end of the academic year.
- Opinions and experiences of mentor teachers and mentor students. Namely, at the beginning of the academic year, each first-year student is assigned a mentor teacher and a mentor student (Section 3.4., Appendix 2).
- Opinions and experiences of the Student Union representatives who, if necessary, present the problems and achievements of the students of the Faculty of Medicine at the Faculty Council sessions.
- Survey on student satisfaction with the teaching at the end of studies, which is given to students upon completion of undergraduate, graduate and integrated studies (Section 2.3., Appendix 7). The Office of Student Affairs is in charge of this process. They submit questionnaires to the Center for Studies of the University of Rijeka within the terms defined by the Teaching Quality Assurance Manual of the University of Rijeka. The Center processes them and publishes the results, which, among other things, serve as a basis for discussion at the Quality Assurance Committee and the Faculty Council sessions.
- Survey on the satisfaction of teaching and non-teaching staff, which is active throughout the entire academic year on the SPP intranet. Average results of teaching and non-teaching staff's satisfaction are published once a year, at the end of the academic year at the Faculty Council session. The Quality Assurance Committee discusses the results to improve the satisfaction of teaching and non-teaching staff (Appendix 1.1.1. and Appendix 1.1.1a.).

Furthermore, to improve the quality of teaching and the satisfaction of both students and teachers, the Faculty has been conducting peer review (Appendix 1.1.2.) for years in accordance with the provisions of the Teaching Quality Assurance Manual of the University of Rijeka and the Quality Assurance Manual of the Faculty of Medicine in Rijeka, which describe in detail the procedure of peer review of teaching, forms for teaching evaluation and teacher self-evaluation.

Student satisfaction with study programs is measured by:

- Survey on student satisfaction with teaching conducted after completing studies, as outlined above (Section 2.3., Appendix 7).
- Teaching evaluation survey – conducted for all courses through a request on the SPP intranet. Surveys are processed via Excel and sent by the employee of the Office of International Relations and Quality Improvement to the course coordinators, heads, chairperson of the Quality Assurance Committee and Vice Dean for Quality Assurance. Also, the employee of the Office of International Relations and Quality Improvement is in charge of analysing survey results. Based on the conclusion from the Quality Assurance Committee session, the chairperson of the Quality Assurance Committee submits to the Faculty Council a written report once a year, at the end of the academic year. The report highlights the average results of the course evaluations and teacher evaluations by departments (Appendix 1.1.3. and Appendix 1.1.3a.).

The Vice Dean for Quality Assurance and the chairperson of the Quality Assurance Committee organize meetings with student representatives in the Quality Assurance Committee and with representatives of study years of all study programs to discuss ways to increase motivation and encourage student turnout in terms of completing student surveys.

The Faculty is dedicated to developing and implementing human resource management policies. The long tradition and success in educational, scientific and professional areas result from joint work and synergy of all teachers, students and non-teaching staff based on commitment, enthusiasm and transparency of all procedures.

For each calendar year, the Faculty Council adopts a Plan for Promotion, Employment and Other Personnel Changes (Appendix 1.1.4. and Appendix 1.1.4a.), which is created based on job complexity coefficients available to the Faculty and in accordance with current Croatian regulations. The Senate of the University of Rijeka decides on the approval of the Plan. Based on the decision on adoption, the University of Rijeka gives its consent for announcing calls for application. The decision on processing individual appointments to ranks is made by the Faculty Council based on the University of Rijeka's consent by publishing calls for application and appointing expert committees in charge of conducting appointments to ranks. Calls for application are published in the Official Gazette, daily newspaper, EURAXESS website and Faculty's website in accordance with the provisions and general acts of the University of Rijeka and the Faculty. The final decision on the appointment to ranks and job positions for teachers and associates is made by the Faculty Council based on reports and proposals of the expert committee.

The quality policy of the Faculty of Medicine in Rijeka is based on the Teaching Quality Assurance Manual of the University of Rijeka, the Quality Assurance Manual of the Faculty of Medicine in Rijeka and other related documents at the national and European level, such as:

- Strategy for Education, Science and Technology (OG 14/2014)
- Act on Scientific Activity and Higher Education (OG 123/03, 198/03, 105/04, 174/04, 46/07, 45/09, 63/11, 94 / 13, 139/13, 101/14 and 60/15, 131/17)
- Act on Quality Assurance in Science and Higher Education (OG 45/09)
- Act on the Croatian Qualifications Framework (OG 22/13, 41/16, 64/18, 47/20, 20/21)
- Ordinance on the Croatian Qualifications Framework Register (OG 96/21)
- Ordinance on the Content of Licence and Conditions for Issuing Licence for Performing Higher Education Activity, Delivering a Study Programme and Re-accreditation of Higher Education Institutions (OG 24/10)
- Ordinance on Conditions for Issuing Licence For Performing Scientific Activity, Conditions for Re-accreditation of Scientific Organizations and the Content of Licence (OG 83/10)
- Guidelines for harmonization of study programs with qualification standards and the development of new study programs harmonized with the Croatian Qualifications Framework, National Council for Human Resource Development, Zagreb, December 2016
- Other documents of the Agency for Science and Higher Education, such as: Standards for quality evaluation of the University and University constituents in the process of re-accreditation of higher education institutions, Procedure for re-accreditation of higher education institutions, System of assessment and evaluation of the quality of higher education institutions in the process of re-accreditation of higher education institutions

- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), 2015.

The Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025 defines strategic goals regarding the management and continuous training of Faculty employees. This implies the establishment of instruments for the development and improvement of educational function, activities in scientific research, organizational structure and public function (p. 23-38). The areas are structured in accordance with the Strategic Development Plan of the University of Rijeka, given that the Faculty contributes with its work and results to the achievement of the University's set goals and mission.

Each strategic goal has defined subgoals/tasks, indicators, target values and responsible persons and/or bodies of the Faculty for their realization (Table 1.1.1., Appendix 1.1.5.).

The Faculty follows the University of Rijeka Strategic Development Plan for the periods 2014-2020 and 2021-2025, the basic goals of which are included in the Strategic Development Plan of the Faculty of Medicine in Rijeka. In addition, every year, the Faculty analyzes the implementation of the University's strategic goals and the Report on the Implementation of the Strategic Development Plan, which are adopted at the Faculty Council sessions.

The starting point for the Strategic Development Plan of the Faculty of Medicine in Rijeka for the period 2019-2025 was the SWOT analysis because defining strategic goals implies considering the factors that may affect their implementation, which imply the Faculty's strengths and weaknesses and the opportunities and threats the Faculty faces in its environment. The SWOT analysis is supplemented by strengths, weaknesses, opportunities, and threats arising from the analysis of ESG standards on quality in higher education, analysis of the situation in the environment in which the Faculty operates, and analysis of the situation in teaching.

The Science Strategic Plan 2016-2020 of the Faculty of Medicine in Rijeka was adopted in July 2016. It covers all basic areas of development and progress at the Faculty of Medicine in the field of science. The document presents the Faculty's mission, vision, position and scientific potential and elaborates the strategic goals of the Faculty's development and their implementation outcomes. The Report on the Implementation of the Science Strategic Plan for the period 2016-2020 is also available (Appendix 1.1.6.).

For the next period from 2021 to 2025, a new strategy was adopted called the Science Strategic Plan 2021-2025 of the Faculty of Medicine. It deals in more detail with scientific research activity and key areas of scientific development at the Faculty.
The Faculty of Medicine in Rijeka participates in the implementation of internal evaluation of the quality of higher education institutions organized by the University of Rijeka. The procedure and criteria for internal evaluation are defined by the Teaching Quality Assurance Manual of the University of Rijeka, which the Faculty also follows. The internal evaluation of the quality assurance system at the University of Rijeka is carried out cyclically once every three years. The periodic internal evaluation of the quality assurance system consists of four phases: Phase I: Planning; Phase II: Assessment in the narrow sense; Phase III: Report; Phase IV: Follow-up. The

internal evaluation results and the opinion of the committee appointed by the University during the previous two cycles (2012-2015 and 2017-2019) are publicly available (Quality Assurance System/Activities and reports). During the academic year 2021-2022, the Faculty will undergo the third assessment cycle. Internal evaluation of the effectiveness of the institutional quality assurance system was conducted using the Form for constituent's self-evaluation of teaching quality, established at the University of Rijeka level (Teaching Quality Assurance Manual of the University of Rijeka).

The Faculty systematically collects and analyzes data on its processes, resources and results and uses them for effective management. Data crucial for making well-founded decisions are obtained from the following information systems:

- ISVU – Higher Education Institutions Information System – data on study programs, students, courses, grades, pass rates, ECTS credits, student surveys, employees
- National IT System of Applications to Higher Education Institutions – NISpVU system or Become-a-student – data on applicants, applications, high school transcript, state matura results
- MOZVAG – information system supporting evaluation of study programs – data on study programs and teacher workload
- CROSBI – Croatian Scientific Bibliography – information on scientists and scientific productivity
- UNIRI portfolio and University of Rijeka's SharePoint Portal – information on University's employees, operational bodies, documents, decisions and calls for application
- Merlin – e-learning platform
- Faculty's website
- DABAR – digital academic archives and repositories
- CROLIST - library business program
- Turnitin – system for verifying the originality of undergraduate, graduate and postgraduate level student theses
- STATUS – payroll software
- COP – central salary system
- Svarog – software for secondary income calculation
- Cron – general ledger, balance sheets, invoicing, payment transactions, assets, treasury
- VIRGA – centralized procurement at the Faculty level
- EOJN – vendor database
- DIAR – e-business.

Areas of key performance indicators are defined by the Faculty's and University's strategic development plans and financial statements. The Report on the Faculty Administration's Implementation of the Strategic Development Plan includes a system for monitoring key performance indicators according to the planned indicators of the University of Rijeka's Strategic Development Plan. Also, at the Faculty Council sessions, the financial reports (Appendix 1.1.7.) for the previous year and the reports of the Faculty's Quality Assurance Committee are adopted and discussed once a year.

The Report on the Faculty Administration's Implementation of the Strategic Development Plan is presented to the Faculty Council members once a year. Based on this Report, Action Plans are defined for the next academic year.

1.2. Higher education institution applies the recommendations for quality improvement from previously conducted evaluations

The Faculty undergoes periodic quality assurance procedures conducted by the University of Rijeka (internal evaluation) and the Agency for Science and Higher Education (ASHE).
The University of Rijeka conducts the quality assurance evaluation process every three years, while the ASHE conducts it every five years.

All forms of external accreditation operate within the legal framework, such as: the Act on Scientific Activity and Higher Education (OG 123/03, 198/03, 105/04, 174/04, 02/07, 46/07, 45 / 09, 63/11, 94/13, 139/13, 101/14 and 60/15, 131/17), Act on Quality Assurance in Science and Higher Education (OG 45/09), Ordinance on the Content of Licence and Conditions for Issuing Licence for Performing Higher Education Activity, Delivering a Study Programme and Re-accreditation of Higher Education Institutions (OG 24/10).

The self-evaluation implementation at the Faculty conducted by the University is based on documents related to the quality assurance system, reports and action plans under the University of Rijeka Strategic Development Plan 2014-2020, reports on previous quality assurance system evaluations and/or re-accreditation of the institution, and Faculty's strategic documents, Statute and regulations.

The University of Rijeka conducts an internal evaluation of the quality assurance system every three years. The last evaluation at the Faculty of Medicine in Rijeka was conducted in 2018 (second cycle), and a new one was announced for 2022 (third cycle). ASHE conducts periodic evaluations every five years. The last evaluation was conducted in March 2015, and a new re-accreditation cycle has been announced for April 2022. In the academic year 2016-2017, the ASHE completed the accreditation of the doctoral study program (Appendix 1.2.1.).

After each accreditation cycle, the Faculty took steps to adopt suggestions to improve the system. After the conducted internal and external evaluations, the Faculty of Medicine in Rijeka analyzes the proposals and continuously implements activities for improvement.

In that sense, in accordance with the recommendations of the previous external evaluation procedure in the section Higher education institution management and quality assurance, the Faculty has adopted a new Strategic Development Plan of the Faculty of Medicine in Rijeka for the period 2019-2025 with clearly defined areas and goals and defined subgoals/tasks, indicators, target values and responsible Faculty's persons and/or bodies for their realization. Also, in July 2016, the Science Strategic Plan of the Faculty of Medicine in Rijeka for the period 2016-2020 was adopted, with clearly specified strategic goals for scientific development and expected outcomes

and indicators of implementation success. The Science Strategic Plan 2021-2025 of the Faculty of Medicine was adopted on March 8, 2022. Furthermore, after the re-accreditation of the Faculty's doctoral studies in the academic year 2016-2017, the Doctoral School of Biomedicine and Health was founded.

All activities that resulted from the University of Rijeka's recommendations after the second cycle of internal evaluation are analyzed in Table 1.2.1. (Appendix 1.2.2.).

1.3. Higher education institution supports academic integrity and freedom, prevents all forms of unethical behavior, intolerance and discrimination

The quality policy of the Faculty of Medicine in Rijeka supports the prevention of all forms of unethical behavior, intolerance and discrimination, in accordance with the Code of Ethics for Teachers, Associates and Scientists of the Faculty of Medicine in Rijeka, the Code of Ethics for Students of the Faculty of Medicine in Rijeka and Ethics Committee Rules of Procedure for Protection of Academic Integrity, preserving the dignity and promoting the reputation of the Faculty of Medicine, University of Rijeka. All these documents are based on respecting the person's dignity, equality and justice, academic freedom, professional conduct and all laws and legal procedures. The Ethics Committee for Biomedical Research also operates at the Faculty.

In addition to the above, all undergraduate, graduate and postgraduate theses are checked through the Turnitin software for verifying the originality of students' theses for all constituents of the University of Rijeka (Decision of the Faculty Council dated February 17, 2015). Furthermore, all undergraduate, graduate and postgraduate theses are entered in the DABAR digital academic archive and repository to reduce unethical behavior in the preparation of theses. In addition, different ethical issues are discussed during the teaching of different courses, and students are trained to reflect on the importance of ethical conduct. The Rules of Conduct for Students during the Current Pandemic, which were adopted and accepted at the University level in July 2021, are published on the Faculty's website.

Regulations on studying, student evaluation, undergraduate and graduate thesis are published on the Faculty's website.

Evaluation and assessment criteria and methods are publicly available and published on time on the Faculty's website (pursuant to Article 79 of the Act on Scientific Activity and Higher Education, Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka) in the detailed syllabus of each course and on the Merlin e-learning platform, which can be accessed with an AAI identity. Accordingly, the assessment and evaluation criteria and methods are presented in the introductory lectures at the beginning of the semester.

The Faculty's Office of Legal, Personnel and General Affairs is available for students in solving any legal problem, while vice deans in charge of individual studies, Vice Dean for Teaching and the entire Faculty Administration are available for all issues related to teaching. Students have their student ombudsman at the University level and at the Faculty level.

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

The Faculty's official website is the basic platform for informing the interested public about all activities. It is available in Croatian and English and contains the following information: information for students, information about the Faculty, links to the SharePoint Portal (SPP) for teachers and students and a link to the Faculty Council webpage for Council members. A special website is also available for our study of Medicine in English. Detailed content is available on the Faculty's website under the information section. Access to information is regulated by the currently valid regulations of the Republic of Croatia, and all rules of procedure are presented on the Faculty's website. For more transparent and easier access to the Faculty's website, a new website has been created and harmonized with other constituents of the University.

The Dean, vice deans, specially appointed information officer, teachers and professional administrative services of the Faculty are responsible for the content of the Faculty's official website and its timely update.

Information on enrollment, enrollment criteria, enrollment quotas, calls for application for undergraduate, graduate, integrated, postgraduate university (doctoral), and postgraduate specialist studies are available on the Faculty's website (*Information for students – Admissions and Enrollment*). To facilitate adaptation in the new environment, the University of Rijeka has issued a Guide for Freshmen, used by all University's constituents, including the Faculty of Medicine in Rijeka.

In order for students of Medicine in English to get the best possible information on enrollment procedure, study program and student life in Rijeka, we designed an information leaflet and brochure (Appendix 1.4.1., Appendix 1.4.1a. and Appendix 1.4.1b.).

Information on study programs (courses, course coordinators, ECTS credits) of undergraduate, graduate and integrated studies and postgraduate university (doctoral) and postgraduate specialist studies are also published on the Faculty's website (*Information for students – Study Programs*).

Course syllabi containing the list and description of lectures, seminars/practicals, learning outcomes, and literature for each course are published on the Faculty's website and the Merlin e-learning platform, which students and teachers can access using their AAI identity.

Information about the Doctoral School and the current version of the program are published on the Faculty's website. For better acquainting the public with the programs within the Doctoral School, a leaflet was made and delivered electronically to institutions from biomedical and related fields (Appendix 1.4.2. – Leaflet of the Doctoral School). The Faculty's activities are also made public, e.g., through an article published in the *Novi list* newspaper on the occasion of the Faculty Days ceremony (Appendix 1.4.3.).

In addition to the official website, information can also be found on the Faculty's social networks: Facebook, LinkedIn, YouTube channel – many activities are continuously published on the Faculty of Medicine's social networks. Our Facebook page currently has almost 3.4 thousand followers, while our LinkedIn page has more than 1000 followers, with the follower count constantly growing. Information for students and the general public is published daily.
Through websites and social networks, the Faculty informs the interested public about various activities that take place at the Faculty.

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

As the largest and oldest constituent of the University of Rijeka, the Faculty of Medicine has an exceptional responsibility and significance for the wider community. We are continuously developing and improving cooperation with local government and self-government units, civil society institutions, and other educational institutions. Our social responsibility is visible through a series of activities aimed at popularizing science and communicating with the public through the media. In that sense, the key goals are stated in the Strategic Development Plan of the Faculty of Medicine.

Faculty employees contribute to the development of the economy and the local community by participating in scientific and professional projects, as described in Section 5 and in the analytic supplements that are an integral part of this Self-Evaluation Report (Tables 5.3.a. and 5.3.b.).
In the last five academic years, the Faculty staff has participated in numerous activities that include: the popularization of science, public lectures, professional meetings, symposia, scientific discussions, newspaper articles, etc., which are presented in detail in Section 5.
The Faculty also contributes to the community by providing its premises, equipment and infrastructure for conducting seminars, workshops, conferences, guest lectures by national and international experts on topics relevant to the local community.

During the past period, the Faculty staff has held numerous positions in various associations, expert bodies, committees, working groups at both the parent institution and the University, in the governing councils of various institutions, local government bodies, national bodies (Croatian Parliament, ministries, national agencies) and international organizations (various societies, the European Medicines Agency, etc.), which is presented in detail in Section 5.

The volunteering activities of the Faculty students is reflected in numerous organized events listed in Table 1.5.1. (Appendix 1.5.1.).

1.6. Lifelong learning programs implemented by the higher education institution are in line with the strategic goals and mission of the higher education institution and social needs

The University of Rijeka, in accordance with the Ordinance on Lifelong Learning of the University of Rijeka, states the development of lifelong learning as one of its strategic goals. The Strategic Development Plan of the University of Rijeka for the period 2014-2020 clearly states the basic goals of the development of lifelong learning: raising the level of education of general and special populations, facilitating the improvement of the general population's quality of life, bringing scientific research findings closer to non-academic audiences, especially to the economy, adjusting the labor market with a consequent increase in employability and reduction of unemployment, and the realization of financial profit necessary for its development.

In this sense, the importance of lifelong learning is recognized at the Faculty level, which is why lifelong learning is included in the Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025 within the goals related to education. The purpose of lifelong learning is continuous education and the upgrade of existing educational processes and its connection to the evaluation system of postgraduate educational processes. The Faculty also has a Committee for Postgraduate Studies and Lifelong Learning, which, according to the needs of the labor market and guidelines in higher education, organizes and implements several lifelong learning programs tailored to modern needs of professional, scientific, educational and social development. Administrative support to the Committee is provided by the Office of Postgraduate (Specialist) Studies and Lifelong Learning. After implementing a lifelong learning program, a Report on the Implemented Program is sent to the University (Appendix 1.6.1.).

All these programs are accredited by the Committee for Lifelong Learning of the University of Rijeka in accordance with the procedure and criteria prescribed by the Ordinance on Lifelong Learning of the University of Rijeka.

A descriptive questionnaire on participants' satisfaction is conducted for the mentioned lifelong learning programs. Participants are given the opportunity to present the positive and negative aspects of conducted programs. In accordance with the results obtained, continuous improvement is carried out regarding the program content and teaching.

II. STUDY PROGRAMS (ESG 1.2., ESG 1.9.)

2.1. General goals of all study programs are in line with the mission and strategic goals of the higher education institution and social needs

The mission and strategic goals of the Faculty of Medicine are defined by the Act on Scientific Activity and Higher Education of the Republic of Croatia, other relevant laws and bylaws, the University of Rijeka Strategic Development Plan (current one for the period 2014-2020 and newly adopted one for the period 2021-2025), and the Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025. The University of Rijeka has pointed out as its mission the implementation of scientific, artistic and developmental research, artistic creation and professional work, as well as undergraduate, graduate and postgraduate education based on these elements. In this context, the mission of the Faculty of Medicine is to educate and train the academic staff in the field of biomedicine and health based on the indivisibility of scientific work and higher education. The general goals of all Faculty's study programs are in line with the mission, vision and defined strategic goals of the Faculty. The goals of the Faculty's Strategic Development Plan and the University's Strategic Development Plan are defined in four areas: Learning and Teaching, Research, Knowledge Transfer, and Regional Engagement and Internationalization. Goals related to the education program are defined in Chapter I. Learning and Teaching, subgoals 1.1-10. By implementing annual action plans (Appendix 2.1.1.), the Faculty participates in fulfilling the goals, which are aimed at achieving the University's and Faculty's set goals. Every year, we monitor the implementation of goals and submit the Report on the Implementation of the University's Strategic Development plan, based on which an action plan is adopted for the implementation of goals in the following year (Appendix 2.1.2.).

The curricula and course syllabi of the Faculty of Medicine are also in line with the mission, vision and strategic guidelines of the University of Rijeka Strategic Development Plan 2021-2025 and the Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025. Study programs are organized in a vertical manner: from undergraduate and graduate study to postgraduate study, with the lower level of study always creating the prerequisites for enrollment in the higher level of study. The Faculty of Medicine in Rijeka conducts the following studies: 3 integrated undergraduate and graduate university studies (Medicine, Medicine in English and Pharmacy), 2 undergraduate university studies (Environmental and Public Health and Medical Laboratory Diagnostics), 1 graduate university study (Environmental and Public Health), 5 postgraduate university studies (doctoral studies) and 22 postgraduate specialist studies.

The goal of all study programs of the Faculty is to train students with the competencies necessary for rapid and successful integration into the global labor market. The Faculty's study programs are based on the Faculty's and the University's goals, thus achieving the Council of Europe's four purposes of higher education: preparing students for active citizenship and future careers (e.g., contribution to employability), supporting students' personal development, developing a broad and advanced knowledge base and encouraging scientific work and innovation. The required competencies are described by learning outcomes. The structure of learning outcomes for all

undergraduate and graduate study programs can be found in Table 2.1. in the analytic supplement.

From the aspect of labor market needs, the justification for conducting the study of Medicine in Croatian and English and the study of Environmental and Public Health is unquestionable. The Faculty monitors the labor market needs and adapts its study programs or introduces new ones accordingly (Section 3.1.). The launching of new study programs Undergraduate university study of Medical Laboratory Diagnostics and the Integrated undergraduate and graduate study of Pharmacy was the answer to the labor market needs. Enrollment quotas at the Faculty of Medicine in Rijeka are in line with the recommendations of the Croatian Employment Service (December 2020) for enrollment policy and scholarship policy for area VIII (Primorje-Gorski Kotar County).

The implementation of all study programs is fully legitimate, purposeful and harmonized with social needs (labor market needs). The enrollment quota is harmonized with the annual reports of the Croatian Employment Service for the whole Republic of Croatia (My employability), indicators of professional associations (Digital Atlas of Croatian Medicine) and the guidelines of the Network of Higher Education Institutions and Study Programs in the Republic of Croatia. The guidelines are based on the Faculty's space and staff capacities required for quality teaching and work with small student groups. Given the area of study programs we conduct (Biomedicine and Health), we pay special attention to maintaining high-quality standards for teaching that takes place in clinical departments. Enrollment quotas for Environmental and Public Health studies have not changed in the last three years. The study of Medicine in English was launched in the academic year 2017-2018 when the enrollment quota was 30 students. Due to the great interest, the enrollment quota was increased to 50 students from the academic year 2018-2019 (Appendix 2.1.3. – Faculty Council's Decision). The enrollment quota for the study of Medicine in the Croatian language is 130 students (Table 3.2. in the analytic supplement), except in the academic year 2018-2019 (Appendix 2.1.4. – Faculty Council's Decision) when it was 138 students. It should be noted that pursuant to the Agreement on incentive measures for enrolment in higher education (which is part of the University of Rijeka's call for application), various categories of applicants (applicants with disabilities rated at 60% or more; Croatian Homeland War veterans; Croatian disabled Homeland War veterans; children of killed, captured or missing Homeland War veterans; children of 100% disabled Homeland War veterans) are entitled to enroll as full-time students outside the approved enrollment quotas even if they are not ranked within the approved quotas, provided they have passed the qualification threshold. In applying this, our Faculty enables enrollment of the above-mentioned categories of applicants without limiting the chances of other candidates within the approved enrollment quotas.
The Faculty of Medicine conducts study programs that lead to regulated professions. The studies of Medicine (in Croatian and English) are harmonized with the European Credit Transfer and Accumulation System (ECTS), according to which at least 60 ECTS credits are obtained in one year of full-time study. The study lasts six years, which means that the student must obtain a total of 360 ECTS credits during the study. The program amended according to EU standards has 5500 teaching hours through medical courses, and an additional 360 hours include courses that the European Commission does not include in the compulsory curriculum of the study of Medicine (Medical English I-VI during all years of study, Physical Education in the first two years of study

and Graduation Thesis). The study is completed by passing all exams, writing a thesis and taking a diploma exam. The student is issued a diploma and a diploma supplement containing the passed exams, grades and other information necessary for interpretation of the acquired qualification. Academic/professional title acquired upon completion of studies is: doctor of medicine (MD). The acquired qualification enables students for direct employment and to perform the most demanding work in healthcare institutions in accordance with the National Occupational Classification. The license to work is issued by the Croatian Medical Chamber professional association. In addition, the Faculty educates students who are competitive in the national and international labor market. The National Occupational Classification is harmonized with the International Standard Classification of Occupations (ISCO-08).

The Undergraduate university study of Environmental and Public Health is harmonized with the European Credit Transfer and Accumulation System (ECTS), according to which the student obtains at least 60 ECTS credits during one year of full-time study. During the study, the student must acquire a total of 180 ECTS credits (2486 hours of all forms of teaching). The study is completed after passing all exams and writing and defending a bachelor's thesis. The student is issued a diploma and diploma supplement containing the passed exams, grades and other information necessary to interpret the acquired qualification (in accordance with the Bologna Process). Academic/professional title acquired upon completion of studies: Bachelor of Environmental and Public Health (univ. bacc. env. pub. health / B.Sc.EPH).

The Graduate university study of Environmental and Public Health is harmonized with the European Credit Transfer and Accumulation System (ECTS), according to which the student obtains at least 60 ECTS credits during one year of full-time study. During the study, the student must acquire a total of 120 ECTS credits (1455 hours of all forms of teaching). The study is completed after passing all exams and writing and defending a master's thesis. The student is issued a diploma and diploma supplement containing the passed exams, grades and other information necessary to interpret the acquired qualification (in accordance with the Bologna Process). Academic/professional title acquired upon completion of studies: Bachelor of Environmental and Public Health (mag. sanit. ing. / M.Sc.EPH).

The undergraduate and graduate Environmental and Public Health study programs are harmonized with the requirements and recommendations of the Croatian Chamber of Health Workers, which is responsible for issuing licenses to work (Ordinance on Issuance, Renewal and Revocation of Licence for Independent Work).

In terms of program objectives, learning outcomes, duration and organization of teaching content, the Integrated undergraduate and graduate study of Medicine is comparable with all other study programs of the same type in the Republic of Croatia (Faculties of Medicine in Zagreb, Split and Osijek) and other programs within the European Union (Prague, Maribor, etc.). The program is in line with the requirements and recommendations of the Directive 2005/36/EC, has received a positive peer review of the European Commission in the field of health and the Ministry of Science and Education's positive opinion on the compliance of the study program with the Directive after the thematic evaluation was conducted (Appendix 2.1.5.).

The undergraduate and graduate studies of Environmental and Public Health are the only university studies in the Republic of Croatia of that kind and are comparable to similar and related studies in the Republic of Croatia (Faculty of Food Technology and Biotechnology, Biotechnology in Medicine, etc.). Compared to related studies at the international level, the study of Environmental and Public Health is highly consistent, both in content and in the expected duration of the study. Although there are differences in terminology and the internal organization of studies, the content and competencies are at a high level of quality, which is in line with the International Federation of Environmental Health (IFEH). Therefore, the competencies of professionals who complete this study at the Faculty of Medicine in Rijeka correspond to those of the related studies at the international level, including a comparison with programs such as those in EU countries.

2.2. Expected learning outcomes at the study programs conducted by the higher education institution correspond to the level and profile of qualifications acquired by them

The learning outcomes for the study programs were made according to the Dublin Descriptors and Bloom's Taxonomy. The descriptors of learning outcomes according to the levels of the Croatian Classification Framework (CROQF) and the European Classifications Framework (EQF) for the 6th and 7th levels were also considered when preparing the learning outcomes for study programs. The Faculty has clearly defined the learning outcomes for study programs that are in line with the mission and goals of the Faculty of Medicine and the University of Rijeka. These learning outcomes can be found in the description of the study programs available on the Faculty's website. Based on the defined learning outcomes for the courses conducted on the study programs, the contributions of each course to the learning outcomes have been determined for each study program level. The expected learning outcomes clearly reflect the competencies needed for inclusion in the labor market, continuation of education or other individual/societal needs. Table 2.1. of the MOZVAG analytic supplement lists the learning outcomes at all study program levels and the contributions of individual courses to the learning outcomes for study programs.

Short descriptions of all study programs conducted at the Faculty are publicly available at www.medri.uniri.hr. In accordance with the University of Rijeka Study Regulations and the Faculty's study system, at the beginning of each academic year, the Faculty Council accepts all course syllabi for all study programs available for the current academic year at www.medri.uniri.hr. Course learning outcomes are listed in the ECTS course description form as well as in the course syllabi published on the Faculty's website and the course webpages (Merlin e-learning platform) (Appendix 2.2.1. – INP, Appendix 2.2.2., 2.2.2a. and 2.2.2b. – Study program register book).

After completing an undergraduate or graduate study program, the Faculty issues to the student a diploma supplement in Croatian and English (Section 3.9.). Feedback from students is collected through constant interaction with student representatives in the Faculty Council's operational

bodies (Teaching Committee, Quality Assurance and Improvement Committee, Elective Courses Committee) and through a survey. The survey on the quality of the entire study, which includes questions on the content, structure and organization of study programs, is conducted by the University of Rijeka. For each academic year, the University publicly announces the results of a survey conducted at the University level.

During the modifications to study programs at the Undergraduate (2017-2018) and Graduate (2020-2021) university studies of Environmental and Public Health, learning outcomes were improved and revised (Appendix 2.2.3. – Decision on the Modifications to the Undergraduate Study Program of Environmental and Public Health). The guidelines of the Croatian Qualifications Framework (CROQF) and the recommended taxonomy were followed to modify and improve the learning outcomes for courses. In the study of Medicine, learning outcomes were changed and revised according to the needs of the study and were approved by the Faculty Council's decisions (Appendix 2.2.4.). In order to further improve learning outcomes, the Faculty of Medicine participates as a partner on the project designed to improve the existing Medicine study program within the Croatian Qualifications Framework with the aim of developing occupational and qualification standards and modernizing study programs based on learning outcomes and labor market needs. The holder of this project entitled "Improvement of the existing Integrated undergraduate and graduate study program of Medicine" is the Faculty of Medicine, University of Split. Apart from the Faculty of Medicine in Rijeka, the partners are the Faculty of Medicine, University of Zagreb and the Josip Juraj Strossmayer Faculty of Medicine, University of Osijek. The project started on March 22, 2019. The project will define a list of key jobs, knowledge and skills that will define the occupational and qualification standards of medical doctors and improvement of professional practice through the development of learning outcomes and procedures for evaluating acquired learning outcomes (CROQF – Application for registration of occupational standards – doctor of medicine) (Appendix 2.2.5. – Agreement with CROQF).

2.3. Higher education institution validates the achievement of expected learning outcomes at the conducted study programs

The descriptions of study programs and all course syllabi define the methods of assessment of expected learning outcomes at the course level. At the beginning of each academic year, the course syllabi are adopted by the Faculty Council and published on the Faculty's website.

Assessment of course learning outcomes can be conducted through seminar papers, tests, midterm exams, written and oral examinations, practical assignments, project assignments and presentations (Appendix 2.3.1. – Seminar paper example, Appendix 2.3.2., 2.3.2a., 2.3.2b. – Test example). By achieving the learning outcomes for courses and the bachelor's/master's thesis, the student also acquires and masters the learning outcomes for the study program (Appendix 2.3.3. – Bachelor's thesis and Appendix 2.3.4. – Master's thesis). The acquisition of course learning outcomes is assessed and evaluated continuously during the course, and the final grade is determined at the final exam. All course syllabi have defined manners and methods of assessing learning outcomes. The final exam includes the entire course material. After students take the

final exam, the final grade is determined, encompassing all activities during the course. This manner of assessing learning outcomes promotes students' continuous engagement during the course, provides a more objective perspective and reduces assessment bias, and contributes to the success of mastering the course content and achieving better academic performance. All these procedures are defined by the University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka (2018).

Impartiality and objectivity on written exams are ensured by publishing all activities and results on the course webpages (Merlin). Achievement of expected learning outcomes for the study program is also assessed during the preparation and defense of bachelor's/master's thesis, during which the mentor and committee evaluate the extent to which the student has achieved learning outcomes. Bachelor's and master's theses are available in the Repository of the Faculty of Medicine.

When planning new study programs or modifying existing ones, great attention in determining learning outcomes is paid to structuring compulsory courses to enable the acquisition of general and specific competencies of a particular profession comparable to similar study programs in the European Union. In this way, we want to ensure the openness of study programs towards the horizontal and vertical mobility of students in the national and international areas of higher education as well as the mutual recognition of qualifications acquired upon completion of studies. In determining learning outcomes, special attention is paid to defining the practical competencies that medical students must acquire in order to be better prepared for clinical practice (Appendix 2.3.5. – Clinical skills booklet). The practical competencies of Environmental and Public Health students are defined at the course level (Appendix 2.3.6. – Logbook of professional practice).

In order to determine as precisely as possible whether and to what extent the learning outcomes for study programs have been achieved, the Faculty continuously collects information from students and other relevant stakeholders. Thus, regular student evaluations of teachers and courses provide us with information on students' satisfaction with teaching methods, evaluation and assessment methods, and the actual course workload. The survey on graduates' satisfaction also examines students' satisfaction with exams, evaluation and continuous assessment of work, and the extent to which graduates believe they are ready to enter the labor market (Appendix 2.3.7. – Survey on graduates' satisfaction).

It should be emphasized that the results obtained through surveys on the evaluation of courses and teachers are systematically processed by the Quality Assurance and Improvement Committee (Section 1.1.). Based on these analyses, the Faculty takes measures to adjust the teaching process and student evaluation and assessment methods. If student surveys or individual complaints to the Vice Dean for Teaching reveal the problem of inconsistent compliance with the University of Rijeka Study Regulations, the Ordinance on Assessment and Evaluation of Students of at the Faculty of Medicine in Rijeka and course syllabus in terms of evaluation and assessment (e.g., non-compliance with the planned assessment and evaluation methods, insufficient learning resources, etc.), the Quality Assurance and Improvement Committee, the Vice Dean for Teaching and the Vice Dean for Studies of Environmental and Public Health and Medical Laboratory

Diagnostics take appropriate measures according to the Rules of Procedure for Student Evaluation of Courses from Undergraduate, Graduate and Integrated Studies. In agreement with the course coordinators, these shortcomings are eliminated either immediately after the complaint or in the next academic year (Appendix 2.3.8. and 2.3.8a. – Survey and modifications). Also, at the end of each academic year, student pass rates are analyzed for each course. In the event of a low pass rate, measures are taken in cooperation with course coordinators, such as organizing additional groups for students who re-take a course, introducing additional exam dates, revising student obligations in course syllabi to balance students' ECTS workload in a particular course, etc. (Section 3.2.).

By harmonizing study programs in the field of regulated professions (doctors of medicine, environmental and public health), we have met the expectations of all relevant institutions regarding harmonization of programs with internationally recognized programs of the European Union. In that way, we have created all prerequisites for automatic mutual recognition of diplomas and the possibility of horizontal and vertical mobility of both students and graduate experts.

2.4. Procedures for planning, proposing and accepting new programs, and revising or canceling existing programs include feedback from students, employers, professional associations and alumni

From the last re-accreditation and obtained licence for conducting undergraduate and graduate study programs at the Faculty of Medicine in Rijeka in 2015 until today, there has been a need for certain changes. All changes in the Medicine study program were carried out in cooperation with course coordinators and students (students are members of the Study Year Council and the Teaching Committee) and taking into account the labor market needs. The modifications were also encouraged by Article 3 of the Ordinance on Internship of Medical Doctors (OG 114/13, 157/13, 30/14, 129/15), which stipulates that doctors of medicine, Croatian citizens, who enrolled in the study program of medicine after July 1, 2013, and citizens of the contracting states of the European Economic Area that do not prescribe the obligation to attend internship, do not have to attend internship and are not obligated to take a medical licensing exam.

Due to the new legal changes, interviews with final-year students and excellent acceptance of the course Simulation of Clinical Skills (Appendix 2.4.1. – Survey) and the new elective course Professional Practice in all years of study (from the academic year 2017-2018), there was a need to increase the number of teaching hours of practical classes. Therefore, in 2019, the fifth and sixth years of the study of Medicine were reorganized with the aim of increasing the number of teaching hours of practical classes at the sixth year of study (Appendix 2.4.2. – Decision of the University of Rijeka on Changes and Amendments to the Medicine Study Program). Consequently, the courses of Medical Genetics, Epidemiology, and Health Ecology were transferred to the fifth year, while the course Medical Emergencies II was transferred to the sixth year.

In addition, two new courses that include clinical skills (Medical Skills I and Medical Skills II) were introduced in the sixth year of study. These changes increased the number of practical hours in the sixth year of study, which is extremely important for students who complete their studies (Appendix 2.4.3. – Table of teaching hours of practical classes). Accordingly, final-year students stay at various teaching sites of healthcare institutions, where they can improve practical competencies and better prepare for the labor market.

In 1990, the Faculty of Medicine of the University of Rijeka launched the Integrated graduate study of Environmental and Public Health. As a scientific study program, since the academic year 2005-2006, it was organized in accordance with the Bologna Process and divided into the Undergraduate university study of Environmental and Public Health (lasting three years and with the credit value of 180 ECTS) and Graduate university study of Environmental and Public Health (lasting two years and with the credit value of 120 ECTS). The total duration of the studies is five academic years, with a total credit value of 300 ECTS. From then until 2017, these programs underwent several changes and improvements approved by the Faculty Council of the Faculty of Medicine and the Senate of the University of Rijeka. Thanks to the constant cooperation with students and monitoring of labor market needs, in the academic year 2017-2018, the Undergraduate university study program has been updated (Appendix 2.4.4. – Amendments to the Undergraduate university study of Environmental and Public Health).

Following the changes at the Undergraduate university study of Environmental and Public Health, the Graduate university study of Environmental and Public Health also underwent changes in the allocation of ECTS credits, which were adopted in 2019. This led us to categorize the overall changes and propose them to the University for evaluation. We classified the changes into several categories, which are listed below (Appendix 2.4.5. – Amendments to the Graduate university study of Environmental and Public Health): introducing new compulsory courses (Instrumental Methods, Professional Practice I and II, Challenges of Crisis Communication), returning the course status from elective to compulsory (Fundamentals of Urbanism and Spatial Planning), merging courses into one course (Special Toxicology I and Special Toxicology II into Special Toxicology), renaming courses and suspending some elective courses.

Based on the feedback from our Alumni, we have introduced new courses (Sanitary Hydrotechnics, Hygiene Management in Hospitality Industry) to connect with the real sector. After completing the Graduate university study of Environmental and Public Health, graduate students complete a one-year internship in health care institutions.

The lack of highly qualified staff in the field of medical laboratory diagnostics and the need for a scientific approach in their education are the reasons for re-launching a significantly reformed and improved study program of Medical Laboratory Diagnostics as a university study. Medical laboratory diagnostics is a health and scientific field related to the activities of clinical laboratories for diagnosis, treatment and prevention of diseases. The undergraduate university study of Medical Laboratory Diagnostics enables the acquisition of knowledge and skills in accordance with the requirements of modern clinical testing applicable in the preservation and improvement of human health. The needs for education of students that includes the acquisition of knowledge

in the field of medical laboratory diagnostics are extremely objective and enable the work process of laboratory services in healthcare and scientific institutions of the Republic of Croatia (Appendix 2.4.6. – Register of the MLD study program).
For many years, there has been a visible need in the Republic of Croatia for the profile of Master of Science in Pharmacy. This need was especially evident in the strategic document Network of Higher Education Institutions and Study Programs, which emphasizes pharmacy as a deficient profession in the entire Republic of Croatia (in all twenty counties and the City of Zagreb). Also, the document points out that there are only two appropriate study programs available in the Republic of Croatia for education in this profession, at the University of Zagreb and the University of Split. Given the existing and growing need for professionals in this field, the University of Rijeka has launched the study program of Pharmacy to provide the necessary education and qualifications to a number of young people and for the health benefit of citizens and society as a whole. Therefore, starting from the academic year 2021-2022, the study of Pharmacy was launched at the University of Rijeka, with the Faculty of Medicine in Rijeka and the Department of Biotechnology of the University of Rijeka being study program holders. Compliance with the requirements of professional associations is confirmed by the active participation of the Croatian Chamber of Pharmacists and the Croatian Pharmaceutical Society in the development of the study program (Appendix 2.4.7. – Licence for conducting the Pharmacy study program).

2.5. Higher education institution ensures that ECTS credits are in compliance with the actual student workload

All study programs of the Faculty of Medicine are harmonized with the European Credit Transfer and Accumulation System (ECTS), according to which at least 60 ECTS credits are acquired during one year of full-time study. ECTS credits are awarded for study obligations (class attendance, independent work, midterm exams and all activities required for taking the final exam) based on the total amount of work required by the student to achieve the expected learning outcomes (according to the Instructions for ECTS Allocation, Commission for Accreditation and Evaluation of Study Programs of the University of Rijeka). Each study program has a clearly elaborated student workload, which is expressed in the ECTS course description form for each course (Appendix 2.5.1., 2.5.1a., 2.5.1b.). ECTS course description forms are an integral part of a study program proposed and adopted by the Faculty Council. ECTS credits are acquired after the successful fulfillment of all required study obligations and the application of appropriate methods for assessing the determined learning outcomes, i.e., after passing the final exam.

All course teachers are familiar with the method of linking the awarded ECTS credits with the assessment of the appropriate student workload. Students re-evaluate their workload through surveys on the quality of teaching at the course (Appendix 2.5.2.). The survey results were difficult to interpret unambiguously and to conduct a systematic change in ECTS credits within the course syllabus for several reasons. One of the reasons includes the attitudes of teachers and students, who often do not agree on the number of hours a student should spend on mastering the learning outcomes of a particular course, and this disagreement is often present within the student population itself. Furthermore, the results of such analyzes cannot always be applied by changing

the number of course ECTS credits because the total number of ECTS credits per academic year (60 ECTS) is determined by law, so any change in ECTS credits in one course would reflect on the number of ECTS in other courses of the same year of study, and such change would not be justified. In addition, the high student workload in the studies related to regulated professions is defined by a specific number of teaching hours stipulated by the curriculum (a minimum of 5,500 hours for medical training according to the EU Directive). Thus, the harmonization of ECTS credits must not change the total number of teaching hours. Relevant bodies (heads of studies, Quality Committee, Vice Dean for Teaching, Vice Dean for the Studies Environmental and Public Health and Medical Laboratory Diagnostics, Vice Dean for Quality) conduct periodic analysis of results and coordinate the necessary harmonization.

The University of Rijeka and the Faculty of Medicine conduct student surveys in each academic year, including a survey of student workload (question: *Obligations in the course are harmonized with ECTS credits*). In this way, feedback is received from students on the workload at individual courses, which is the basis for determining the harmonization of courses with the planned ECTS credits (Appendix 2.5.3. – Amendments to the Medicine study program – form from 2019). In addition, analyses of student progress and completion of studies are also carried out for the needs of the Ministry of Science and Education and for the implementation of the Strategic Development Plan of the University of Rijeka (Section 3.2.).

In case of student complaints about the testing and evaluation of knowledge, skills and competencies at the final exam, in accordance with the University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine, the student files a complaint to the dean/vice dean appointed by the Committee for Evaluation of Effectiveness of Evaluation of Students. At integrated, undergraduate and graduate levels of study, student work within the final examination of learning outcomes is evaluated by a three-member committee. At postgraduate studies, the Doctoral School Council and the Committee for Scientific Research Activity evaluate the submitted papers and registration of the general topic prior to the defense before the expert committee, and the Faculty Council confirms their decision.

Satisfaction with teaching staff and course workload is evaluated through student surveys. In addition, upon completion of the study, a survey is also completed for the needs of the University of Rijeka regarding student satisfaction with the study. The results of all the above-mentioned surveys at the University level are publicly available at the https://medri.uniri.hr/fakultet/osiguravanje-kvalitete/.

2.6. Student professional practice is an integral part of the study programs

After the abolition of the compulsory internship and encouraged by the communication with students, there was a need for a systematic solution to increase the number of hours of professional practice, i.e., the organization of professional practice as part of compulsory and elective courses. Professional practice is an integral part of teaching at the Integrated undergraduate and graduate university study of Medicine (Appendix 2.6.1., Table 1). It is

conducted as part of compulsory courses or as an elective course Professional Practice introduced since the academic year 2017-2018 during all years of study (1.5 ECTS). As part of the elective course, students have the opportunity to attend professional practice in the teaching bases with which the Faculty of Medicine signed an agreement, which are located mostly in Primorje-Gorski Kotar County. It is also possible for students to have professional practice in their place of residence, which enables a better connection of students with the environment from which they come. The number of students who chose the elective course Professional Practice from the academic year 2017-2018 until 2020-2021 increased, which is an indicator of students' great interest in improving practical skills (Appendix 2.6.2., Table 2 – Professional practice). Therefore, we have signed many cooperation agreements with county hospitals as professional bases (CGH Šibenik, CGH Požega, CGH Čakovec). We have also previously signed an agreement with CGH Karlovac and Veterans Hospital Ogulin (Appendix A 1.1.).

The conditions for performing professional practice are defined by the Ordinance on Professional Practice. Professional practice within the elective course is performed with the help of a mentor. In order to monitor the professional practice within the elective course, the student presents the data on their mentor and the institution in which they will have their professional practice (Appendix 2.6.3. and Appendix 2.6.3a. – Forms for professional practice) and Logbook of professional practice (Appendix 2.6.4. and Appendix 2.6.4a. – Logbook of professional practice). Completed and certified forms of completed professional practice are submitted when enrolling in a higher year of study.

Professional practice enables students to more easily master, better understand and complete theoretical knowledge by acquiring appropriate clinical experience in healthcare institutions under appropriate supervision. Furthermore, the practice provides students with new experiences and competencies that will facilitate professional inclusion. In order to perform professional practice, the Faculty of Medicine has signed a cooperation agreement/contract on the admission of students with nine legal institutions (Appendix 2.6.5. – Professional practice agreement). In this way, the student acquires appropriate clinical experience in healthcare institutions under appropriate supervision. Working in healthcare institutions does not only enrich and improve students' professional and practical competencies but also opens the possibility of their later employment in the same institution. In the following period, the Faculty is building a network of partner institutions, with which agreements have been concluded on conducting professional practice (Appendix 2.6.6. – Agreement).

From the academic year 2017-2018, the compulsory course Professional Practice is held at the third year of Undergraduate university study of Environmental and Public Health. The course aims to familiarize students with professional practice in terms of implementation of acquired knowledge in the field of public health and health ecology as a basis for this professional education (75 teaching hours, 5 ECTS). Assessing the achievement of expected learning outcomes in practical work at the end of the undergraduate study is carried out by checking the continuous knowledge assessment during professional practice and keeping a record of professional practice (Appendix 2.6.7. and Appendix 2.6.7a. – Record of professional practice).

From the academic year 2020-2021, in the first and second year of the Graduate university study of Environmental and Public Health, we introduced the compulsory course Professional Practice

I (40 teaching hours, 1 ECTS) and II (80 teaching hours, 2 ECTS). Professional practice is held in the Teaching Institute of Public Health of Primorje-Gorski Kotar County (Appendix 2.6.8.). 38hea im of the Professional Practice is to apply the acquired knowledge of undergraduate and graduate university study of Environmental and Public Health and to train students for independent and creative work in many different areas such as environmental protection, waste management, health ecology, DDD activities, toxicology, food industry, quality control of food, water, soil and air, occupational safety and health. Assessing the achievement of expected learning outcomes in practical work upon completion of professional practice at the graduate study is carried out by checking the professional practice record-keeping.

III. TEACHING PROCESS AND STUDENT SUPPORT (ESG 1.3., ESG 1.4., ESG 1.6.)

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study program, clear, publicly available and consistently applied

In the academic year 2020-2021, there were a total of 1,087 students studying at the Faculty of Medicine in Rijeka, 958 students at the Integrated undergraduate and graduate study of Medicine and Medicine in English (797 students in Croatian and 167 in English), 65 students at the Undergraduate university study of Environmental and Public Health, and 64 students at the Graduate university study of Environmental and Public Health (Table 3.1. in the analytic supplement).

Every year, the Faculty adopts the criteria for admission or continuation of studies in all study programs by the decision of the Faculty Council. Defining these criteria is based on national policies, the University's and Faculty's strategic decisions, and the necessary knowledge and skills needed to study a particular study program of the Faculty. Enrollment in all study programs of the Faculty takes place in accordance with the University of Rijeka Study Regulations and based on the Call for applications for enrollment in undergraduate and graduate and integrated studies of the University of Rijeka and the decisions of the Faculty Council (Appendix 3.1.1. and Appendix 3.1.1a.). The enrollment requirements are precisely regulated and the Faculty strictly adheres to them. They are in accordance with the requirements of the study program, adopted by the Faculty Council for each academic year, and published on the Faculty's website. As for all higher education institutions that are university constituents in the Republic of Croatia, the admission and enrollment procedure at the Faculty is carried out through the Central Applications Office.

Requirements for enrollment in the first year of undergraduate and integrated studies are clearly defined. They include evaluation of high school transcript, evaluation of state graduation exam results, and evaluation of additional achievements in high school. The high school transcript is awarded 10% or 100 points out of a total of 1000, and the other 90% of points goes to state graduation exam results in the subjects: Biology, Chemistry, Physics (for the studies of Medicine and Environmental and Public Health) and additionally Mathematics (for the study of Environmental and Public Health). A basic prerequisite for applying to our university studies is also attending the subjects of Biology, Chemistry and Physics for at least two years during secondary education. With such a selection procedure, we enrolled students in the current academic year who achieved a very high number of points on the final ranking list (Medicine: 664.5-913.4; Environmental and Public Health: 444.5-697.9), which speaks in favor of the quality of enrolled students with excellent state graduation exam results. Also, setting a classification threshold (40% or 400 points out of a total of 1000) below which we do not enroll students has proven to be a good admission criterion. The required level of the state graduation exam for the past five-year period was B. In the academic year 2021-2022, we changed that level to A for the Integrated undergraduate and graduate study of Medicine, while the required level for the Undergraduate university study of Environmental and Public Health remained B (Appendix 3.1.2.,

Appendix 3.1.2a., Appendix 3.1.2b. and Appendix 3.1.2c. – Faculty Council's Decision on Amendments to Admission Criteria).

The Faculty is in charge of evaluating the admission criteria for enrolling students in the Integrated undergraduate and graduate study of Medicine in English who do not enroll through the Central Applications Office. These applicants must pass an entrance exam in Biology, Physics and Chemistry. After the call for applications is finished and the entrance exam is conducted, the Faculty publishes on its website the results and forms related to enrollment in the study program. Enrollment is done online through the Office of Student Affairs.
In order to inform future potential students (both from grammar schools and vocational schools), we organize Faculty Open Days on the occasion of the Faculty Days ceremony.

The structure of enrolled students and interest in the Integrated undergraduate and graduate study of Medicine and the Undergraduate university study of Environmental and Public Health in the last three academic years is shown in Figure 3.1.1. The number of applications for study programs in the last three academic years is high, as well as the number of high school graduates for whom some of our study programs were the first choice. In the last three years, the number of applicants at the Integrated undergraduate and graduate study of Medicine was on average 817% higher than the number of enrolled students; the number of applicants at the Integrated undergraduate and graduate study of Medicine in English was on average 203% higher than the number of enrolled students; the number of applicants at the Undergraduate university study of Environmental and Public Health was 260% higher than the enrollment quota and 366% higher than the number of enrolled students, while the number of applicants at the Graduate university study of Environmental and Public Health was 104% higher than the number of enrolled students (Table 3.2. in the analytic supplement, Figure 3.1.1). Also, students who have graduated from grammar schools or vocational schools enroll in our study programs with very good and excellent (Medicine 4.35-4.51) or very good GPA (Environmental and Public Health: 4.27-4.32). In the last three years, the success rate on the state graduation exam upon enrollment in our studies averaged 68% for the Integrated undergraduate and graduate study of Medicine and 56% for the Undergraduate university study of Environmental and Public Health.
The relatively high or satisfactory pass rate in the first year of studies of all enrolled generations since the introduction of the state graduation exam as a mechanism of enrollment at higher education institutions shows that enrollment parameters have been well designed, are a good selection criterion because we enroll in our study programs those secondary school students who incline to natural sciences and a high level of knowledge in scientific subjects.

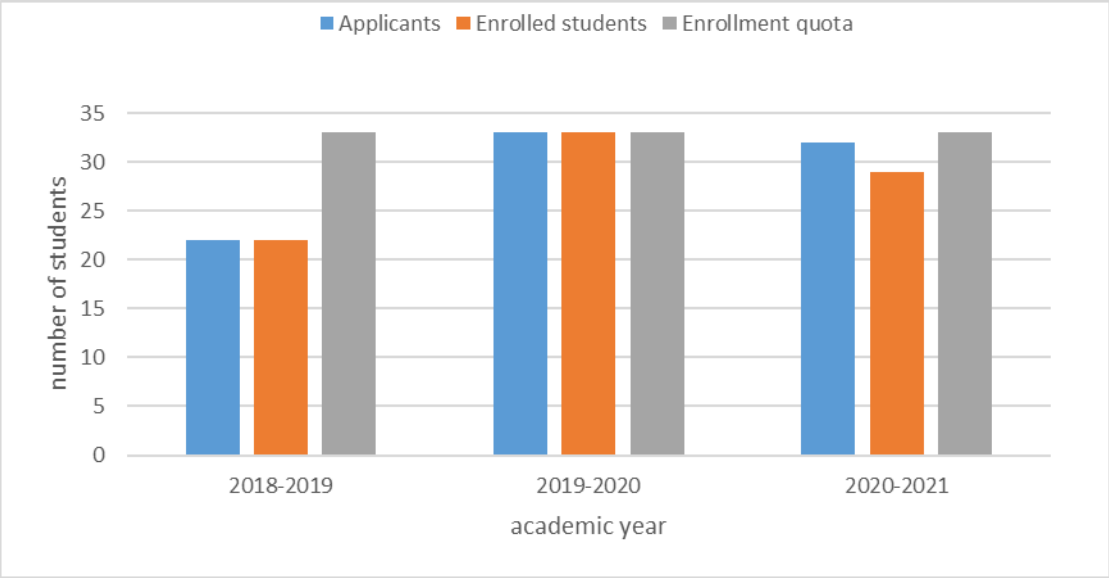


Figure 3.1.1. Number of applicants, students enrolled in the first year of study and enrollment quota for the Integrated undergraduate and graduate study of Medicine in the last three academic years.

For each academic year, the University of Rijeka announces a call for applications for enrollment in the first year of graduate university studies. The enrollment requirements for the Graduate university study are in accordance with the requirements of the study program, adopted by the Faculty Council for each academic year, and published on the Faculty's website. Enrollment in graduate studies is also possible for students who have completed previous undergraduate studies in the Republic of Croatia and students from other universities outside the Republic of Croatia in accordance with the Ordinance on Prior Learning Assessment and Recognition of the University of Rijeka. The application for the recognition of foreign higher education qualification is submitted to the Committee for Prior Learning Assessment and Recognition of the University. Candidates can enroll in the graduate university study of Environmental and Public Health according to the following conditions:

1. Candidates who have completed the Undergraduate university study of Environmental and Public Health at the Faculty of Medicine at the University of Rijeka and acquired at least 180 ECTS credits are directly listed on the rankings.
2. Candidates who have achieved at least 180 ECTS credits at an undergraduate university non-equivalent study (undergraduate university studies completed at the Faculty of Food Biotechnology, Faculty of Science, Faculty of Chemical Engineering and Technology, Faculty of Food Technology at the Faculty of Food Technology and Undergraduate university study of Agroecology at the Faculty of Agriculture).
3. Candidates with a bachelor's degree in Environmental and Public Health from undergraduate professional studies. According to the Senate Decision on the enrollment criteria for university graduate studies, stipulating that enrollment from undergraduate professional studies is conditioned by acquiring competencies defined by the Ordinance on Lifelong Learning of the University of Rijeka, these students are obligated to pass supplemental examinations according to the lifelong learning program. If the student does not pass the supplemental examinations, they will not be allowed to enroll in the second year of study (Appendix 3.1.3. and Appendix 3.1.3a. – Lifelong LearningnProgram and Decision on Adoption of the Program).

Requirements for enrollment in higher years of study are defined by the University of Rijeka Study Regulations. All notices regarding admission and enrollment are published on the Faculty's website and are available to all students. In order to improve the teaching process, we have established a working group in charge of requirements for enrollment in higher years of study. Enrollment in higher years of study is carried out through the ISVU system and the Office of Student Affairs.
In case of difficulties in study progress due to justified reasons (health issues, pregnancy, parental leave, etc.), the student can file a request for deferral of studies in accordance with the Decision on Conditions for the Right to the Deferral of Student Obligations in Justified Cases in justified cases (Appendix 3.1.4. – Decision adopted at the Faculty Council session dated March 10, 2020). The request for deferral (Appendix 3.1.5. – Request for deferral) and the opinion of the authorized medical doctor (based on the medical documentation) are submitted to the Office of Student Affairs. The Vice Dean for Teaching and the Dean resolve the requests (Appendix 3.1.6.), and the Office of Student Affairs informs the student about the decision regarding the request.

Requirements for transfer to the Faculty of students from other higher education institutions in the Republic of Croatia and the EU are possible in accordance with the Decision on Criteria for Transfer of Students from Other Higher Education Institutions of our Faculty (Appendix 3.1.7. and Appendix 3.1.7a. – Decision adopted by the Faculty Council on March 9, 2021). The Decision defines all documentation required for the transfer. A student may apply for transfer after completing the first year of study. A student who applies for transfer must meet the requirements for enrollment in a higher year of study at the higher education institution from which they are transferring. The decision on the transfer is made by the Vice Dean for Teaching based on the opinion of the Student Transfer Committee. Until the academic year 2020-2021, transfer requirements were regulated by the Decision on Deferral of Student Obligations and Transfer From Other Higher Education Institutions dated April 19, 2016.

The systems of recognition of foreign higher education qualifications (academic recognition) and recognition of study periods are based on the provisions of the Act on Recognition of Foreign Educational Qualifications (OG 158/03, 198/03, 138/06, 124/09 and 45/11) and Regulations on Recognition of Foreign Higher Education Qualifications and Study Periods of the University of Rijeka. The procedure applied by our Faculty is as follows: a student who wants to transfer to our Faculty from another higher education institution outside the Republic of Croatia submits a request to the Faculty of Medicine of Rijeka and encloses all the necessary documents related to the recognition of study periods for the purpose of continuing education in our equivalent studies. The Academic Recognition Qualifications Office carries out the verification process of the relevant foreign institution from which the student transfers and is available for any contentious issues that arise in the recognition process. The vice dean in charge of the respective study, with the help of the Student Transfer Committee, first checks whether the student meets the formal requirements of our Faculty (pursuant to the Decision on Criteria for Student Transfer from Other HEI), which, among other things, include a ban on transfers in the first or the last year of studies, and fulfillment of the requirements for enrollment in the successive year at the parent institution. If these prerequisites are met, the process of recognition of the study period begins, which is carried out by comparing the study program of the institution from which the student is coming (attached in the documentation) with our study program. If the objectives, content, learning

outcomes, total teaching hours, and the number of ECTS credits assigned to the original course are similar or the same as those of our courses, the Vice Dean recognizes the exam passed. Furthermore, the student is obligated to register for and pass the exams (supplemental examinations) in all courses that were not included in the curriculum of their original study. Finally, a decision is issued, which may ultimately be positive or negative, depending on the number of requests for transfer in the same academic year, which is directly related to the capacity of the relevant study to recruit new students. The final decision is issued to the Academic Recognition Qualifications Office within 30 days from the day of issuing the decision.

The Faculty has a Committee for Recognition and Evaluation of Prior Learning for the purpose of recognition of prior learning pursuant to the Regulations on Prior Learning Assessment and Recognition of the University of Rijeka (adopted at the Faculty Council of the Faculty of Medicine on March 10, 2020). The application forms that students use in case of recognition of formal learning are Application for recognition of prior learning and Application for recognition of passed exam.
Recognition of foreign professional qualifications and assessment of competencies acquired in foreign educational programs is the responsibility of competent chambers (Croatian Medical Chamber, Croatian Dental Chamber, Croatian Chamber of Health Professionals). Thus, on December 12, 2013, at the Croatian Chamber of Health Professionals – Council of Professional Department for Environmental and Public Health, the Committee for Recognition of Foreign Professional Qualifications was formed. Its task is to establish a system of assessment and verification of competencies acquired within foreign educational programs, and their comparison with the programs of the three studies in the field of environmental and public health offered at our Faculty of Medicine in Rijeka.

3.2. Higher education institution collects and analyzes data on students' progress in studies and based on them ensures students' continuation and completion of studies

The evaluation of student work is described in detail in the University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka. The Faculty collects and analyzes data on students' progress in studies and the pass rate in study programs. Procedures for monitoring student progress are included and precisely described by the study program conceived on learning outcomes, at the course level and at the program level. Since all courses are based on the concept of learning outcomes, continuous monitoring of student progress is envisaged.

According to the University of Rijeka Study Regulations, valid for generations who have enrolled in our study programs in the last five years, students undergo continuous monitoring of acquired

knowledge and skills during classes. Students obtain up to 50-70% of the final grade during classes, while 30-50% of the final grade is obtained at the final exam (which is compulsory). A full-time student who did not obtain the required ECTS credits in the academic year is obliged to re-enroll the same course(s) in the next academic year, according to the study program, and compensate for the difference of up to 60 ECTS credits (the allowed deviation amounts to a total of 5% of ECTS credits from the minimum number of ECTS credits in the study program).
For all study programs at our Faculty, the presented analysis monitors the pass rate and students' progress in studies through the analysis of: A) the pass rate through the obtained ECTS credits in the first year of study and B) the completion of studies and the average duration of studies.

A) Student pass rates from the first to the second year of study in all study programs are presented in Table 3.4. of the MOZVAG analytic supplement

The data on pass rates (expressed in the number of ECTS credits) for first-year students of the Integrated undergraduate and graduate study of Medicine show that at least 60 ECTS credits were obtained by 59-65% of students, 55-59 ECTS credits were obtained by 1-5% of students, 30-54 ECTS credits were obtained by 16-23% of students, while 18-29 ECTS credits were obtained by only 4-7% of students, which speaks in favor of high pass rates at the first year of study (Table 3.4. in the analytic supplement, Figure 3.2.1.a.). In conclusion, the analysis shows that throughout the observed five-year period, the pass rate did not change much and was very successful. The pass rate for students of the Integrated undergraduate and graduate study of Medicine in English covered a four-year period.

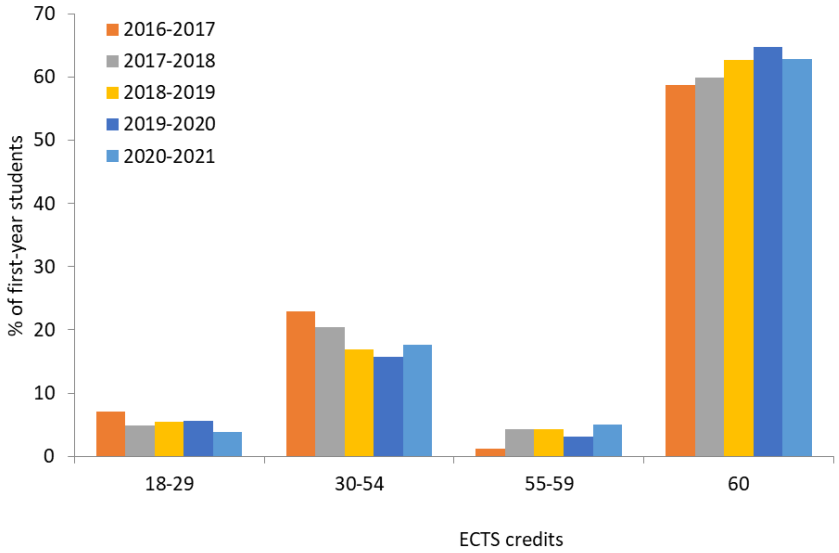


Figure 3.2.1.a. Pass rate of first-year students in the last five academic years at the Integrated undergraduate and graduate study of Medicine according to the obtained number of ECTS credits (expressed in percentages).

The data on pass rates (expressed in the number of ECTS credits) for first-year students of the

Integrated undergraduate and graduate study of Medicine in English show that at least 60 ECTS credits were obtained by 54-65% of students, 55-59 ECTS credits were obtained by 6-12% of students, 30-54 ECTS credits were obtained by 12-24% of students, while 18-29 ECTS credits were obtained by only 0-4% of students, which speaks in favor of high pass rates at the first year of study (Table 3.4. in the analytic supplement, Figure 3.2.1.a.). In conclusion, the analysis shows that throughout the observed five-year period, the pass rate did not change much and was very successful.

The data on pass rates (expressed in the number of ECTS credits) for first-year students of the Integrated undergraduate and graduate study of Environmental and Public Health show that at least 60 ECTS credits were obtained by 27-36.2% of students, 55-59 ECTS credits were obtained by 0-7% of students, 30-54 ECTS credits were obtained by 32-54% of students, while 18-29 ECTS credits were obtained by only 5.3-12.7% of students, which speaks in favor of high pass rates at the first year of study (Table 3.4. in the analytic supplement). In conclusion, the analysis shows that throughout the observed five-year period, the pass rate did not change much and was very successful.

According to the pass rates (expressed in the number of ECTS credits) for first-year students of the Integrated undergraduate and graduate study of Medicine, Integrated undergraduate and graduate study of Medicine in English and Undergraduate university study of Environmental and Public Health (UUSEPH) in the academic year 2020-2021, 60 ECTS credits were obtained by 63% of students of Medicine, 65% of students of Medicine in English, and 39% of students of UUSEPH; 55-60 ECTS credits were obtained by 5% of students of Medicine, 12% of students of Medicine in English, and 7% of UUSEPH; 30-54 ECTS credits were obtained by 18% of students of Medicine, 12% of students of Medicine in English, and 43% of students of UUSEPH; 18-29 ECTS credits were obtained by 4% of students of Medicine, 0% of students of Medicine in English, and 10% of students of UUSEPH.

We believe that mastering certain challenging courses in terms of scope and content in the first year of study is the reason for slightly lower pass rates in some study programs (Medicine – 68%, Medicine in English – 69%, and Environmental and Public Health – 46%).

B) Completion of study programs is presented in Table 3.5. of the MOZVAG analytic supplement

According to the percentage of graduates per generation compared to the number of students enrolled in the first year of study from the academic year 2011-2012 until 2015-2016 (last generation of graduates considering the period covered by the self-evaluation report), data for the Integrated undergraduate and graduate study of Medicine show that 60-83% of students graduated. Of the generation enrolled 10 years ago, 73% of students graduated; of the generation enrolled 9 years ago, 80% of students graduated; of the generation enrolled 8 years ago, 83% of students graduated; of the generation enrolled 7 years ago, 69% of students graduated; of the generation enrolled 6 years ago, 60% of students graduated. A high percentage of graduates is visible for the period between the academic years 2011-2012 and 2013-2014, and a slightly lower

percentage can be seen for the last analyzed period, which is explained by the fact that this analysis included only students who graduated within the regular study period, i.e., without exceeding the duration of studies (Table 3.5. in the analytic supplement, Figure 3.2.3.a.). Completion for the study program of Medicine in English is not shown because the 4th year is enrolled in the academic year of evaluation.

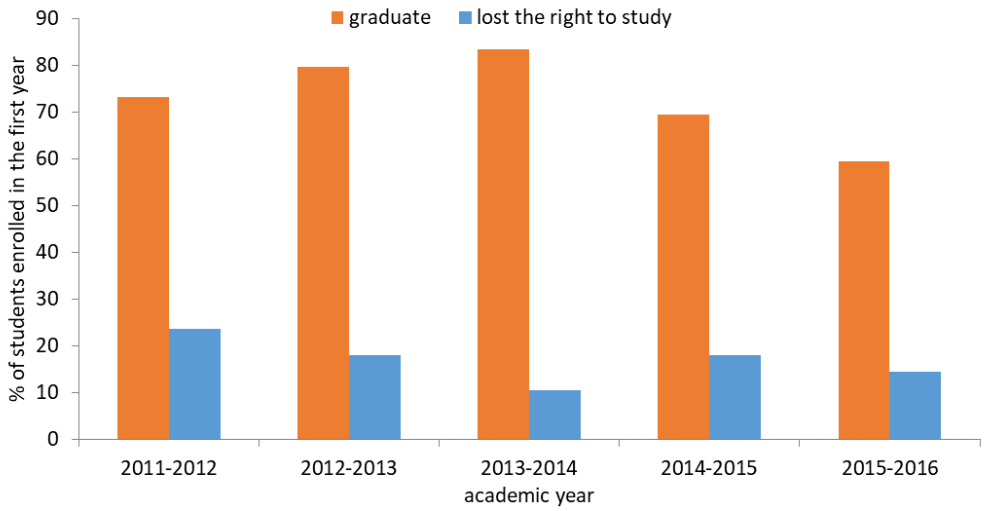


Figure 3.2.3.a. Percentage of graduates at the Integrated undergraduate and graduate study of Medicine by generations compared to the number of students enrolled in the first year of study, and the percentage of students who lost the right to study compared to the number of enrolled students during the last five generations.

According to the percentage of students who defended their bachelor's thesis by generations compared to the number of students enrolled in the first year from the academic year 2014-2015 until 2018-2019 (the last generation considering the period covered by the self-evaluation report), data for the Undergraduate university study of Environmental and Public Health show that 24-77% of students met the requirements for completion of studies. Of the generation enrolled seven years ago, 70% of students graduated; of the generation enrolled in the study six years ago, 50% of students graduated; of the generation enrolled five years ago, 77% of students graduated; of the generation enrolled four years ago, 59% of students graduated; of the generation enrolled three years ago, 24% of students graduated. A higher percentage of graduates is visible for the period between the academic years 2014-2015 and 2017-2018, and a slightly lower percentage can be seen for the last analyzed period, which is explained by the fact that this analysis includes only students who defended their bachelor's thesis within the regular study period, i.e., without exceeding the duration of studies (Table 3.5. in the analytic supplement).

According to the percentage of graduates per generation compared to the number of students enrolled in the first year of study from the academic year 2015-2016 until 2019-2020 (last generation of graduates considering the period covered by the self-evaluation report), data for the Graduate university study of Environmental and Public Health show a high percentage of graduates, which is 88-96% of students (Table 3.5. in the analytic supplement).

Furthermore, the analysis of Table 3.5. in the analytic supplement shows that the average duration of studies is six years and three months for the six-year Integrated undergraduate and graduate study of Medicine, three years and four months for the three-year Undergraduate university study of Environmental and Public Health, and two years for the two-year Graduate university study of Environmental and Public Health (Table 3.5. in the analytic supplement).

We also analyzed the percentage of students who lost the right to study compared to the number of students enrolled in the generation. Data for the Integrated undergraduate and graduate study of Medicine show that 24% of students lost the right to study in the academic year 2011-2012, 18% of students lost the right to study in the academic year 2012-2013, 11% of students lost the right to study in the academic year 2013-2014, 18% of students lost the right to study in the academic year 2014-2015, and 15% of students lost the right to study in the academic year 2015-2016. Data for the Undergraduate university study of Environmental and Public Health show that 30% of students lost the right to study in the academic year 2014-2015, 50% of students lost the right to study in the academic year 2015-2016, 23% of students lost the right to study in the academic year 2016-2917, 31% of students lost the right to study in the academic year 2017-2018, and 47% of students lost the right to study in the academic year 2018-2019. Data for the Graduate university study of Environmental and Public Health show that only 0-9% of students lost the right to study over the last five years.

According to the percentage of students who are still studying by generations compared to the number of students who enrolled in a year of study between the academic years 2011-2012 and 2015-2016 (last generation of graduates considering the period covered by the self-evaluation report), data for the Integrated undergraduate and graduate study of Medicine show that 2-26% of enrolled students are still studying. Of the generation enrolled 10 years ago, 3% of students are still studying; of the generation enrolled 9 years ago, 2% of students are still studying; of the generation enrolled 8 years ago, 6% of students are still studying; of the generation enrolled 7 years ago, 13% of students are still studying; and of the generation enrolled 6 years ago, 26% of students are still studying (Table 3.5. in the analytic supplement).

According to the percentage of students who are still studying by generations compared to the number of students who enrolled in a year of study between the academic years 2014-2015 and 2018-2019 (last generation of graduates considering the period covered by the self-evaluation report), data for the Undergraduate university study of Environmental and Public Health show that 0-29% of students from enrolled generations are still studying. Of the generations enrolled between the academic years 2014-2015 and 2016-2017, none of the students are studying anymore; of the generation enrolled in the academic year 2017-2018, 9% of students are still studying; and of the generation enrolled in the academic year 2018-2019, 29% of students are still studying (Table 3.5. in the analytic supplement).

In conclusion, study programs have a satisfactory pass rate, but there is always room for improvement. We try to increase the pass rate through all institutional mechanisms, but in doing so, we pay special attention to maintaining our quality assurance system and evaluation criteria. The Faculty of Medicine is continuously working to increase the pass rate and students' progress

in studies by maintaining the optimal ratio of teachers and students (Section 4.1., Table 4.1A in the analytic supplement), working comprehensively on the quality of the teaching process through the institutional quality assurance system, reviewing the usefulness of introducing new organizational forms of teaching (reorganization of clinical teaching), increasing the number of hours of practical teaching, and enabling work in small student groups. Also, with the evaluation system, we encourage continuous work throughout the year. Annual verifications of learning outcomes and the implementation of student surveys based on which we improve teaching reveal there is certain progress in the student pass rate.

3.3. Higher education institution provides student-centered teaching

The University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka stipulates, among other things, student obligations in terms of assessment, class attendance, and taking exams. The implementation of all study programs includes all forms of teaching: lectures, seminars, and practicals, while some study programs also include field courses (Appendix 3.3.1.).

At the Integrated undergraduate and graduate study of Medicine, the curriculum of preclinical courses is realized in the main building of the Faculty of Medicine and our teaching bases: Clinical Hospital Center (CHC) Rijeka, Teaching Institute of Public Health of Primorje-Gorski Kotar County, Health Center of Primorje-Gorski Kotar County, Lovran Orthopedic Clinic, Thalassotherapia Opatija – Special hospital for medical rehabilitation of heart, lung and rheumatic diseases, Emergency Medical Service of Primorje-Gorski Kotar County, Polyclinic Medico, Rab Psychiatric Hospital, Special Hospital for Ophthalmology Svjetlost, Zagreb. The teaching bases conduct exclusively clinical courses, where students acquire practical competencies from the study program by working with patients. We should point out that all our teaching bases and institutions outside the Faculty that conduct part of the classes provide a satisfactory level of quality (in terms of premises and staff capacity), which contributes to enriching the teaching process and gives students a complete representation of the health system and its organization. It is especially important to emphasize that students learn the most through practical classes, and it is the introduction of all segments of working with patients in different institutions that makes it possible.

Great attention is paid to all forms of teaching, and the development of teaching methods in practical forms of teaching (online teaching on Merlin e-learning platform) is especially encouraged. In most of our study programs, it is necessary to adopt practical professional skills. Therefore, we worked intensively to increase the capacity and equipment of skills labs that enable the acquisition of clinical skills and competencies on simulation models and to design and introduce elective courses Professional Practice at the Integrated undergraduate and graduate study of Medicine. Of course, most of the practical training at clinical courses takes place alongside patients in clinical wards, and we have also introduced clinical rounds for students at the Emergency Medical Service of the Clinical Hospital Center Rijeka. Furthermore, we conduct courses Simulation of Clinical Skills (work in the Skills Lab and general and county hospitals of the

Republic of Croatia with which the Faculty of Medicine has signed an agreement), Medical Skills I and II, and the elective courses Professional Practice (I-V). The aim of these changes is to enable students to work with experienced specialist physicians and other team members and to build confidence in working with patients, especially those who are critically ill. Changing the curriculum of clinical courses at the Integrated undergraduate and graduate study of Medicine by preventing a larger number of students come to the clinical teaching site at once, we ensured that students acquire clinical skills more successfully (Appendix 3.3.2. – Decision of the Faculty Council).

Field classes for the study of Environmental and Public Health are conducted in food processing facilities (dairy, meat, fish, olive oil, pasta, bakery goods, beer processing plants) or collective catering facilities (student canteen, hotel kitchen, hospital kitchen). Based on precise instructions and division of tasks, students organized in groups (3-4 members) collect information on-site through direct conversation with employees in the plants and observation of the manufacturing process and report on the results orally at the final seminar class. Field classes in food processing plants or collective catering facilities enable students to learn about standard techniques, procedures and devices used in food manufacturing and distribution, gain experience in recording the manufacturing process, and gain experience in applying the principles of good hygiene and manufacturing practices.

Pursuant to the University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka, students' work on the course is assessed and evaluated during classes and at the final exam in accordance with the study program. Student assessment is performed using the European Credit Transfer and Accumulation System (ECTS) and the numerical grading system. Assessment of students in each course is performed during classes and at the final exam as follows: the total percentage of student success during classes (class attendance, midterm exams, and other class activities determined by the study program) is worth 50-70% of grade points, and the total percentage of student success on the final exam is worth 30-50% of grade points. Student success for each course is expressed by the ECTS grading scale in percentages from 0 to 100% grade points. The passing grade in undergraduate and graduate studies can not be lower than 50% of grade points. The examination threshold for the final exam cannot be lower than 50% of successfully completed class activities. The final grade is the sum of the percentage achieved during classes and the percentage achieved at the final exam. According to the Regulations, the exam can be taken in the form of a written exam, oral exam, practical work or any combination of these forms.

Various forms of examinations, whether oral or written, are a safe method to assure greater objectivity in the assessment and evaluation of final knowledge and competencies. The large scope or complexity of the course content in a particular study program requires constant encouragement of continuous student work during classes. This is achieved by conducting short tests after each seminar class, conducting midterm exams after covering larger units, encouraging student work and research by writing seminar papers or making presentations, and stimulating student activity during discussions at seminar classes and practical classes, especially through acquiring practical skills at practical classes. The most important changes introduced by new Study

Regulations are related to encouraging students to continuous work during classes and evaluation of this work through the gradual collection of ECTS credits (which makes a maximum of 50-70% of the grade), and the total pass rate of students at the final exam is 30-50% of the grade. This system aims to adjust the assessment on the course to successful achievement of expected learning outcomes and focuses on teaching and direct work with students, which brings many benefits and contributes to increasing pass rates. If a student does not obtain the minimum number of ECTS credits determined by the Study Regulations, they cannot take the final exam. Also, in assessing students' knowledge, it is especially important that the teaching content and compulsory and additional literature are harmonized and that the learning outcomes for a particular course are precisely defined, which we are working on intensively.

Most courses in our study programs use a combination of written and oral assessments of achieved learning outcomes on the final examination, while clinical courses use a combination of all three forms of assessment. Defined methods for assessment of expected learning outcomes in individual courses are adapted to the course content and goals. In clinical courses, special attention is paid to the specific nature of learning outcomes, which are based on the acquisition of practical skills (learning outcomes). The combination of all forms of assessment of achieved learning outcomes and the system of obtaining grade points during classes contribute to greater objectivity and impartiality on exams.

Generally speaking, the adequate enrollment policy makes it possible to organize classes in student groups, providing optimal work with students. The size of study groups for lectures, seminars and practicals is tailored to the specific requirements of each course and the form of practicals (laboratory, clinical, surgical) in order to achieve the optimum student-teacher/teaching assistant ratios and ensure a better quality of the teaching process. Considering that student attendance and activity in all forms of teaching are evaluated according to the Study Regulations, it is important to maintain the optimum size of student groups in order to apply the ECTS credit system correctly.

Classes are held in lecture rooms equipped with computers, projectors and internet access. Several years ago, an e-learning system interface was introduced based on the Merlin e-learning platform (which is based on Moodle, the learning management system (LMS) of the University Computing Center SRCE) to support the teaching process. It is and is very easy to use. The platform has contributed to the simplification of teaching, written examinations (and midterm exams) and statistical analysis of exams, and part of the evaluation of student work and correspondence has been transferred to the online environment. On the Merlin platform, each course has its webpage where students have access to teaching materials and all information related to the course. Communication on the platform is possible through discussion boards (forums) and e-mail. This enables simplified communication between teachers and students as well as among students. According to the instructions of the University of Rijeka (Appendix 3.3.3., Appendix 3.3.3a. and Appendix 3.3.3b. – Decision of the University) on teaching in the academic year 2020-2021 (hybrid model), 40% of teaching on the study program can be held online. Therefore, teaching was adapted to this model depending on the epidemiological situation. Recommended e-learning platforms are Merlin, MS Teams and Big Blue Button. The practical part

of the course was mostly held in the premises of the Faculty and teaching bases, while the lectures were held online.

At the Faculty of Medicine, the procedures for continuous monitoring of the quality of teaching are carried out by the Quality Assurance and Improvement Committee in cooperation with the Quality Assurance and Improvement Committee of the University of Rijeka. The Faculty's Committee organizes, coordinates and implements assessment procedures and develops internal mechanisms for quality assurance and improvement. In the past five years, the Quality Assurance and Improvement Committee has compiled a new Quality Assurance Manual of the Faculty of Medicine in Rijeka. It offers the possibility for a student to initiate a teacher evaluation survey (if they are dissatisfied with the work of teachers/departments or vice versa or if they want to praise the work of a teacher). Until then, a survey was initiated only by the course coordinator, periodically for an individual teacher who participated in the course more than 30%. Student evaluation of teaching for each academic year provides feedback from students on the quality of the teaching process and the teachers. At the end of each evaluation cycle, the results obtained for an individual teacher or a particular course are submitted in full to the head of the Committee, Vice Dean for Teaching and Dean. In case a teacher receives poor evaluation in a segment of their work or attitude towards students, the head of the department is obligated to talk to them, point out the problem, advise them and find ways to solve the issue or incorrect approach to teaching, and then conduct the survey again to check progress. Also, according to the Faculty's Ordinance on Conditions and Procedure for Appointment to Ranks and Corresponding Positions, applicants must have a positive evaluation of their teaching held in front of the committee and students for the first election or election into a higher rank. The certificate on the positively evaluated institutional student survey is issued to the teacher by the Quality Assurance and Improvement Committee based on the results of the institutional student survey. A positive evaluation is considered to be a score of 3.0 or higher. An example of a report on student evaluation can be found in Appendix 3.3.4. (Survey report). Despite some initiatives for public disclosure of the results of student surveys, Committee members (teachers, associates, students, an external member, and a lawyer) have agreed that for the time being, the results should be shown summarily by departments at thematic sessions of the Faculty Council and that the teachers who do not meet the minimum quality requirements should be held up in their further teaching work through mechanisms preventing election into a higher scientific-teaching or teaching rank. The Committee's position is that the mechanisms available to the department heads or the dean are much more effective in terms of stimulating improvement in the teachers who have not received a positive evaluation than a potential public disclosure of results of anonymous student surveys.

In addition to the student survey, students can express their observations through student representatives directly to the vice dean for the relevant study or to the Vice Dean for Teaching. Students are members of the Teaching Committee and the Quality Assurance and Improvement Committee, where they can also present their comments and requests. The student organization also has a Student Teaching Committee, where the representative for teaching issues consolidates all observations and presents them to the Vice Dean for Teaching.

In addition, each session of the Faculty Council has a regular item on the agenda called *Student*

Reports, which enables students to express a problem concerning teaching or examinations directly. A student representative for all years of study (currently, that is the president of the Student Union of our Faculty) regularly attends the sessions of the Dean's Collegium and resolves current student issues directly with the members of the Collegium. Students are also members of other Faculty's permanent committees, so they directly contribute to their work. Students also regularly participate in meetings of the Study Year Councils (meetings of all course coordinators of a given year of study at which course timetables and exam dates are harmonized) (Appendix 3.3.5. – Invitation letter for the Study Year Council). We must emphasize that the meetings of students who have already passed all the exams in the relevant year of study and students who are about to register for these courses significantly contribute to a better organization of teaching and reduce subsequent student comments regarding teaching to a minimum.

Also, once a year, the Quality Assurance and Improvement Center of the University of Rijeka conducts surveys unique for all faculties. After processing the results, they submit the results for the previous academic year.

3.4. Higher education institution provides appropriate student support

At the beginning of each academic year, we organize a matriculation ceremony for newly admitted students, on which students are informed about studying, career opportunities, student associations at the Faculty, University Psychological Counseling Office, and primary health care options for students coming from another city or state. Upon enrollment at the Faculty, the student receives an e-mail address for the uniri.hr domain, which is the official communication channel with teachers and professional administrative services. Also, all students with their username and password they receive when enrolling at the Faculty can access electronic services such as ISVU (where each student can see information on the status of each enrolled course, register/deregister for the exam, etc.), Merlin (students have access to detailed information for each course and can interact with teachers and other students in the course), and Webmail (students have access to their e-mail and can communicate with all other students, teaching and non-teaching staff). The newly-created information system for course syllabi (INP MEDRI) is intended for students and teachers to access all information related to course syllabi and schedules. It also records class attendance and acquired clinical skills.

The Faculty's website contains a Guide for freshmen with basic information for newly admitted students. Our website also publishes all Faculty's legal acts relevant for students, all application forms, notices, etc. The Faculty operates in an energy renovated building in accordance with European standards, near the Clinical Hospital Center and the Teaching Institute of Public Health of Primorje-Gorski Kotar County (Appendix 3.4.1., 3.4.1a. – Energy certificate). The Faculty building offers students lecture rooms for teaching, a library with a space for learning, an IT classroom, rooms for student associations, and a student canteen. All lecture rooms are equipped with computers, projectors, and internet access. Wireless connection is available in all Faculty premises.

Students of the Integrated undergraduate and graduate studies of Medicine and Medicine in English and university undergraduate and graduate studies contact the Office of Student Affairs for all questions and problems. Their office hours for students are every day from 9 am to 12 pm. During student enrollment and submission of bachelor's and master's theses, working hours are extended if necessary. The Office of Student Affairs Service has six employees, and the entire study system is managed through the information system (ISVU). Postgraduate students have at their disposal the Office of Postgraduate (Specialist) Studies and Lifelong Learning and the Office of Science, Projects and Doctoral Studies. These two offices have seven employees who are always available to postgraduate and doctoral students.

The Biomedicine and Health Library is a place where students often spend a lot of time during their studies because it has a reading room, a space for quiet individual and group student work, and a space for learning. The Library's office hours are Monday through Friday from 8:30 am to 8 pm. The Library staff consists of three qualified professionals: two graduate librarians and one senior librarian. The Library also employs a proofreader for English and Croatian. Employees regularly attend professional training and actively participate in professional and scientific meetings. They participated in Erasmus workshops at the Norwegian University of Science and Technology in Trondheim (2017), at the Aix-Marseille University in France (2019), and in June 2022, they are planning on going to the University of Warsaw in Poland. Erasmus training is an opportunity to share experiences with colleagues from European higher education libraries (Section 4.5.).
The IT Services are available to students in case of any problems with access to online platforms and e-mail related to the study. The IT Services have three employees.

The Office of International Relations and Quality Improvement is the next popular destination for students interested in international mobility. The Office has one employee who is an expert advisor for international cooperation. Apart from her regular office hours, the colleague is available to outgoing and incoming mobility students at any time by e-mail. The Vice Dean for International Relations and the Office of International Relations and Quality Improvement take care of international students who come for exchange, either through institutions or student organizations, allowing students to gain great friendships and experiences and present our institution in a good light.

For many years, the Faculty of Medicine in Rijeka has an established mentoring system through which first-year students are assigned a mentor from the ranks of teachers (mentor teacher). Mentor teacher monitors student progress throughout their studies and provides necessary assistance (Appendix 3.4.2. – Decision of the Faculty Council on mentor teachers). Mentors hold meetings with students and have direct individual communication with the student (consultations, e-mail). Also, our students have designed a mentoring system through which they can be assigned a mentor from the ranks of senior students (mentor student), which we can say is more effective in achieving their goals.

We consider the possibility of consultation with course teachers or teaching assistants to be an important form of providing learning assistance. Student consultation hours are published on each department's webpage or agreed with the individual teacher. Also, most departments have

developed a system of student demonstrators from the ranks of senior students, so they are also included in assistance in learning and course materials (in the last academic year, student demonstrators participated in 6343 teaching hours of practical classes). We have also introduced the Ordinance on Student Demonstrators, which regulates student demonstrating work and lays down provisions for registering demonstrating work in a diploma supplement.

Enrollment of applicants with disabilities rated at 60% or more is allowed outside the regular enrollment quota if they meet the classification threshold of 40%. Since we have thus facilitated the enrollment of students with disabilities, we are taking all further steps to facilitate studying for such students. At the beginning of the academic year, all vice deans in charge of individual studies, heads of studies, and course coordinators are informed about the need to adjust the teaching methods or examination methods. We also have an appointed coordinator at the Faculty for all issues related to students with disabilities. Furthermore, we should mention the University Counseling Center and their Psychological Counseling Office, Legal Counseling Office and the Office for Students with Disabilities. Students can turn to their experts for help or participate in their workshops.

Furthermore, although the Faculty does not have special funds to finance students of lower socioeconomic status, we refer them to apply for University scholarships that include this category of students (e.g., Call for applications for granting scholarships within the framework of the Aleksandar Abramov "Solidarity" Foundation, Call for applications for granting scholarship covering participation in student expenses, Measures for Improvement of the Social Dimension of Studying at the University of Rijeka). Enrolled students with disabilities rated at 60% or more, regardless of their academic success, are not charged for participation in study costs (determined by the University's decisions in accordance with the criteria of excellence) and are thus stimulated to continue studying. Additionally, all students who, according to the Senate's decisions, must participate in their study costs can pay the tuition fee in several installments.

The Faculty's Office of Legal, Personnel and General Affairs is available for students in solving any legal problem, while vice deans in charge of individual studies, Vice Dean for Teaching and the entire Faculty Administration are available for all issues related to teaching. Students have their student ombudsman at the University level and at the Faculty level.

Since 2018, the Faculty has been practicing the Privacy Policy – personal data protection policy, which also applies to students of the Faculty as primary users of the Faculty's services (see Topic I).

Numerous student activities at the Faculty of Medicine in Rijeka are organized by the Student Union, with the continuous and strong support of the Faculty Administration and staff, as well as by student associations that operate at the Faculty: FOSS MedRi (Faculty Committee of all Students of the Faculty of Medicine Rijeka), CroMSIC (Croatian Medical Students' International Committee), EMSA (European Medical Students' Association), student groups and individual students. It is important to note that FOSS MedRi has been active at the Faculty of Medicine almost since the founding of the Faculty and is the oldest student organization at the University of Rijeka.

The organization of extracurricular activities is aimed at conducting international exchanges, participation in and organization of international and national scientific congresses, raising the quality and standards of studies and student life, popularization and involvement of students in scientific research activities, organization of public health, medical popularization and humanitarian projects, cultural and sports activities, and other student extracurricular initiatives.

As part of extracurricular activities, medical students organize very successful projects throughout the year that include hundreds of Faculty volunteer students and employees. Some of them are international exchanges of medical students, organized by the CroMSIC student association. As part of this project, more than fifty medical students have the opportunity to annually participate in a one-month clinical traineeship at various clinics and medical schools around the world, and an equal number of students from around the world realize their clinical traineeship through student exchange at the Clinical Hospital Center Rijeka and participate in scientific projects at various departments of the Faculty. Among the international activities, we have to mention the Diving Medicine Summer School, within which we host medical students from various parts of the world to learn about underwater and hyperbaric medicine, after which they are awarded a certificate for diving up to 18 meters.

Every year, our associations organize various student congresses at the Faculty. The most important ones are: NeuRi – the largest student neuroscience congress in this area, Sanitas – congress dedicated to the protection and preservation of health, HITRI – emergency medicine congress, Science PICNIC and others. Of course, our associations are also engaged in educating the public on various topics important for health and disease prevention. These are educations on cardiovascular diseases (Measurement of Blood Pressure and Sugar, Prevention of Cardiovascular Diseases and Diabetes), vaccination (Let's Talk About Vaccination, Cjepko), sexual and reproductive health and rights (THE Talk, Menstruaction, mRAK Campaign) and mental health (Self-Retrospective). We also organize the education of children through workshops such as Puzzles of Heredity (that teaches children the basics of genetics), Clean Small Hands (that teaches the importance of handwashing), and the Teddy Bear Hospital – Rijeka (bringing the medical environment closer to children in a fun and interactive way). It is worth mentioning the projects that organize events where students are the primary beneficiaries – School of Interventional Radiology, Medskills clinical skills competition – where students have the opportunity to learn many basic medical skills and learn more about advances in various clinical branches of medicine.

Finally, many of our projects are of humanitarian character (Humanitarian Ball of Medical Students, Drops of Life, Be Someones Santa, KosaRi) through which students of the Faculty of Medicine in Rijeka show their big hearts. In addition to charity events, students help each other through the Mentor Student project, in which senior students help first-year students adapt to the new academic environment, and CroBuddy, which connects Croatian students with international students attending study of Medicine in English.

The study quality and standard are particularly taken care of by the Student Union and the Teaching Committee, whose members (student representatives) actively participate in the work of the Faculty Council and other Faculty committees, where they are involved at all levels in the

preparation, decision-making and measures related to the continuous improvement of study conditions. In this sense, digital support is provided through regular updates of the internet portal foss.hr with online guidelines for freshmen and graduates and with a large amount of free teaching, scientific and professional content. In student common rooms, students are allowed unlimited use of four computers with internet access and a wireless local-area network (WLAN).

The student paper Speculum has been published for many years, the Humanitarian Ball of Medical Students is a traditional event, and our students have also started Axis, the mixed student choir of the Faculty of Medicine.

The involvement of students in various aspects of the scientific research process and popularization of science within project activities is realized through the Science Committee, which supports scientific research work and continuously organizes popular science lectures, scientific forums, and workshops on scientific methodology. Many students are directly involved in various phases of scientific research at individual clinics and departments and are members of the editorial boards of the professional-scientific journal published at the Faculty (*Medicina Fluminensis*).

In addition to regular classes of Physical Education, students are involved in many sporting activities, tournaments and competitions at the university local, national and international level as members of the Rijeka University Sports Federation and the Student Sports Association. Every year, they also participate in Humanijada, a regional sports competition for students of (bio)medical faculties.

In conclusion, students of the Faculty of Medicine have the opportunity during their education to participate in numerous extracurricular activities, which are organized under the motto "student for students" by the Student Union and student associations operating at the Faculty. Involving students in some of the projects, initiatives, or events increases the study quality and standard and educates better future professionals in the field of biomedicine and health. In accordance with the decisions of the Senate and the Regulations on the Distribution of Funds Generated from Student Tuition Fees of the University of Rijeka, the Faculty and all other constituents allocate funds each year for student projects of the University of Rijeka. The University has a Committee for Assessment and Cofinancing of Student Activities, to which students can submit applications for their projects. Each academic year, a call for applications is announced for the financing of student projects by the Student Center of the University of Rijeka, to which all students of our Faculty can apply.

Students are awarded the Rector's and Dean's Awards every year for their success in studies, science and volunteer work. In the academic year 2020-2021, our students received four Rector's Awards for Student Activism, for Student Volunteer, for Student Professional and Scientific Work, and three Dean's Awards for Student Activism.

As regards motivating students to learn through a reward system, we should mention that each year, at the ceremonial Faculty Council session held on the occasion of the Faculty Days

ceremony, the Dean presents prizes and awards to the best students of university and professional studies, selected according to the Ordinance on Awarding Full-Time Students. The ranking list of nominees is formed uniformly based on the best average grades during the academic year. The criteria for the nominees for the award include success in all exams from the previous year and enrollment in the next year of studies, no previous repetition of a year, the lowest average grade from all exams previously passed should not be lower than 4.00 and 4.5 in the year for which they are being awarded. The criteria for candidates for the award for the entire duration of studies include a minimum average grade of 4.5 in all the years of studies and a minimum average grade of 4.5 in the bachelor's or master's thesis, with the duration of studies also being taken into account. Students are also awarded by the criteria of the average grade in clinical courses, which should not be lower than 4.5. In addition to the awards for excellence, a call for applications for awarding the Dean's Award for Student Activism is announced each academic year. After students apply, the Dean appoints a selection committee that always contains one student. The awards are presented as a diploma/accolade with a symbolic gift, while the award for student activism includes a diploma/accolade and a tablet. The Clinical Hospital Center usually presents the award for best graduate student with a laptop or a grant for postgraduate study (Appendix 3.4.3., Appendix 3.4.3a., Appendix 3.4.3b. and Appendix 3.4.3c. – Certificate and award plaque). This kind of assessment, which evaluates the student's effort during the study, and the awards and accolades presented to the best students are a very good way to motivate students to learn and should definitely be continued.

3.5. Higher education institution provides support to students from vulnerable and underrepresented groups

Students coming from vulnerable and underrepresented groups are provided with support during enrollment (Decision of the Senate dated April 4, 2017). Based on the recommendation of the Croatian Rectors' Conference regarding the right to priority enrollment in higher education institutions (CLASS. NO.: 602-04/20-05/23, REG. NO.: 380-230/071-21-17 dated April 30, 2021), the following applicants have the right to direct enrollment in the status of full-time students if they pass the state graduation exams (which are a mandatory condition for enrollment in certain study programs), pass the appointed threshold and satisfy any prerequisites and additional assessments of special knowledge, skills and abilities: Croatian Homeland War veterans, Croatian disabled Homeland War veterans, children of killed, captured or missing Homeland War veterans, children of 100% disabled Homeland War veterans from Group I, children of civilians killed, deceased or missing under the circumstances referred to in Articles 6, 7, and 8 of the Act on the Protection of War Veterans and Civilians (OG 33/92, 77/92, 58/93, 2/94, 76/94, 82/01, 103/03, 148/13, 98/19), hereinafter: the "Act", children of war civilians whose disabilities occurred under the circumstances referred to in Article 8 of the "Act", children of war veterans and civilians disabled in peacetime of the Group I with a 100% disability occurred under the circumstances of Articles 6, 7, and 8 of the "Act", candidates with 60% or more physical impairment, candidates with second to fourth degree of disability in accordance with the "List of severity and type of disability – impairment of functional abilities", candidates with a disability classified in the "List of disabilities – List I".

The Faculty provides support to students with disabilities through a coordinator who is a teacher at the Department of Anatomy, Faculty of Medicine, University of Rijeka. This person offers individual support to students from vulnerable and underrepresented groups. Students can contact the coordinator in order to exercise their rights to the adaptation of teaching and examination methods and resolve all other issues related to the rights and study of students with disabilities. The coordinator in charge of supporting students from vulnerable and underrepresented groups and the vice deans cooperates with the Office for Students with Disabilities within the University Counseling Center of the University of Rijeka. At the beginning of each academic year, the Office contacts the coordinator who communicates directly with the vice deans (Vice Dean for Teaching, Vice Dean for the Study of Medicine in English and International Relations, Vice Dean for the Studies of Environmental and Public Health and Medical Laboratory Diagnostics) and in cooperation with them regulates the exercise of rights and the adjustment of academic activities. Vice deans communicate directly with teachers to ensure the adjustment of academic activities according to the Decision on the Recognition of Students with Disabilities. There are currently three students at the Integrated undergraduate and graduate study of Medicine who have a recognized status of students with disabilities (60-90%). In addition, at the introductory class for first-year students, representatives of the University Counseling Center of the University of Rijeka inform students about their work every year. In cooperation with the Department of School and University Medicine of the Teaching Institute of Public Health, the Office has drafted a proposal for the Protocol for Care and Monitoring of Students with Health Conditions, Disabilities and Chronic Diseases (adopted by the Senate on April 4, 2017) and the document Exercising the Right to Adapt the Academic Environment for Students with Impairments and Other Disabilities at the University of Rijeka, which are also applied at the Faculty of Medicine as one of the constituents (Appendix 3.5.1. – Letter from the University regarding student disability). A link to documents related to vulnerable and underrepresented groups is available on the Faculty's website.

In addition, the Decision of the Senate of the University of Rijeka on the exemption from participation in study costs and tuition fees for students from areas affected by the earthquake is taken into account during enrollment in higher years of study, which has been applied to several students.

The Faculty adapts the admission requirements according to different student needs. Students with disabilities are provided with the adaptation of study conditions and academic activities. The Faculty's spatial accessibility and infrastructure are adapted to students with disabilities and reduced mobility (entrance to the Faculty premises leads directly to the elevator). In the case students have motor or other disabilities, they are allowed individual adjustments that include the duration of the examination, taking oral instead of written exams, and the like.
The Faculty provides financial support to students from vulnerable and underrepresented groups in the form of necessary teaching aids.

3.6. Higher education institution enables students to gain international experience

When it comes to gaining international experience, students are most interested in international mobility. It is mostly achieved through bilateral and multilateral agreements and mobility programs (Erasmus+, International Credit Mobility KA107 – Erasmus+, bilateral exchange and CEEPUS). In the previous five-year period, the Faculty expanded the network of partner institutions within the Erasmus+ program and concluded many new agreements. The Faculty currently has 35 signed cooperation agreements with 14 countries within the ERASMUS+ program, and an additional 5 bilateral agreements with institutions in 5 countries (Appendix 3.6.1., Appendix 3.6.1a. and Appendix 3.6.1b. – Bilateral cooperation agreement, Appendix 3.6.2. and Appendix 3.6.2a. – List of Erasmus bilateral agreements). Students continuously receive information through relevant websites about the possibilities of attending part of studies abroad, primarily through Erasmus+ student mobility programs, and about other forms of participation like summer school programs, CEEPUS programs, etc. The Faculty of Medicine has signed bilateral cooperation agreements based on which we actively conduct international cooperation with the following institutions: Hyogo College of Medicine, Japan, Beijing University Health Science Center, China, University of Kansas Medical Center, USA, University of Ljubljana, Slovenia and Istanbul Aydin University, Turkey.

The Faculty's website contains guidelines for mobility programs and the link to the University's International Mobility Office's website, where the Erasmus+ Charter and other relevant acts are available. In addition, Erasmus+ Info Days are regularly held at the Faculty, organized by the Erasmus+ coordinator and the University's International Mobility Office. Furthermore, the Erasmus+ coordinator is continuously available to students to provide initial information on the possibilities of attending part of their studies abroad and to help with the application process and the implementation of the student mobility program. Also, support for interested students is provided through the Office of International Relations and Quality Improvement, which operates at the Faculty.

The Faculty enables students the recognition of ECTS credits obtained at another higher education institution in accordance with the Faculty guidelines for outgoing Erasmus+ students. After the completed mobility abroad, the procedure is carried out for the recognition of ECTS credits obtained at a foreign institution, whereby the international mobility coordinator acts following the documents such as the Learning Agreement and the Transcript of Records. Based on the confirmation of the international mobility coordinator, the obtained ECTS credits are entered into the ISVU system.

The trend in the number of outgoing mobility students in the last five academic years for the Integrated undergraduate and graduate studies of Medicine and Medicine in English is shown in Figure 3.6.1. In the observed period, 72 students of the Faculty conducted part of their studies abroad, and most of their mobility periods lasted less than three months (Table 3.6. in the analytic supplement). There was a noticeable decline in mobility in the academic year 2020-2021 when it was used by only six students. This trend in the number of outgoing mobility students can be partly explained by the fact that students do not receive sufficient financial support from the

Erasmus+ program when they go studying abroad to more desirable and thus more expensive destinations. The decline in the number of outgoing mobility students in the last two academic years is primarily the result of the COVID-19 pandemic and travel restrictions, which have substantially reduced mobility.

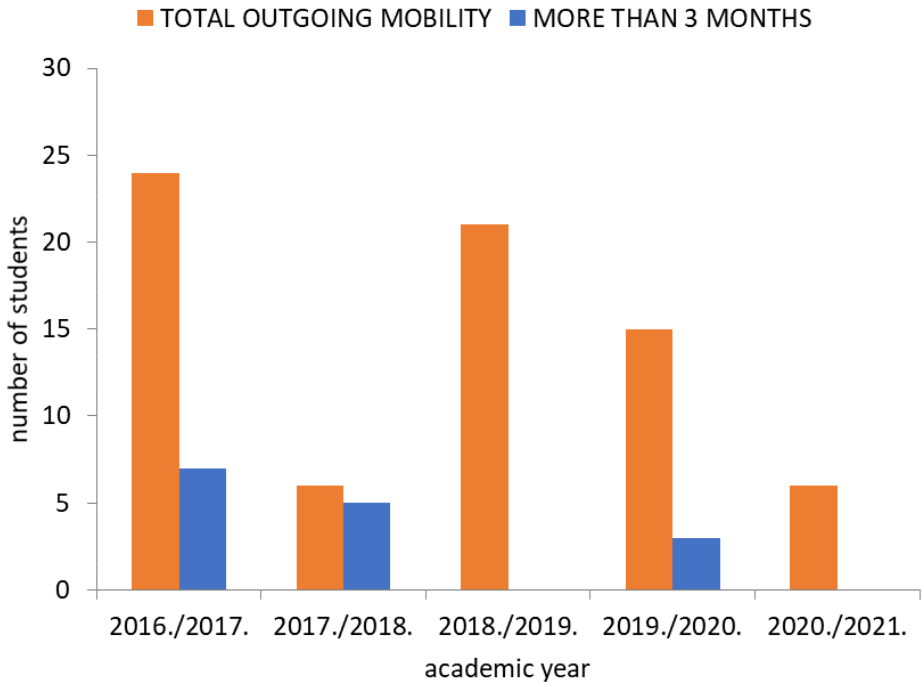


Figure 3.6.1. Number of students in outgoing mobility

The analysis of feedback on student satisfaction with the quality of higher education support is performed by the Agency of Mobility and EU Programmes, i.e., the Erasmus+ program. After the mobility, they send a survey to each mobility student regarding their satisfaction with the mobility. Also, all students participating in outgoing mobility programs are required to fill out a final report in which, among other things, they express the level of their satisfaction with the completed mobility. We can conclude that within the framework of interinstitutional Erasmus+ cooperation, significant progress has been made at all levels of mobility in terms of the Faculty's outgoing students to partner institutions. This will continue to be encouraged, depending on the Faculty's possibilities, by concluding new agreements and extending existing ones and by conducting more intensive mobility within the YUFE Association of European Universities, whose project partner is the University.

3.7. Higher education institution provides favorable study conditions for international students

From the academic year 2017-2018, the Faculty offers international students classes in English at the Integrated undergraduate and graduate study of Medicine – the study of Medicine in English. The first generation of enrolled students is currently in the fifth year of study, and we still do not

have a generation of graduate students. By the academic year 2021-2022, a total of 161 students have enrolled in the study of Medicine in English. Courses conducted at the full-time study program are identical to those at the same study program conducted in the Croatian language. Information related to the study of Medicine in English is available on the Faculty's website. The Department of Croatian Language and Literature of the Faculty of Humanities and Social Sciences and the Public Open University Rijeka conduct Croatian language learning programs, and the number of international students from our Faculty attending the Croatian language course is 69 (Appendix 3.7.1., Appendix 3.7.1a and Appendix 3.7.1b. – Certificate of attendance of the Croatian language course).

Incoming mobility students within the ERASMUS+ exchange program have all student rights and obligations, just like Croatian students. Student mobility can also be carried out through the ERASMUS Mundus program, the CEEPUS network, and the CESEENET network for postgraduate university students. The incoming mobility process is defined by the acts of the University of Rijeka. Incoming students are managed by the Vice Dean for the Study of Medicine in English and International Relations and the ERASMUS coordinator (who is an expert advisor for international relations at the Faculty) together with the International Relations Office of the University of Rijeka. The Faculty meets all the organizational and staff prerequisites for accepting international students and taking care of their stay and accommodation.

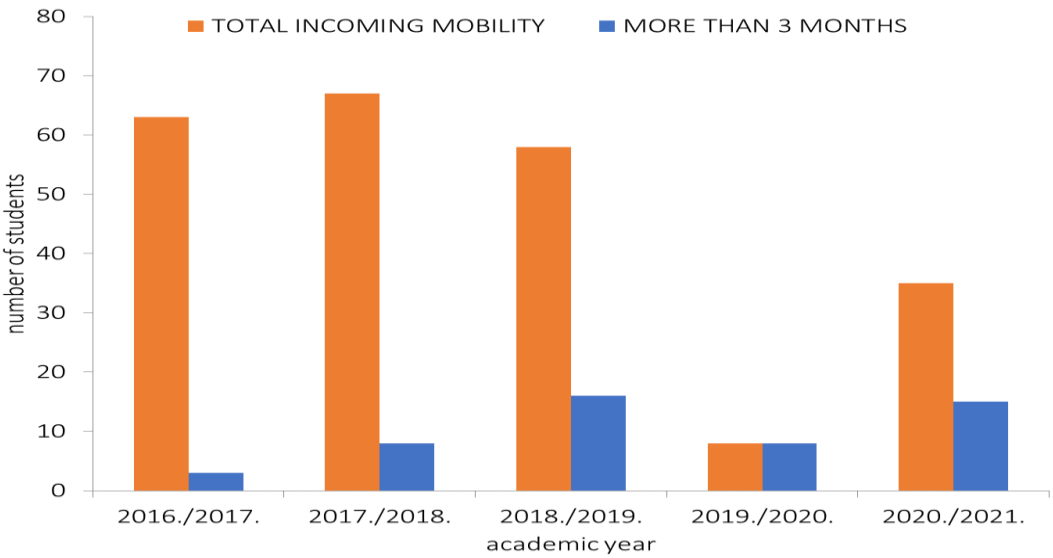


Figure 3.7.1. Number of incoming mobility students.

The number of incoming mobility students was 231, of which 181 students used the mobility period lasting up to three months, and 50 students used the mobility period lasting more than three months. In the academic year 2016-2017, we had a total of 63 incoming mobility students; in the academic year 2017-2018, we had a total of 67 mobility students; in the academic year 2018-2019, we had a total of 58 mobility students. During the last two academic years, there were slightly fewer incoming mobility students – 8 in the academic year 2019-2020 and 35 in the academic year 2020-2021 (Table 3.6. in the analytic supplement). The decline in the number of incoming mobility students in the last two academic years is primarily the result of the COVID-19 pandemic and travel restrictions, which have substantially reduced mobility (Figure 3.7.1).

3.8. Higher education institution provides objective and consistent evaluation and assessment of student achievements

The University of Rijeka Study Regulations regulates, among other things, student obligations at the Faculty of Medicine in Rijeka in terms of class attendance. Article 38 (Exam) states that an exam can be taken by a student who has met all the requirements prescribed by the study program. In the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka, Article 7 regulates student obligations related to the class absence (A student did not fulfill their obligations stipulated by the study program if they were absent for more than 30% of teaching hours from each form of classes – lectures, seminars, and practicals). Class attendance is tracked through an attendance sheet at each seminar and practical class and, in most courses, lecture class. Any absence must be justified and (depending on the course) compensated. In most courses, activity and demonstrated knowledge during seminars and practicals are assessed and appointed with grade points. During the course, the student must obtain a certain number of grade points (50% of the prescribed grade points for the course) to gain the right to access the final exam. Such a system of motivating students to attend classes has proven to be very effective and useful because such forms of teaching imply active student participation in discussions and practical classes, which certainly contributes to the acquisition of knowledge and skills in each course.

Our study programs are conducted through semesters (the first three years of the studies of Medicine and Medicine in English, and Undergraduate university study of Environmental and Public Health), clinical rotation classes (the last three years of the studies of Medicine and Medicine in English, refers primarily to clinical teaching, 2-3 courses take place simultaneously) or trimesters (Graduate university study of Environmental and Public Health). Such organization of teaching allows students of lower years of study to gradually acquire the necessary knowledge and skills provided by the course during the semester. In higher years of study, “concentrated” forms of teaching have multiple benefits, one of the most important being the commitment to learning one or a small number of courses. However, in our view, the main drawback is to do with the justification of student absence, which, even in brief illness, may exceed the 30% of permitted absences because the classes are held in shorter periods. Based on the student’s written request and the explanation of the justification for the absence, such problems are resolved by the Vice Dean for Teaching and Vice Dean for Studies of Environmental and Public Health and Medical Laboratory Diagnostics. In the event of justified absence (longer hospitalization, participation in sports competitions in a top athlete status, etc.), we try to find a solution to make up for such absence. However, if no solution is viable, the student must re-register for the same course in the next academic year.

Before the beginning of the academic year, after coordination of the timetables of all study programs at the Study Year Council (held in May) and adoption by the Faculty Council, the following information is published on the Faculty’s website (under STUDY PROGRAMS): curricula for the next academic year, teaching schedules and exam dates, timetables of elective courses, a list of mentors from teaching ranks for individual studies, and detailed syllabi for each course of a study program containing: course information (brief course description, general instructions,

where and in what form classes are organized, the required accessories, instructions for attending and preparing for classes, student obligations, etc.); list of required and elective literature; curriculum: list of lectures, seminars and practicals (with titles, explanations and learning outcomes); student obligations; exam (exam taking, detailed exam description of the oral/written/practical part, point distribution, grading criteria); test dates during classes; the possibility of teaching in a foreign language; other notes (related to the course) important for students; and the timetable of classes.

Each department has its own webpage, which provides a list of courses by study programs and a list of teachers and associates with their e-mail addresses for communication with students. Until the academic year 2019-2020, the results of the midterm exams and final exams were announced on the SharePoint portal of each department, and from the academic year 2020-2021, they are published on online platforms (Merlin, MS Teams). Students can comment on the implementation and results of examinations via these platforms or can contact the Vice Dean for Teaching and heads of studies via e-mail.

The announcement of exam dates and the implementation of examinations are carried out through the National Information System of Higher Education Institutions (ISVU system and its version ISVURI). All exam dates are agreed at the Study Year Council of each study, attended by course coordinators for the respective year of study and student representatives, and are finally approved by the Vice Dean in charge of that study program. Exam dates are entered into information systems at the beginning of the academic year so that students can plan their exams in the best possible way. Students access these IT programs with a password.

Most courses in our study programs use a combination of written and oral assessments of achieved learning outcomes on the final examination, while clinical courses use a combination of all three forms of assessment. Defined methods for assessment of expected learning outcomes in individual courses are adapted to the course content and goals. In clinical courses, special attention is paid to the specific nature of learning outcomes, which are based on the acquisition of practical skills. The combination of all forms of assessment of achieved learning outcomes and the system of obtaining grade points during classes contribute to greater objectivity and impartiality on exams.

The University of Rijeka Study Regulations (consolidated text from the academic year 2018-2019) have been in force since the academic year 2008-2009. The document stipulates that the final grade in the course is formed based on obtained grade points during classes (which make up to 50-70% of the final grade) and at the final exam (which make up to 30-50% of the final grade). This manner of grading promotes students' continuous engagement and learning during the course, facilitates the acquisition of the course content, and simultaneously evaluates the activity and knowledge acquired during classes, thus rewarding the student's effort and activity.

The teaching staff improves their skills and competencies through various forms of teacher training organized by the Faculty and other institutions. Support for the development of teaching skills, language skills and other skills is provided by the University of Rijeka (E-learning in the Teaching Process), Center for Teacher Education within the Faculty of Humanities and Social

Sciences in Rijeka, teacher competencies in higher education (organized by the Faculty for its teaching staff), additional English language courses for teaching and non-teaching staff, workshops and seminars on achievement of learning outcomes in study programs and online learning (Agency for Science and Higher Education) (Appendix 3.8.1. – English language courses for teaching and non-teaching staff). Detailed information about in-service training programs can be found in Section 4.3. The higher education institution provides support to teachers in their professional development.

Procedures for resolving complaints are stipulated by the University of Rijeka Study Regulations and the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka. The student has the right to submit a written complaint to the Dean or the head of the department within 24 hours after the announcement of exam results. According to the Ordinance on Internal Organization and Workplaces at the Faculty, this matter is placed under the jurisdiction of the vice dean for the relevant study. If the complaint is considered well-founded, a three-member committee shall be convened within 24 hours of receiving the complaint. The teacher who gave the student the grade at issue cannot be chairman of the committee. The written exam or the written part of the exam is not re-taken but is only re-evaluated by the committee. If the exam was oral or consisted of an oral part, the vice dean sets the date of the exam, which should be held as early as possible, and no later than three days after the complaint. The committee decides by majority vote.

Furthermore, in addition to formal ways of making complaints, students can always write a written complaint, but it must be reasoned and signed. A signed appeal/complaint is also any such document signed by the official student representative of a study year or the appointed student ombudsman of our Faculty. At the University level, there is also the University student ombudsman, who represents the interests of students from all University constituents.

In addition to the option of filing a complaint about a teacher or the teaching process, students can get acquainted with behaviors that are considered inappropriate in fulfilling their student obligations (example: copying exams, copying seminar papers, copying presentations, copying projects, and plagiarizing in general) and the consequences of such behaviors (Ordinance on Student Disciplinary Responsibilities of the University of Rijeka, Code of Ethics for Students of the Faculty of Medicine in Rijeka and Code of Ethics for Students of the University of Rijeka and its Appendix).

In the case students have motor or other disabilities, they are allowed individual adjustments that include the duration of the examination, taking oral instead of written exams, and the like.

3.9. Higher education institution issues a diploma and diploma supplement in accordance with the relevant regulations

Article 84 of the Act on Scientific Activity and Higher Education stipulates the issuance of a diploma confirming that a student has completed a certain study and acquired the right to an academic title and a certain degree or a certain professional title. In addition to the diploma, the

student is issued a diploma supplement in Croatian and English, listing the exams passed and grades received and containing other necessary information regarding the attained qualification. The content of the diploma and diploma supplement is prescribed by the Ordinance on the Content of Higher Education Diplomas and Diploma Supplements, based on which the Ordinance on the Form of Diploma and Content and Form of Certificate or Attestation of the University of Rijeka is harmonized. The Faculty issues diplomas and diploma supplements in accordance with these regulations. Until the end of 2019, we used the ISVUPatch system to generate diploma supplements. From 2020, the University made available to the Faculty the use of the ISVURi system for the same purpose.
Examples of issued certificates/diplomas and diploma supplements for each study program can be found in Appendices 3.9. (Appendix 3.9.1., Appendix 3.9.2., Appendix 3.9.3., Appendix 3.9.4., Appendix 3.9.5. and Appendix 3.9.6.).

3.10. Higher education institution monitors the employability of alumni

The Faculty analyzes the employability of graduates based on data on the number of graduates in the past period and the data from the Croatian Employment Service (CES) on the number of unemployed medical doctors, bachelors of environmental and public health, and masters of environmental and public health. The University of Rijeka has a Career Office of the University Counseling Center, which provides services that enable students to get acquainted with various opportunities for professional development. It is important to emphasize that, in accordance with the CES data for the period 2018-2020 (Table 3.7. in the analytic supplement), the number of unemployed graduate medical doctors is almost zero. The enrollment quotas for medical students are harmonized with the social and labor market needs and the Faculty's resources. Such good employability of alumni medical doctors can be seen in the data on the ratio of the total number of alumni of the Faculty and the total number of unemployed alumni of the Faculty in the observed period (Figure 3.10.1.).

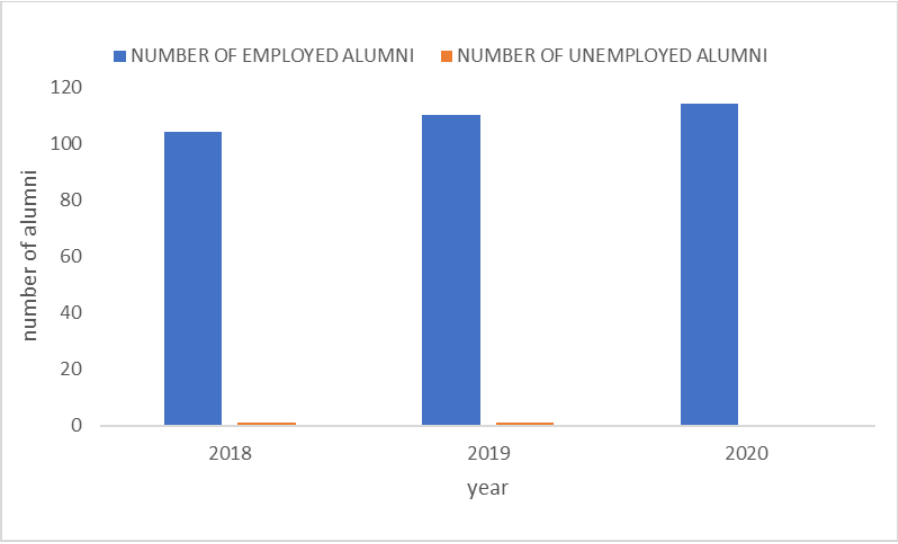


Figure 3.10.1. Ratio of the total number of alumni of the Faculty and the total number of unemployed alumni of the Faculty at the Integrated undergraduate and graduate university study of Medicine in the last three calendar years (2018, 2019, and 2020).

It should be noted that the Faculty's study programs, in addition to candidates from the Primorje-Gorski Kotar County, are enrolled by a large number of candidates from other parts of Croatia. In this way, the Faculty contributes to the education of medical doctors and bachelors and masters of environmental and public health in the labor market of the entire Republic of Croatia, not just the Primorje-Gorski Kotar County. The system of enrollment in higher education institutions through the Become-a-student application has contributed to great student mobility, which is why residence is no longer a crucial precondition for future students when choosing the higher education institution they want to enroll in. For example, in the academic year 2020-2021, the study of Medicine was enrolled by 31 students from the City of Zagreb, representing 23.7% of first-year students of this study. In the academic year 2020-2021, the Undergraduate study of Environmental and Public Health was enrolled by six students from Istria County, representing 21.4% of first-year students of that study. The Faculty regularly publishes all information relevant to graduate students on its websites and social networks. For example, within the Faculty's Facebook page, there is a special *Jobs and careers* section, where students and alumni are informed about calls for applications and other opportunities for employment and internships. The Faculty has also launched its LinkedIn page to connect more intensively with our alumni and inform them about calls for applications for continuation of studies in lifelong learning programs and study programs of the Faculty, as well as calls for applications for vacancies, scholarships, internships, and the like.

During the study, we practice several ways of bringing the student closer to the world of professional work through: clinical problem-solving cases on some courses, guest lectures by experts from hospitals and other medical faculties, professional practice in or outside the place of study, participation in scientific and professional meetings organized by/at the Faculty, involvement in projects of teachers who are employed at the Clinical Hospital Center and the Faculty of Medicine, and the preparation of bachelor's and master's theses including research in preclinical and clinical departments. It is often the case their teachers/mentors are former students of the Faculty.

Also, there are many experiences of employing students after a completed professional practice or defended master's thesis. Employers usually turn to the Faculty and our teachers in search of quality staff. On the other hand, there is constant communication with employers from whom we receive feedback on their (dis)satisfaction with the competencies of our former students .

The employability of bachelors of environmental and public health cannot be described clearly because more than 90% of them enroll in graduate studies (Appendix 3.10.1.). Although the data from the CES have shown that the number of unemployed masters of environmental and public health is growing, we cannot fully agree with that. It should be emphasized that in the analyzed five-year period, graduate students were not admitted for internship (Appendix 3.10.2. – Internship). However, in the last two years, due to the COVID-19 pandemic, the number of employed masters of environmental and public health is increasing (Appendix 3.10.2.).

At the Croatian Employment Service's webpage My employability one can calculate the employment probability within 12 months of the inquiry and obtain the following results for a 24-year-old person without work experience who enters the labor market directly after completing

education in the field of healthcare, who is without children and does not have any basis for special status (veterans, persons with disabilities, etc.):

- "Bachelor of Environmental and Public Health"
  Men – the employment probability in Primorje-Gorski Kotar County is 74.85%; at the level of the Republic of Croatia, it is 51%
  Women – the employment probability in Primorje-Gorski Kotar County is 75.42%; at the level of the Republic of Croatia, it is 51%
- "Master of Environmental and Public Health"
  Men – the employment probability in Primorje-Gorski Kotar County is 85.93%; at the level of the Republic of Croatia, it is 51%
  Women – the employment probability in Primorje-Gorski Kotar County is 86.47%; at the level of the Republic of Croatia, it is 51%.
  * Terms in quotation marks are taken from the menu on the CES's website.

Without going into the terminology, methodology of calculation, up-to-dateness and accuracy of data and search results on the CES's official website, the data mentioned above could indicate that the employment perspective within 12 months after graduation, especially after graduate studies, is very good. The Faculty is aware of the importance of monitoring the employability of alumni and believes that one of the ways to do that is to stay in touch with our former students. Our current communication with alumni, which takes place through the Croatian Association of Environmental and Public Health Professionals (HUSI), indicates a high level of employment (Appendix 3.10.3.).

The higher education institution provides support to students in terms of planning future careers by connecting with alumni, which enables the best insight into employment opportunities after graduation. Among other things, alumni participate in activities during the Faculty Days ceremony. The Faculty maintains close cooperation with many employers (teaching and non-teaching bases) and receives feedback from the heads of these institutions on the employment of Faculty's alumni and satisfaction with employees (Appendix 3.10.4. – Feedback from ALUMNI).

IV. TEACHING AND INSTITUTIONAL CAPACITIES (ESG 1.5., ESG 1.6.)

4.1. Higher education institution provides adequate teaching staff capacities

As of December 31, 2020, the Faculty has 365 employees participating in the teaching process, of which 60 hold the scientific-teaching rank of full professor with tenure, 32 hold the scientific-teaching rank of full professor, 73 hold the scientific-teaching rank of associate professor, 91 hold the scientific-teaching rank of assistant professor, 31 hold the associate rank of postdoctoral researcher, 75 hold the associate rank of teaching assistant, 3 hold the teaching rank of senior lecturer, 1 holds the teaching rank of lecturer. Considering the Faculty's primary focus, which is the scientific field of biomedicine and health, it is important to mention the cumulative employment relationship specific to higher education institutions related to the field of health. Namely, the Health Care Act stipulates in Article 126 that teachers and persons holding associate ranks – health professionals teaching in healthcare institutions for the needs of higher education institutions related to the field of health – may simultaneously establish an employment relationship with one healthcare institution and one, exceptionally two, higher education institutions related to the field of health, thus performing the job part-time in the healthcare institution and part-time in the higher education institution. Accordingly, our Faculty has 252 part-time employees, i.e., 69.42% of employees holding the scientific-teaching rank are in cumulative employment (Table 4.1.a in the analytic supplement). In the observed period, 16 teachers terminated their employment, 13 teachers were employed with a permanent contract, i.e., promoted to the scientific-teaching rank of assistant professor, and 19 associates were employed for the teaching assistant rank (Table 4.2 in the analytic supplement).

As presented in Table 4.3. in the analytic supplement, the majority of teachers and associates were selected in the field of biomedicine and health, basic medical science, and clinical medical sciences, whereas 21 teachers and associates were selected in the field of public health and health care, which corresponds to the scientific area and field of study programs conducted at the Faculty. In order to ensure high-quality teaching staff and interdisciplinary approach required for individual courses in the study programs of the Faculty, the Faculty also employs teachers from other scientific fields: humanities – three teachers from the scientific branch of philosophy and one teacher from the scientific branch of philology; social sciences – one teacher from the scientific branch of educational sciences; natural sciences – two teachers from the scientific branch of physics and two from the scientific branch of chemistry; biotechnological sciences – one teacher from the scientific branch of food technology; technical sciences – one teacher from the scientific branch of mechanical engineering.
For each academic year, the Faculty meticulously plans future employments and promotion of teachers (Appendix 4.1.1.) and prepares the plan for employment of external associates (Appendix 4.1.2.). To ensure uninterrupted teaching in integrated undergraduate and graduate studies, undergraduate studies, graduate studies, and postgraduate university (doctoral and specialist) studies, the Faculty has employed 126 external associates in scientific-teaching ranks. Specifically, we employed 8 full professors with tenure, 14 full professors, 13 associate professors, 32 assistant professors, 10 postdoctoral researchers, and 49 teaching assistants. The ratio of the number of employed external associates compared with the number of permanently employed scientific-teaching staff at the Faculty is 3:1; therefore, it can be concluded that the ratio is

certainly more than satisfactory. Also, it should be emphasized that the increased employment of external associates is not a reflection of the Faculty's faulty employment policy but a reflection of state policy in limiting new job vacancies despite the justification of launching new study programs. The increase in the number of students per teacher did not affect the quality of work with students.

Based on all the above and Table 4.3. in the analytic supplement, it is clear that the Faculty ensures the coverage of teaching with its own staff for each study program, which provides the quality and continuity of teaching and learning. As presented in Table 4.4. in the analytic supplement, teachers have achieved a high level of scientific and professional productivity, which will be discussed in more detail in Section 5. Thus, we can conclude that they regularly meet the criteria for scientific and teaching progress defined by the Act on Scientific Activity and Higher Education, Ordinance on Conditions for Appointment to Scientific Ranks, and other general acts. Table 4.3. in the analytic supplement shows that, given their scientific-research profile, teachers are qualified to teach in the courses they coordinate. Teachers and associates apply within their teaching process the results of their scientific research work and professional achievements and the achievements from scientific projects, thus ensuring systematic update and improvement of their course and teaching. In this context, it should be mentioned that the Plans for Promotion and Employment of Teachers and Associates (Appendix 4.1.1.) are thoroughly and purposefully drafted and adopted at the Faculty Council sessions and then confirmed at the University Senate sessions. Such plans are made once a year, and their amendments are adopted following the same procedure, depending on the Faculty's needs for each study program and available job vacancies approved by the Ministry of Science and Education.

In order to achieve and maintain the highest possible level of quality of study programs, the Faculty pays special attention to meeting the requirements of Article 6, paragraph 3 of the Ordinance on the Content of Licence and Conditions for Issuing Licence for Performing Higher Education Activity, Delivering a Study Programme and Re-accreditation of Higher Education Institutions. In accordance with this document, the ratio between the total number of permanently employed teachers and the total number of enrolled students must not exceed 1:30. At the Faculty of Medicine in Rijeka, the optimal ratio of students per one teacher is determined by the final report of the ASHE from 2015 (Appendix 4.1.3). In the year of the evaluation, the ratio of students per one teacher (including associates and teaching ranks) is 1:3.35, which confirms the final report of the ASHE from 2015 that all study programs employ a sufficient number of qualified teachers to ensure quality and continuity of teaching and learning. This trend has been maintained in the previous five-year period, and the Faculty's plan is to continuously increase the capacity of both teaching staff and students. The Faculty has received a licence from the Ministry of Science and Education to conduct two new study programs starting from the academic year 2021-2022 – the Integrated undergraduate and graduate university study of Pharmacy and the Undergraduate university study of Medical Laboratory Diagnostics. With the introduction of these two study programs, the number of students at the Faculty has increased by 59 (29 students enrolled in the study of Medical Laboratory Diagnostics and 30 students enrolled in the study of Pharmacy), which consequently led to new employment of teaching staff.

In addition to the above, in order for the quality of teaching to be at a high level, the Faculty pays

special attention to monitoring and planning the teaching workload of teachers and associates and distributing it evenly in accordance with laws and regulations, general acts, and especially following the Collective Agreement for Science and Higher Education. The head of each department is responsible for the teaching workload of their teachers by carefully planning the introduction of new courses at the department within new or planned study programs, depending on current or planned staff capacities. It should be noted that new employments depend on the teaching workload of each department, the development strategies for certain fields of biomedicine and health, and the Faculty's strategic determinants. Based on all the above, the decision on the need to employ new associates is made by the Faculty Council in accordance with the opinion of the committees established for this purpose.

Article 67 of the Collective Agreement for Science and Higher Education from 2019 stipulates the concept of the standard distribution of working time. The full-time equivalent for scientific-teaching positions is divided into 45% of the teaching workload and 45% of the scientific-research workload. For teaching assistants, the full-time equivalent is divided into 22.5% of teaching workload and 67.5% of scientific-research workload; for postdoctoral researchers, the full-time equivalent is divided into 33.8% of teaching workload and 56.2% of scientific-research workload; for lecturers, the full-time equivalent is divided into 67.5% of teaching workload and 22.5% of research and professional workload. Institutional contribution and administrative tasks account for 10% of the full-time equivalent for all teaching staff. If there is a need for greater involvement of a teacher to maintain or improve the quality of teaching, and there is no possibility of new job openings, the Faculty applies a flexible distribution of working hours from Articles 70 and 71 of the Collective Agreement. This achieves a balanced ratio of the teaching workload at the Faculty, in accordance with all laws and regulations and the Collective Agreement.

4.2. Employment, promotion and re-election of teachers are based on objective and transparent procedures that include the evaluation of excellence

Starting from the premise that the Faculty's mission is based on profiling the Faculty as a scientific and educational institution that provides high-quality education, undertakes purposeful cognitive and practically valuable scientific research efforts in biomedicine and health, and that the Faculty's public function is aimed at recognizing science and profession in the field of biomedicine and health, the Faculty pays special attention to employment, promotion, and re-election of teachers, which is based on objective and transparent procedures that include the evaluation of excellence.

All employments and promotions at the Faculty are carried out in accordance with the annual plan of employment and promotions adopted by the Faculty Council for the following calendar year (Section 4.1.). The employment procedure is initiated after determining the need for a new employee and obtaining the University's consent based on a written explanation. Criteria for determining this are the planned teaching workload and compliance with the Faculty's strategic development plan. General requirements for employment of teachers are determined by the Act on Scientific Activity and Higher Education, the conditions for election into scientific ranks are

determined by the National Council for Science, Higher Education and Technological Development in the Ordinance on Conditions and Procedure for Appointment to Ranks and Corresponding Positions, and the minimum requirements in terms of educational, teaching and professional work for election into the scientific-teaching and teaching rank are prescribed by the Croatian Rectors' Conference. The procedure for election into scientific-teaching rank and appropriate job position is carried out by the Faculty in accordance with the provisions of the Act, the Statute of the University, the Statute of the Faculty and the Faculty's Working Regulations.
For each election procedure, the Faculty Council decides to announce a public call for applications and appoints an expert committee for the execution of the election into a scientific, scientific-teaching, teaching, or professional rank.

Each call for applications is published on the Faculty's website, in the Official Gazette (Official Gazette of the Republic of Croatia), in daily newspapers, and on the official website for job vacancies for the European Research Area (EURAXESS). The expert committee appointed for the election consists of a minimum of three members. All committee members have the same or higher rank than the one for which the call for applications is announced. For the election of candidates to scientific and scientific-teaching ranks, at least two members of the expert committee are from the same scientific field, and at least one member must be from the same scientific field for which the candidate is elected, all in accordance with the Ordinance on Procedure for Appointment to Scientific-Teaching, Artistic-Teaching, Scientific, Teaching and Associate Ranks and Corresponding Positions at the University of Rijeka.

At least one member is external (not an employee of the Faculty). The Faculty Committee for the election of teachers and associates proposes to the Faculty Council the composition of the expert committee, and the Faculty Council decides on the appointment of the expert committee. An integral part of the expert committee's report is an overview of the scientific, teaching and professional activities of candidates who apply for the call for applications, based on which the expert committee gives its opinion.
The expert committee's opinion is given for discussion and adoption to the Faculty Council. An example of the entire documentation related to the call for applications for election into a rank is available in Appendix 4.2.1.
Plans for the promotion of teachers are approved by the University Senate. Plans for the promotion of teachers take into account the retirement of current teachers and the need to engage teachers in accordance with the study program and syllabi of all studies at the Faculty and for the purpose of permanent rejuvenation of teaching staff (Section 4.1.).

The Faculty selects the best candidates for each position in the procedure initiated by a public call for applications. When selecting associates, special attention is paid to the candidate's average grades achieved during studies and grades obtained on courses that are directly related to the scientific field of the department for which the candidate is selected. Also, the candidate selection process includes an overview of the candidate's previously published scientific and professional papers, presentations, work experience, and awards and achievements in the field of their professional activity obtained during and after their studies. The expert committee usually assesses candidate's eloquence and work motivation. These elements are evaluated in detail by

the expert committee in its report submitted to the Faculty Council, which then decides on the selection of candidates. The work of associates is especially evaluated. For this purpose, a formal procedure for evaluating the work of teaching assistants and postdoctoral researchers has been established, which is prescribed by the Ordinance on Evaluation of Teaching Assistants, Postdoctoral Researchers and Mentors of the University and Article 45a of the Faculty Statute.

Requirements and procedures for employment, promotion, and re-election of teachers are stipulated by the Act on Scientific Activity and Higher Education. Faculty teachers are elected into scientific ranks and scientific-teaching positions. The election of a teacher into a scientific rank is a precondition for election into a scientific-teaching position. Scientific ranks in the Republic of Croatia and the preconditions for election into these ranks are prescribed by Article 32 of the Act on Scientific Activity and Higher Education and Articles 1, 2, 17 and 19 of the Ordinance on Conditions for Appointment to Scientific Ranks of the Faculty. These documents prescribe quantitative and qualitative criteria that must be taken into account when electing employees of the Faculty into scientific ranks. The procedure for election into scientific ranks is prescribed by Articles 33 to 36 of the Act on Scientific Activity and Higher Education. Articles 81 and 82 of the Statute of the University and Article 41 of the Statute of the Faculty prescribe the preconditions and procedure for election into scientific ranks in accordance with the Act. The decision on election into a scientific rank is made by the Faculty Council based on the expert committee's report and confirmed by the Scientific Field Committee for the fields of basic medical sciences, clinical medical sciences, public health and health care, dental medicine, and pharmacy.

Scientific-teaching, teaching, and associate positions and preconditions for election into these ranks are prescribed by Articles 91, 93, 95, 97, and 101 of the Act on Scientific Activity and Higher Education and the Decision on Necessary Requirements for Evaluation of Teaching and Scientific-Professional Activity Within the Procedure for Election into Scientific-Teaching Ranks. Articles 81, 83 to 85 of the Statute of the University and Articles 40 to 46 of the Statute of the Faculty regulate the preconditions and procedure for election into scientific ranks in accordance with the Act, while the procedure for election to these ranks is prescribed in more detail by the Ordinance on Procedure for Appointment to Scientific-Teaching, Artistic-Teaching, Scientific, Teaching and Associate Ranks and Corresponding Positions at the University of Rijeka. The procedure for election to scientific-teaching, teaching and associate ranks is initiated by publishing a call for applications on the Faculty's website, in the Official Gazette of the Republic of Croatia, in daily newspapers, and on the official website for job vacancies for the European Research Area (EURAXESS). The call for applications must be open for at least 30 days. The decision on election to scientific-teaching, teaching, and associate positions is made by the Faculty Council based on the report of the expert committee. The election to the scientific-teaching rank of full professor and full professor tenure is confirmed by the University Senate. An example of the entire documentation related to the call for applications for election into a full professor rank is available in Appendix 4.2.1.

The election, appointment, and evaluation of teachers take into account their activities and the results achieved in teaching, scientific and professional work. The election of teachers into scientific ranks takes into account the quality and number of their published scientific papers and

data relating specifically to invited lectures and presentations at international meetings and conferences, their citation rates, participation in seminars at foreign scientific institutions, managing national and international projects, international mobility, review of scientific papers and scientific projects, participation in bodies and committees related to scientific activity, mentoring of doctoral students, authorship, and editorship of books, and membership in the editorial boards of scientific journals. For the election into the scientific-teaching rank, the teacher is evaluated according to general and special conditions. The general condition for the election into a scientific-teaching rank of assistant professor is a positively evaluated inaugural lecture in front of teachers and students. The election of a teacher into a higher rank takes into account the teaching held at a higher education institution in the prescribed scope and the positively evaluated results of the institutional research on the quality of teaching or the positively evaluated results of the student survey conducted by the higher education institution. The Faculty's Ordinance on Conditions and Procedure for Appointment to Ranks and Corresponding Positions prescribes additional conditions of the Faculty, which applied to elections into scientific-teaching ranks until December 16, 2017, after which the Decision on Necessary Requirements for Evaluation of Teaching and Scientific-Professional Activity Within the Procedure for Election into Scientific-Teaching Ranks of the Rectors' Conference and the National Council for Science, Higher Education and Technological Development entered into force.

Special conditions are the criteria of teaching contribution, the criteria of scientific-professional contribution, and the criteria of the institutional contribution that the teacher must meet. A teacher who does not meet the conditions for appointment to a higher rank is re-elected to the same rank after a period of four years and nine months. The procedure for the re-election of teachers to the same rank is prescribed by the Ordinance on Procedure for Re-Appointment to Scientific-Teaching, Artistic-Teaching, Scientific, Teaching and Associate Positions at the University of Rijeka. In the period from October 1, 2016, to September 30, 2021, due to the lack of complexity coefficients required for promotion into higher scientific-teaching ranks, although in both cases teachers met the conditions for the promotion, 78 re-elections were conducted to the same scientific-teaching rank, of which two re-elections relate to the study of Dental Medicine, which is no longer conducted at the Faculty. Appendix 4.2.2. presents complete documentation of a re-election procedure.

Article 95, paragraph 8 of the Act on Scientific Activity and Higher Education and Article 6 of the Ordinance on Procedure for Appointment to Scientific-Teaching, Artistic-Teaching, Scientific, Teaching and Associate Ranks and Corresponding Positions at the University of Rijeka prescribe preconditions for promotion before the expiry of the regular promotion deadlines. Such so-called premature promotion is allowed if it is established that the employee meets the criteria for appointment to a higher scientific-teaching position in relation to the one to be elected. This is specially decided by the expert council of the faculty and with the consent of employees, but not before three years expire from their previous election to a lower-ranking position. The main goal of this possibility is to encourage teachers to achieve teaching and scientific excellence. In doing so, special consideration is given to whether there is an available complexity coefficient in the Faculty's advancement and promotion plan and whether a teacher who advances early has published scientific papers in prestigious international and national journals, has coordinated

competitive international or national scientific projects, has published textbooks and other teaching materials, has mentored doctoral students or bachelor's and master's theses, has engaged in projects to popularize science, etc. Unfortunately, this type of promotion is rarely used because promotions are planned in advance to maintain the total number of complexity coefficients at the Faculty.

Following the topic of awarding teaching excellence, the University of Rijeka adopted the Criteria for awarding teaching excellence, which were defined by the Committee for Defining Criteria for Awarding Teaching Excellence and approved by the decision of the Senate of the University of Rijeka (CLASS. NO.: 003-01/21-03/02; REG. NO.: 2170-57-01-21-52 dated March 2, 2021). In accordance with these criteria, every academic year, the University conducts the procedure for presenting the Teaching Excellence Award to employees of constituents who are appointed in the scientific-teaching or artistic-teaching rank of assistant professor or higher and to one employee in a teaching or associate rank. At the University's invitation, each constituent, including the Faculty of Medicine in Rijeka, appoints a committee in charge of reviewing the received applications, in accordance with the University of Rijeka's criteria for awarding teaching excellence, and submitting a proposal to the University. In accordance with the submitted proposals from the constituents, the University evaluates and awards teaching excellence. Appendix 4.2.3. presents an example of documentation for evaluating and awarding teaching excellence.

Certain retired professors are awarded the honorary title of professor emeritus for their achieved international reputation and distinguished academic contributions to the Faculty. The prerequisites and procedure for appointing a professor emeritus are prescribed by Article 96 of the Act on Scientific Activity and Higher Education, Articles 87 to 90 of the Statute of the University and Article 48 of the Statute of the Faculty.

In addition to teaching excellence, the University of Rijeka (University of Rijeka Foundation) presents annual awards for scientific excellence. Such a system of election and promotion of teachers, based on objective legal and statutory assumptions and detailed internal acts of the University and the Faculty, with responsible compliance with plans for promotion and taking into account teaching, scientific and professional achievements of teachers, strategic goals and prerequisites for further development of the Faculty are fully achieved, within the given budgetary framework, over which the Faculty has no influence.

4.3 Higher education institution provides support to teachers in their professional development

The Faculty provides support to teachers in their professional development, both in promoting their scientific excellence and improving their teaching competencies. For this purpose, the Faculty encourages teachers and associates to attend in-service training to strengthen teaching, scientific and professional competencies at and outside the University and organizes its own training programs. In the period covered by the self-evaluation, Faculty teachers participated in

numerous workshops aimed at strengthening specific competencies, which were related to understanding and application of the CROQF, development of learning outcomes, student-directed teaching methods, knowledge assessment methods harmonized with learning outcomes, remote teaching, development of e-courses, collaborative assessment, teaching in English, etc. In case there is a need to strengthen the capacity of a larger number of teachers, the Faculty independently organizes workshops, which are held by eminent experts. Furthermore, to ensure continuous professional education in terms of teaching methodology and pedagogy and in-service training of higher education teachers in terms of acquiring or improving teacher competencies, especially in the field of medical education and traditional and advanced teaching methods and technologies, the Center for Improvement of Teacher Competencies and Communication Skills was established at the Faculty of Medicine in Rijeka in 2017 (hereinafter: the Center) (Section 1.1.).

The Center actively promotes cooperation with experts in medical education from Croatia (Croatian Association for Medical Education) and with related centers abroad. The Center encourages teachers, especially young ones, to inclusion and orientation towards scientific research in the field of medical education, the production of PhD theses, and scientific profiling in the field of medicine in order to ensure the foundations for scientific and professional development. The Center's activities are focused on conducting peer reviews with the aim of improving the quality of the teaching process based on feedback from other teachers; the basics of working in the Merlin e-learning platform for remote teaching with the aim of improving teacher competencies and communication skills in teaching aided by information communication technology, especially in the virtual environment; acquisition and improvement of teacher competencies for medical education (2017-2019; in cooperation with the Croatian Association for Medical Education, and at the initiative of the Center, the course was accredited called Acquisition and Improvement of Teaching Competencies for Medical Education, which was attended by teachers and associates of the Faculty of Medicine in Rijeka); practical science for the health profession (lifelong learning program); and preparatory English language course for teachers. The Student Section of the Center for Improvement of Teacher Competencies and Communication Skills also operates within the Center. The Faculty's intranet page (SharePoint Portal) contains a webpage *E-learning guide,* with published links to video lectures and special instructions for working in certain e-learning tools (e.g., working in the Merlin system, creating tests in Merlin, working in MS Teams). There are currently many continuing education courses available with e-learning tools at Coursera. The Department of Medical Informatics continuously provides support for work in the Merlin system. Appendix 4.3.1. presents examples of reports from workshops held at the Center.

It should be noted that the Faculty, in accordance with its capabilities, strongly supports the continuous training of teachers and employees of professional administrative services with the aim of improving the quality of their work.

The Faculty continuously evaluates the work of its teachers through student evaluation, which is carried out through the ISVU system or student surveys. This form of evaluation assesses methods of teaching and evaluation of student knowledge, the attitude of teachers towards students, and

their work motivation. The results of student evaluations are analyzed separately by the Quality Assurance and Improvement Committee (Section 1.1.). The Decision on Measures to Improve the Efficiency of Studying at the University of Rijeka provides the constituents with guidelines on how to improve the performance of the course and the entire study program (Appendix 4.3.2.).

Each year, the University presents awards for best teacher and associate from each faculty based on the prescribed criteria, including student evaluation results, cooperation with students in scientific work, improvement of teaching competencies, etc. The University sends an invitation with the Criteria for Teaching Excellence to the deans/heads of constituents for presenting the award for teaching excellence in each academic year. After the constituent submits proposals to the University by applying the Criteria for Teaching Excellence, the University presents awards to best teachers and associates once a year (Section 4.2.).

Furthermore, it should be mentioned that the Faculty awards its young scientists for scientific excellence. According to the Ordinance on Awarding Best Young Scientists, the Faculty of Medicine in Rijeka has been awarding young scientists for many years based on their achievements accomplished annually (Section 5.1.).

The Faculty also participates in financing scientific activities at the Faculty, which is why the Researchers Support Fund has been established. The Fund's resources are provided from the Faculty's own resources, donations from natural and legal persons, and other sources. The Dean of the Faculty announces the call for applications for awarding grants to young scientists at a rate that depends on the available funds, all in accordance with the Ordinance on the Use of Funds from the Researchers Support Fund (Section 5.2.). Appendix 4.3.3. presents a Decision on award of grants for projects submitted to the call for applications of the Researchers Support Fund.

Also, the Faculty takes care of encouraging its teachers' scientific and professional activities. With this aim, we are working on preparing regulations on awarding teachers and scientists. At the time of writing the Self-Evaluation Report, the proposal of the Ordinance was being finalized. It is expected that the document will be proposed for voting to the members of the Council at one of the following Faculty Council sessions.

Also, in order to motivate teachers to apply for research, scientific and professional projects, the Faculty organizes motivational meetings, provides teachers with professional support through employees who are in charge of international relations and projects, and encourages them to attend workshops and seminars on project application. The Faculty encourages teachers to participate in mobility programs in order to improve their teaching and scientific competencies. Erasmus+ Info Days are regularly organized to encourage outgoing teacher mobility. In the last five academic years, Faculty teachers have achieved a total of 25 outgoing mobilities lasting less than three months. Out of that, 1 teacher mobility referred to teaching activities and 24 teacher mobilities referred to professional activities (Table 4.5. in the analytic supplement). These mobilities were realized within the Erasmus+ program. Furthermore, teachers and associates of the Faculty held lectures at numerous foreign universities (Section 5.3.).

To enhance teaching and research, the Faculty procures a range of computer tools and packages,

journal databases, etc. (Sections 4.4. and 4.5.).

Furthermore, the Faculty has adopted the Ordinance on Sabbatical Leave, which regulates the rights and obligations and the manner of using the sabbatical leave for the employees of the Faculty. In the observed period, seven teachers used sabbatical leave – one teacher in the academic year 2015-2016, two teachers in the academic year 2018-2019, two teachers in the academic year 2019-2020, and two teachers in the academic year 2020-2021 (Appendix 4.3.4).

4.4. Space, equipment and the entire infrastructure (laboratories, IT Services, teaching sites, etc.) are suitable for the implementation of study programs and ensure the achievement of expected learning outcomes and the realization of scientific/artistic and professional activities

The Faculty plans and improves infrastructure development in accordance with the set strategic goals, striving to increase the quality and efficiency of legal education, create an open and attractive environment for studying in study programs conducted at the Faculty, and make optimal use of available funds for education and socially useful scientific research.

The Faculty operates in the building that has built its historical role as a complex of the Branchetta brothers Foundation, and which has been expanded by adding one floor to the main building and additional buildings within the complex. The premises of the Faculty of Medicine in Rijeka consist of the main building of the Faculty, the Deanery building, the building of the Department of Molecular Medicine and Biotechnology, the facility for housing experimental animals (Laboratory of Mouse Engineering and Breeding Facility – LAMRI), and the new building of the Center for Proteomics built in 2003 and upgraded in 2015. Furthermore, the Faculty is the unregistered owner of the building of the Department of Forensic Medicine at the address Vukovarska 11 (which houses the Department of Forensic Medicine and Criminalistics and the Department of Food Technology and Quality Control) and the building of the Department of Pathology at the address Cambierieva 17 (where the Department for General Pathology and Pathological Anatomy is located). The mentioned buildings are currently registered in the land registry of the Municipal Court in Rijeka as the property of the Clinical Hospital Center Rijeka. The process of acquiring the right of ownership over these two buildings is in progress, and the consent of the Ministry of Health of the Republic of Croatia is awaited.

Premises intended for teaching cover an area of 3,673 m^2. Ten highly equipped lecture rooms are used for teaching at the Faculty: lecture room 1 (127 m^2 area with 106 seats), lecture room 2 (170 m^2 area with 162 seats), informatics room 3 (35.5 m^2 area with 16 computers), lecture room 4 (48m^2 area with 53 seats), lecture room 5 (48 m^2 area with 54 seats), lecture room 6 (48 m^2 area with 50 seats), lecture room 7 (48 m^2 area with 53 seats), lecture room 8 (44 m^2 area with 56 seats), informatics room 9 (62.5 m^2 area with 22 computers), and lecture hall (90 m^2 area with 70 seats). The building of the Department of Pathology has a lecture room with 100 seats, equipped with computers, projectors, and a screen. We also have three lecture rooms in our teaching bases (CHC 1 – 70 seats, CHC 2 – 85 seats, and Clinic for Orthopedics Lovran – 40 seats). The building of the Department of General Pathology and Pathological Anatomy has 1336.59 m^2 of adequately equipped space available for teaching, and the building of the Department of Forensic Medicine

and Criminalistics offers 440.37 m^2 of space available for teaching. Students also have at their disposal 16 teaching laboratories/rooms for practical exercises in a 798.84 m^2 area equipped with 14 computers and 58 scientific laboratories in a 1039 m^2 area equipped with 56 computers (Table 4.8 in the analytic supplement). The equipment of the lecture rooms is at a satisfactory level, as they are all equipped with screens, projectors, wireless internet (Eduroam) and computers. Lecture rooms 1 and 9 are also equipped with a video conferencing system and are often used not only for teaching but also for scientific and professional meetings/conferences and remote teaching. Due to the pandemic during 2021, five rooms for practical exercises (Department of Anatomy, Department of Pharmacology, Department of Microbiology, Department of Physiology, Department of Medical Chemistry, Biochemistry and Clinical Chemistry) and the library of the Department of Social Medicine and Epidemiology have been equipped with video conferencing systems for remote teaching. Consultations and oral examinations are usually held in teacher offices. If we take into account the enrollment quota (number of enrolled students – 1,231) and the presented data on the total area of teaching space (3,673 m^2), it can be seen that the existing spatial capacities for teaching and the level of their functionality and equipment are complementary and meet the quality requirements for organized classes, which means that the available space per student is 2.98 m2.

The Faculty has 87 teacher offices with an average area of 11.31 m^2. One employee usually uses each teacher office. The offices are equipped with office furniture and computer equipment necessary for work. Faculty students have access to a well-equipped Library, which employs three qualified professionals: two graduate librarians and one senior librarian. The Library also employs a proofreader for English and Croatian languages (Section 4.5.).

In this context, it is worth emphasizing that classes at clinical departments are held in the teaching bases of the Faculty, i.e., healthcare institutions whose teaching sites are also properly equipped with all necessary equipment and tools for quality teaching practical classes.
Furthermore, in accordance with the University of Rijeka Strategic Development Plan 2021-2025 and the basic integration policy of the University of Rijeka, investment is encouraged in integrative elements of the University of Rijeka Campus infrastructure as a space intended for all constituents. Therefore, the building of the Faculty of Informatics and Digital Technologies on the University Campus (at the address Radmila Matejčić 2) contains laboratories used by the Skills Lab (O-S29, O-S30, O-S45, and O-S46, with a total area of 228.28 m^2) and (from the academic year 2021-2022) laboratories required in conducting practical classes at the Integrated undergraduate and graduate university study of Pharmacy (O-341, O-342, and O-343, with a total area of 138.59 m^2).

In accordance with its possibilities, the Faculty usually acquires computer equipment when the existing one becomes obsolete or when it is no longer possible to use it regularly due to frequent failures. The procurement plan for new equipment is drawn up according to the condition and age of the existing one, as well as organizational and personnel changes and needs, considering that the equipment meets the users' requirements. Equipment is procured exclusively by public procurement and in accordance with the annual procurement plan. The plan for the procurement of computer equipment is formed according to the employees' needs, the assessment of the IT Services, and the Faculty's financial possibilities. Part of the equipment was procured from the

Faculty's own funds, and part from the funds of scientific and professional projects of which the Faculty is the holder. In 2021, we started purchasing the service of long-term rental of laptops and desktops and central printing devices, which is a new business model that has already proven to be financially efficient in the corporate environment. Table 4.9. in the analytic supplement presents the list of capital and scientific equipment.

4.5. Library equipment and access to additional content ensure the availability of resources and library services for the needs of quality study and quality scientific and teaching activities

The Library of the Faculty of Medicine in Rijeka was founded in 1955, i.e., when the Faculty was founded. At first, it was located in the Dr. Sobol Brothers hospital, after which it relocated in 1958 to the newly renovated building of the Branchetta brothers, where it is still located today. Since its founding, the Library has focused its holdings and services on students and employees of the Faculty, but also employees of other healthcare institutions in our region. The Library continues to perform its activities for the newly established University constituents in the field of biomedicine and health: the Faculty of Health Studies (2014) and the Faculty of Dental Medicine (2020). During the academic year 2020-2021, the relations between the faculties were defined and contractually regulated, and the Library of the Clinical Hospital Center Rijeka was functionally integrated, thus creating a joint Biomedicine and Health Library.

The Library has a 224 m^2 area, with 120 m^2 of area intended for students and other users. The Library space consists of the following units: reference and issue desk, space for student group work, and a reading room with open access materials and computers. The space has been completely renovated over the past two years (Table 4.10. in the analytic supplement).

The users of the Library are:

- students, scientists, teachers and employees (Faculty of Dental Medicine, Faculty of Health Studies, Clinical Hospital Center Rijeka, Faculty of Medicine)
- members of the Alumni Club
- researchers and scientists from regional healthcare institutions.

Opening hours are Monday through Friday from 8:30 am to 8 pm.
In 2020, there were 1985 active users, about 3611 loans of printed library materials, and 6619 downloads of electronic materials from databases in the Library's subscription.

All information about the available materials (online catalog), services, and work of the Library is available on the Faculty's website (general information such as opening hours, contacts, news, the search engine for relevant databases, specific book collections, online catalog, interlibrary loan services, etc.). The Library's website also publishes additional content offered by the Library within its activities, ensuring the requirements of quality studying and quality scientific and teaching activities. First of all, this refers to the Faculty's institutional repository within the DABAR system (digital academic archive and repository), which represents a permanent digital collection

of students' bachelor's, master's, specialist, and PhD theses and teachers' scientific papers.

The Library holdings consist of:

A. printed materials (36,269 books, about 5,000 textbooks, about 19,000 printed volumes of domestic and international journals, about 5,000 items of bachelor's, master's, and PhD theses).

B. electronic materials (access to journal databases of foreign commercial publishers is provided through a national license).

The Library has an adequate number of copies of required and modern course literature at its disposal.

Subscription to the following e-sources is provided with the funds of the Faculty and other contracting institutions:

Clinical Key – contains more than 1,000 e-books and 600 journals with full texts available from Elsevier publisher, as well as numerous additional content such as clinical trials, expert consultations with videos and articles, international practice guidelines, more than 2,000,000 images, and more than 17,000 medical and surgical videos, monographs on medicines, flyers for patients, etc.

Access Medicine – provides access to 135 textbooks published by McGraw Hill with accompanying content such as more than 900 clinical cases, 1,000 videos, and 11,000 questions and answers intended for medical students and employees in the field of biomedicine and health.

Access Medicine: Case Files Collection – a collection of real-life clinical cases prepared to simulate the clinical approach and decision-making. The cases are divided by branches from the field of biomedicine and health care.

Oxford Medicine Online (OxMed) – offers access to more than 1,000 medical e-books published by Oxford University Press. The books are complemented with additional digital tools, such as videos, that facilitate learning and everyday work.

UpToDate – a database of clinical guidelines that provides answers to questions about diagnosis, treatment, and health care. The database is developed by clinical experts who regularly update the guidelines with new knowledge collected from over 200 reputable journals. The content is peer-reviewed and equipped with bibliographies.

The Faculty is included in the national infrastructure for digital repositories (DABAR), which stores students' bachelor's and master's theses and employees' scientific papers. All sources in the Faculty's digital repository are available in open access, via AAI user account, or on demand to all interested readers.

The Library acquires various library materials, i.e., books, serial publications and databases. In 2019, a total of HRK 252,566.92 was spent on the purchase of library materials. In 2020, a total of HRK 569,840.31 was spent on the purchase of library materials, of which HRK 305,768.24 was spent on books and serial publications and HRK 264,072.07 on databases. In 2021, a total of HRK 929,429.90 was spent, of which HRK 524,063.43 was spent on books and serial publications and HRK 405,366.47 on databases. In the past three calendar years (i.e., two academic years), a total of HRK 1,751,837.13 was spent on library materials.

Books and textbooks are purchased from the Faculty's funds and through exchanges, gifts, and project funds. Purchase of databases is carried out in cooperation with the Faculty's largest teaching base, Clinical Hospital Center Rijeka.
If the Library does not have any of the titles requested by users, it is possible to purchase it through interlibrary loan services in Croatian and European libraries.
In addition to lending library materials, all users also have access to library materials for student work, as well as scientific and professional research papers, bibliography generation, bibliometric analyses, support in the process of scientific publishing, and monitoring of scientific and professional production of the Faculty.

The Library organizes group and individual training for users to develop information literacy skills. The Library also participates in the publishing activities of the Faculty by administering the process of publishing and selling publications and, since recently, by offering translation and proofreading services. Members of the Committee for Publishing Activities compiled the Ordinance on Publishing Activities of the Faculty of Medicine in Rijeka and the Rules of Procedure for Publications of the Faculty of Medicine in Rijeka, which stipulate the basic determinants of publishing activities at the Faculty (especially publishers, types of Faculty publications, Faculty's criteria for publishing, competent bodies, the procedure for publications, collection, storage, and ensuring the visibility of the Faculty's publications), by respecting publishing practices in the field of biomedicine and health. The Ordinance also defines the scope of work of the Faculty's Library in the field of publishing.

The Library staff consists of three graduate experts: two graduate librarians and one senior librarian. The Library also employs a proofreader for English and Croatian.
Employees regularly attend professional training and actively participate in professional and scientific meetings. They participated in Erasmus workshops at the Norwegian University of Science and Technology in Trondheim (2017), at the Aix-Marseille University in France (2019), and in June 2022, they are planning on going to the University of Warsaw in Poland. Erasmus training is an opportunity to share experiences with colleagues from European higher education libraries.

4.6. Higher education institution rationally manages their financial resources

The Faculty's main funding sources are the state budget of the Republic of Croatia, Faculty's revenues, special-purpose revenues, grants, donations, and revenues from the sale or exchange of non-financial assets and insurance-based compensations. Faculty's own revenues include revenues from tuition fees for postgraduate specialist studies, revenues from professional health services provided by the Faculty on the market, revenues from professional projects for business entities, rental revenues, revenues from interest and foreign exchange gains, and revenues from organizing professional courses and meetings. Special-purpose revenues include tuition fees for undergraduate and graduate studies, integrated undergraduate and graduate studies, postgraduate doctoral studies, and revenues from the implemented scientific projects. Grants consist of revenues for the implementation of EU projects, revenues for the implementation of international projects, and aids from the budgets of local and regional self-government units and

other entities within the general government, including transfers between budget users of the same budget.

Donations consist of revenues from business entities and institutions intended to finance certain scientific and professional activities, purchase materials and equipment, and cover the education and training of employees. The Faculty generates revenues from the sale or exchange of non-financial assets (real estate and vehicles) and insurance-based compensations (damage coverage). The revenue structure (Table 4.11. in the analytic supplement) shows that the total revenue was HRK 112,018,741.78 in 2019 and HRK 118,462,425.12 in 2020, with the share of revenues from the state budget ranging from 71.25 % in 2019 to 61.73% in 2020.

The remaining revenues are generated from Faculty' own activities (scientific and professional projects, tuition fees for postgraduate studies, etc.) and from sources regulated by special regulations (tuition fees for full-time and part-time students, tuition fees for the study of Medicine in English, publishing activities, etc.). Revenues from the state budget are mostly used for employees' salaries and material benefits, ranging from 88.34% (2019) to 93.23% (2020). The rest of the funds from the state budget are obtained to cover part of operating costs, international cooperation, publishing magazines, etc. The comparison of revenues (Table 4.11. in the analytic supplement) and expenditures (Table 4.12. in the analytic supplement) shows financial sustainability. Long-term financial sustainability and efficiency are reflected in the monitoring of revenues and expenditures over a period of five years, which are shown in the tables Annual Realization of the Financial Plan as follows: Appendix 4.6.1. for 2016, Appendix 4.6.2. for 2017, Appendix 4.6.3. for 2018, Appendix 4.6.4. for 2019, Appendix 4.6.5. for 2020. From the data presented in Appendixes 4.6.1. to 4.6.5., it can be seen that total revenues are of similar value by years, and differences are visible in activities and sources of funding. An increase in revenue from tuition fees for Integrated undergraduate and graduate study of Medicine in English, postgraduate university specialist and doctoral studies, and from various international sources (projects) proves that the Faculty has developed awareness of its financial sustainability, which is evident from Appendixes 4.6.1. to 4.6.5. The expenditures presented from 2016 to 2020 clearly indicate that the most significant expenditures are salaries and reimbursements for employees, expenditures for services, materials, energy, and compensation of expenses to persons without employment relationship. In order to have a more accurate insight into financial operations, we requested an independent external financial audit, which covered the period until December 31, 2020 (Appendix 4.6.16.).

The Office of Accounting and Finance ensures that the Faculty regularly settles its obligations and takes all available measures to collect revenues. Decisions on financial resource management are based on internal calculations and reports that the Office of Accounting and Finance compiles for business decision-making purposes. Decisions on expenditures are made in accordance with the planned amounts and regular monitoring of cash flow, but also taking into account the sustainability, continuity, and stability of the quality of the Faculty's work and the role and reputation in the local community and further. Proper and timely maintenance (servicing) of existing resources and carefully planned procurement of modern computer equipment and computer programs enable long-term savings and sustainability. Through its regulations,

decisions, and internal procedures, the Faculty ensures transparent, efficient, and purposeful management of its financial resources: Ordinance on the Use and Distribution of Income from Performing Own Activities (Appendix 4.6.6.), Treasury Management Procedure (Appendix 4.6.7.), Invoice Circulation Procedure (Appendix 4.6.8.), Official Vehicle Usage Policy (Appendix 4.6.9.), Revenue Collection Procedure (Appendix 4.6.10.), Procedure for Contractual Obligations Management (Appendix 4.6.11.), Real Estate Management and Disposal Procedure (Appendix 4.6.12.), Ordinance on Project Application and Implementation (Appendix 4.6.13.), Protocol for Recording, Keeping and Archiving Contracts and Agreements (Appendix 4.6.14.), Instructions on Travel Orders Management (Appendix 4.6.15.). In accordance with these documents, the Faculty takes measures to collect overdue receivables (e.g., by sending reminders to debtors and initiating enforcement proceedings). Invoices for overdue expenses are checked and liquidated by a clearly defined protocol in accordance with the Revenue Collection Procedure (Appendix 4.6.10.) and the Invoice Circulation Procedure (Appendix 4.6.8), whereas the payment is executed within the deadline to avoid additional costs (default interests). The legal introduction of the e-Invoicing system and the investment in its implementation in the accounting software achieved a satisfactory level of transparency for all participants in the liquidation process, reduced the possibility of errors, and accelerated and improved the process from receiving invoices to executing payment transactions.

The Faculty manages its own revenues independently and uses them to develop and improve its activities. Management of revenue from market services is regulated by the Faculty Statute, the Working Regulations, and the Ordinance on the Use and Distribution of Income from Performing Own Activities (Appendix 4.6.6.). These regulations clearly define the responsibility for the allocation and use of own resources in order to ensure the primary use of these resources to cover costs and work related to activities that result in Faculty's own revenues.

The intended use of funds is ensured by planning all expenditures that can be foreseen in the processes of implementing projects, planning future revenues, and calculating costs that include mandatory allocations of 3% for the University and 10% for the Faculty. Monitoring the implementation of the financial plan is ensured by keeping analytical records by budget classifications for each work unit, source, project, and activity to provide the necessary information for quality decision-making. The plan for financing activities is based on the cooperation of the Faculty's professional administrative services, departments, and project team leaders. It includes planning activities financed from all sources of funding, such as: costs of attending international scientific and professional meetings/conferences, costs of proofreading papers for scientific journals, costs of training and mobility programs, costs of training of administrative and technical staff, costs of inviting guest lecturers, costs of external cooperation and field teaching, costs of purchasing scientific and professional literature and online databases, costs of purchasing computer equipment, co-financing of student activities (in cooperation with the Student Union), increasing the employees' standards (rewarding their work), improving the academic standards of study programs, and creating a supportive work environment. Furthermore, partnerships are established, additional funding sources are provided from projects, business community, local and regional self-government units, institutions, and diplomatic missions in order to develop and improve the Faculty's work (e.g., for organizing

practical classes for students, purchasing books and equipment, co-financing the organization of meetings and conferences, lifelong learning programs, etc.).

Based on all the above information and planning of the Faculty's activities, the Faculty prepares a Procurement Plan and publishes it on its website along with the Register of Concluded Contracts and Framework Agreements, which demonstrates that the Faculty manages its financial resources transparently and purposefully. Procurement of goods and services is executed in accordance with the Public Procurement Act and the Instructions for Implementation of Simple Procurement Procedures.
As a public institution and user of the state budget of the Republic of Croatia, the Faculty of Medicine in Rijeka does not aim to make a profit in business. Instead, it aims to provide users and the community with the highest quality services through continuous development and efficient management of its resources.

V. SCIENTIFIC/ARTISTIC ACTIVITY

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

a) Teachers and associates publish an appropriate number of quality scientific publications

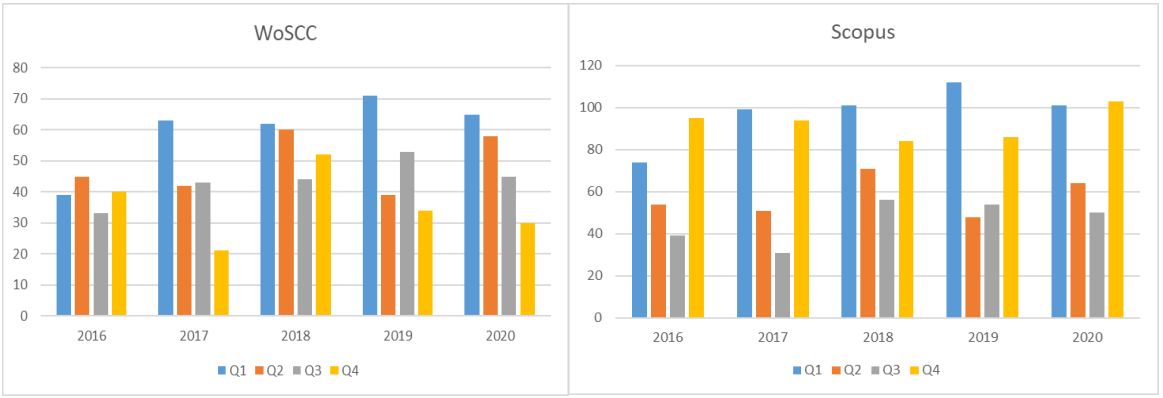
Scientific research groups of the Faculty of Medicine in Rijeka are competitive and internationally recognizable in their research, which significantly contributes to the development of the Faculty of Medicine. This is evidenced by the number and quality of scientific publications, the number of competitive projects, the number of scientifically educated doctoral students, and the achieved international scientific cooperation.

In the five-year period from 2016 to 2020, a total of 1,521 scientific papers were published, of which 1,036 were papers published in journals indexed in the Web of Science Core Collection (WoSCC) and 1,491 were papers published in journals indexed in the Scopus database (Figure 5.1.1. in the analytic supplement, Table 5.1a., link).

The Scopus database reveals a visible increase in the number of scientific papers published by teachers and associates of the Faculty, from 267 in 2016 to 321 in 2020. According to the criteria of international excellence, the increase in the number of papers is accompanied by an increase in the quality of publications. This is evidenced in the fact that the share of publications categorized as Q1 in the Scopus database was 1.36 times higher in 2020 than in 2016, while the largest increase of 51.35% was recorded in 2019 compared with 2016. Furthermore, in 2020, the share of papers with an excellence rate (Exc) was 12.52%. The biggest excellence rate of 18.89% was recorded in 2019, and the average rate in the observed five-year period was 13.95%. If we compare the above values with the University of Rijeka's strategic goal (25% of Q1 papers published and 10% of Exc papers published), we can conclude that the Faculty of Medicine in Rijeka has a high quality of publications and thus significant international influence. Also, the high citation rate of 59,084 times and h-index of 96 further confirm the above. As first, main, or corresponding authors, researchers from our institution have published a total of 1,024 scientific papers, which is an average of 204.8 publications per year. Our employees are the authors of 12 books published internationally, 28 books published at a domestic level, 86 chapters in books, and editors of 24 books. The number of professional papers published is 122.

During its development, the Faculty of Medicine has recognized the importance of its own publishing activities. Throughout history, the Faculty has published or co-published professional and scientific journals: *Acta Facultatis Medicae Fluminensis, Medicina Fluminensis, European Journal of Bioethics (JAHR),* and *Acta medico-historica Adriatica (AMHA)*. Journals are improving every year in terms of quality and visibility, but they are especially valuable because they promote and encourage the scientific work of students and young scientists.

A) B)



C)

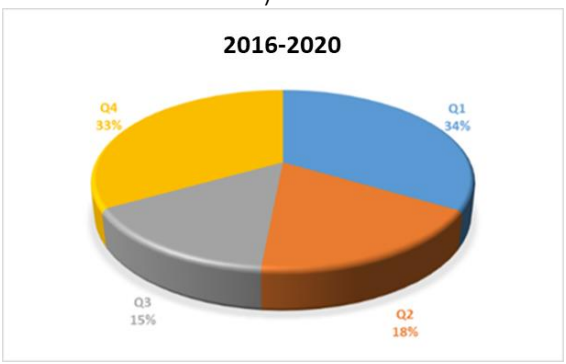


Figure 5.1.1. Number of published papers by Faculty employees.
A) Number of papers published in the WoSCC database from 2016 to 2020; B) Number of papers published in the Scopus database from 2016 to 2020; C) Overview of papers by quartiles according to the most favorable quartile under the Ordinance on Conditions for Appointment to Scientific Ranks.

b) The higher education institution has effective procedures for encouraging quality scientific publications

From the very beginning of their scientific career at the Faculty of Medicine in Rijeka, doctoral students are encouraged to publish the results of their scientific research work in the most prominent scientific journals. As part of scientific research work at postgraduate university (doctoral) studies, students are required to publish at least one original first-author scientific paper on the topic of their PhD thesis in a journal indexed in WoSCC or Scopus databases and belonging to the Q1 or Q2 group in JCR or SJR databases, for the research field according to the topic of the PhD thesis. Alternatively, the candidate must publish at least two original scientific papers from the PhD thesis topic in journals quoted in the WoSCC database, with an impact factor higher than 1, one of which must be a first-author paper. The paper must be published at least in an electronic form and have its DOI number by the time of registration of the PhD thesis.

The programs of postgraduate university (doctoral) studies within the Doctoral School in the scientific field of biomedicine and health prescribe the criteria for selecting mentors.
Prior to publishing the call for applications for enrollment in doctoral studies, a public call is

announced for the application of potential (co)mentors for the general topics of the research. A potential (co)mentor of the PhD thesis must be a doctor of science appointed to a scientific or scientific-teaching rank and employed at the Faculty of Medicine in Rijeka and its scientific-teaching bases. The potential (co)mentor can also be an employee of another university, but in that case, one of the (co)mentors must be an employee of the Faculty of Medicine in Rijeka. The mentoring capacity is determined for each potential (co)mentor by evaluating three criteria:
Criterion 1: Scientific activity of the mentor as the lead author in the last five years
Criterion 2: Quality of the mentor's overall scientific work
Criterion 3: Successful mentorship of doctoral students in the last five years.

Potential (co)mentor's scientific papers indexed in the Web of Science Core Collection (WoSCC) and Scopus databases are evaluated to determine their mentoring capacity. Only papers published in journals with a calculated impact factor (JCR) or SJR are considered.
The evaluation criteria are described in detail in the Doctoral School program (Appendix 5.1.1.). Such a method of selecting mentors encourages teachers to publish their papers in the most prominent scientific journals.

Improving the quality of scientific production is encouraged through training and awards. Faculty members participated in numerous workshops and seminars organized by the University of Rijeka: seminar *Mentoring Doctoral Students* held in 2016, a series of workshops *Information Tools for Researchers* held in 2019 at the University Library, workshop on the popularization of science *Communication of Scientific Findings* held in 2019 (Appendix 5.1.2.).

For many years, the Faculty of Medicine in Rijeka has annually awarded young scientists for their achievements. The awarding procedure is executed according to the Ordinance on Awarding Best Young Scientists by the committee for awarding best young scientists appointed by the Faculty Council at the Committee for Scientific Research Activity's proposal. The award is presented for basic medical sciences and clinical medical sciences, public health and health care.

The Faculty is in the process of preparing the Dean's Decision on Promoting Scientific Excellence of Faculty Employees in order to increase the quality of scientific publications. This refers to awarding financial support to the Faculty staff for publishing scientific papers in Q1 journals by being the lead author (first and last author). The financial grant will be presented depending on the availability of funds for each year.

c) The higher education institution records data on publications (indexation, citation, h-index, if applicable)

Data on publications are presented on the Croatian Scientific Bibliography (CROSBI) interface, which is linked to researchers' profiles on Google Scholar, as well as in the UNIRI employee portfolios in which scientists and associates register their publications in a timely and continuous manner. Teachers also update their ORCID and ResearcherID profiles. Based on these data, the data published in the Web of Science (WoS) and Scopus databases, and annual reports submitted by the Faculty departments at the end of the year for the previous academic year, we monitor

the quality and quantity of scientific publications.

The Faculty keeps records of data on publications and other indicators of teachers in accordance with the supervision of the implementation of the University of Rijeka Strategic Development Plan. This information is available on the University of Rijeka's website, which is explained in detail in Section 5.4.b.

d) The scientific activity of the higher education institution is visible through PhD theses

The scientific activity of the Faculty of Medicine in Rijeka can also be seen through the defended PhD theses. In the period from 2016 to 2020, a total of 89 PhD theses were defended at the Faculty of Medicine in Rijeka, as follows: 13 in 2016, 18 in 2017, 20 in 2018, 14 in 2019, and 24 in 2020. Two PhD theses out of the total number have been prepared and defended in English, and seven more are currently being prepared in English as well. The Faculty of Medicine is a constituent of the University of Rijeka with the largest number of defended PhD theses. The share of PhD theses defended at the Faculty of Medicine in Rijeka compared with the total number of defended PhD theses at the University of Rijeka in the observed period ranges from the lowest 24.56% in 2019 to the highest 41.38% in 2020. The list of defended PhD theses is attached in Appendix 5.1.3. Fifteen PhD theses were mentored/co-mentored by scientists from other domestic or international institutions, thus encouraging interinstitutional cooperation.
The defended PhD theses are also stored in the Repository of the Faculty of Medicine in Rijeka.

e) Teachers and associates of the higher education institution actively promote scientific achievements at national and international meetings and conferences

Teachers and associates of the Faculty actively promote scientific achievements at national and international meetings and conferences. They held more than 1000 invited lectures at scientific meetings and institutions in Croatia or abroad (Appendix 5.1.4.). They actively participated in numerous meetings and conferences in the country and abroad (Appendix 5.1.5.) and are authors or co-authors of a large number of peer-reviewed papers from scientific and professional meetings and conferences.

Faculty teachers continuously organize numerous scientific meetings, conferences, lectures, and symposia, some of which are: 8th Croatian Symposium on Renal Replacement Therapy with international participation *DiaTransplant*, Symposium *Clinical Cytology in the Time of Precision Medicine* on the occasion of marking 60 years of cytology in Rijeka; Rijeka Days of Bioethics (held every year since 1999), Final conference of the project *Becoming entrepreneurial: Knowledge transfer from the University of Rijeka Faculty of Medicine to the biotechnology business sector (EntrepMEDRI)*, Symposium *Viral Pathogenesis and Immunity*, 10th anniversary of the Center for Proteomics; Annual meeting of the Croatian Immunological Society; International Professional and Scientific Symposium *Health for All* (held since 2013), 31st Symposium *Family Perspective of Mental Disorders* (in collaboration with the Croatian Academy of Sciences and Arts), 45th International Symposium 4th Rijeka Forum on Neurodegenerative Diseases: *Neurodegenerative*

Diseases in COVID-19 pandemics; 49th International Symposium 5th Rijeka Forum on Neurodegenerative Diseases: *Neurodegenerative Diseases: Toward Therapy*.

Students of the Faculty are also active in organizing congresses with the support of the Faculty (e.g., the Student Congress of Health Protection – Sanitas and NeuRi Student Congress of Neuroscience 2017).

In order to help students gain experience in participating in and organizing scientific meetings, the Faculty actively participates in the organization of the 1st Biomedicine and Health PhD Students Congress *Science and Us*, which will be held in May 2022 (link).

5.2. Higher education institution demonstrates social relevance of its scientific, professional and artistic research and knowledge transfer

a) The higher education institution monitors social and labor market needs and takes them into account when planning its research activities

Employees of the Faculty of Medicine in Rijeka often have a prominent role in the wider community area beyond the Faculty's activities. The longest-serving mayor of the City of Rijeka, whose term of office expired in May 2021, has established himself personally and professionally as our employee. Our current Vice Dean for Quality at the Faculty of Medicine in Rijeka is also the Deputy Mayor of the City of Rijeka. In the local elections in 2021, one of our employees was a candidate for mayor, and one of our employees was a candidate for Primorje-Gorski Kotar County prefect. One of our employees is the head of the Administrative Department for Health of the Primorje-Gorski Kotar County. One of our employees is a member of the European Parliament. Until 2017, one of our professors was also the rector of the University of Rijeka. Until 2020, the current Director of the CHC held the position of vice rector for science and arts. Our former and current employees' political activities show that the Faculty develops in its employees a strong awareness of the wider environment and the responsibility for public action in various areas and levels of sociopolitical life.

The Faculty's social involvement is obvious from our rapid reaction to current social flows. In the current pandemic of the SARS-CoV-2 virus, our scientists have demonstrated their expertise not only through fieldwork with patients but also through public appearances in the national and local media (from HRT national television to *Jutarnji list* and *Novi list* daily newspapers), investing great effort in educating the general public about the specifics of the virus and pandemic and the usefulness of vaccination in general. Furthermore, one of our professors, the Director of CHC Rijeka and former vice rector at the University, was a guest on the HRT's show *Nedjeljom u 2* (*Sunday at Two*), one of the most-watched shows in the country. One of our professors, former vice dean for postgraduate studies, wrote texts for the Jutarnji list newspaper. Since the beginning of the COVID-19 pandemic, the head of the Center of Excellence for Viral Immunology and Vaccines and his associates have been actively involved in setting up diagnostic procedures and conducting scientific education for the general public. In 2020, at the beginning of the pandemic,

the Faculty received a grant from the Croatian Science Foundation for three projects to research the SARS-CoV-2 virus, and the University of Rijeka funded two more similar projects. The total amount of financial support that our scientists received in the first year of the pandemic to search for possible answers to the pandemic is HRK 4.240.462

Furthermore, the social relevance of our work is visible in the number of competitive projects that are evaluated, among other things, according to the relevance of the topic. In the observed period, we had a total of 203 national and 33 international competitive projects. In the category of national projects, it is worth mentioning 25 projects funded by the Croatian Science Foundation and 2 scientific centers of excellence funded by the Ministry of Science and Education. The category of international projects counts six projects funded by the European Regional Development Fund, three projects funded by the European Social Fund, three projects funded by the Horizon 2020, six projects funded by ERASMUS+, two projects funded by the INTERREG, two projects funded by the European Research Council, two projects funded by the EU Health Programme, one project funded by the European Seventh Framework Program, one project funded by the HERA network, two projects funded by the Helmholtz Association, one project funded by the German Research Foundation (a decision on project extension and additional funding is expected), two projects funded by the National Institutes of Health (NIH) from Alabama.
In 2021, we were approved for eight new projects funded by the Croatian Science Foundation and four new projects funded by the Croatian Science Foundation for the training of doctoral students. Regarding international projects, we were approved for one project funded by the MSCA Horizon, one project funded by the Scottish University of St. Andrews, one project funded by the University of Oxford, and one project funded by ERASMUS+. We also signed an agreement in 2020 and started implementing one project funded by the Swiss FONDATION ACTERIA.

The Faculty of Medicine in Rijeka is specific in the sense that, although we are primarily an institution focused on biomedicine and health, our research projects also cover a wide range of other scientific fields, from theology and bioethics (through the Department of Social Sciences and Medical Humanities) to ecology and port technology (through the Department of Health Ecology). In addition to projects within our narrower field of activity, the breadth of this range allows us to be interdisciplinary and socially relevant by connecting other scientific fields with biomedicine.

The Faculty of Medicine has been cooperating with the private sector for many years. Particularly prominent is the cooperation with the Jadran Galenic Laboratory (JGL) on developing a new antiviral product Rino Spray and developing a new administration solution for the SARS-CoV-2 vaccine. Also, we established a cooperation with the biopharmaceutical company Omnix Medical Ltd. regarding antibody production and antigen testing, based on the registered project *RAIL: disRupting the monoclonal antibodies manufacturing paradigm with ionic liquids* at Horizon Europe (Pathfinder Open). We also have long-term cooperation with the company Fidelta in the field of preclinical drug development.

One of the most important successes of the Faculty of Medicine in Rijeka in the past 30 years is the establishment of several prominent research groups in the field of immunology and virology.

Their quality of work is reflected in the fact that our Faculty has a Center of Scientific Excellence for Viral Immunology and Vaccines (Projects – Center of Excellence for Viral Immunology and Vaccines – zci-cervirvac.hr) – a scientific organization established by the Croatian Government according to the scientific achievement criteria. It is funded by the European Regional Development Fund and other competitive European and domestic funding sources (Appendix 5.2.1.).

The Faculty of Medicine in Rijeka has the necessary know-how, which enabled our scientists to establish in a very short time a reliable method of high-throughput testing at the very beginning of the COVID-19 pandemic in Croatia, when specific IVD tests were not even available yet.

From April until November 2020, our diagnostic team (comprised of professors, postdoctoral researchers, and laboratory technicians) processed all COVID-19 swab samples from the Clinical Hospital Center Rijeka (CHC). During that period, our team worked with the Emergency Medical Service of the CHC Rijeka on establishing and validating point-of-care testing for direct RT-qPCR detection of SARS-CoV-2 to perform testing at emergency admission sites by medical professionals without prior experience with nucleic acid amplification and detection tests. In January 2021, the protocol was established, and a new laboratory, the first of that kind at the CHC, officially began operating. The new laboratory helped shorten the waiting time for test results to just a few hours.

At the international level, the Faculty of Medicine and its organizational units, departments, and individuals cooperate with a number of institutions and experts abroad. We are actively involved in the European Research Area (ERA) and the European Higher Education Area (EHEA), and we strongly encourage all forms of international cooperation that enable knowledge and technology transfer. International cooperation takes place through bilateral and multilateral agreements, participation in academic networks and organizations, participation in professional and scientific conferences.

The Faculty has signed bilateral agreements on international cooperation with the following institutions: Hyogo College of Medicine (Japan), Beijing University Health Science Center (China), University of Kansas Medical Center (USA). Scientists from the Faculty of Medicine in Rijeka are actively involved in a number of significant international projects. The professional and cultural collaboration of our Faculty with foreign institutions results in multidisciplinarity at the institutional level, makes it easier for us to face contemporary challenges from many different perspectives, and allows us to better understand and follow the needs of our immediate and distant environment. The Center for Proteomics stands out in this context as an organizational unit that has established more than 30 high-level scientific projects in partnership with prestigious research institutes, universities, and biotechnological small and medium-sized enterprises in Southeast Europe, the European Union, and the United States. The Center for Proteomics was founded in 2006, focusing on the production and characterization of monoclonal antibodies, indispensable instruments in basic biomedical research, and the development of drugs and biotechnological products.

The European Regional Development Fund is also financing the project titled *Development of an*

innovative rapid test for the diagnosis of subclinical mastitis in dairy cows. The results of this project will facilitate the farmers' daily work (Appendix 5.2.1.).

In the observed five-year period, four professional ERASMUS+ projects (Smart Patients project, Therapy 2.0 project, Post-trauma Integration project, Family Caregiver Support project) in the field of psychiatry and psychological medicine were implemented at the Faculty of Medicine in Rijeka. They have resulted in the development of widely applicable digital applications for education, online psychotherapy, and self-help, which is an important indicator of how the work of the Faculty of Medicine in Rijeka reflects on the wider social environment by creating directly applicable and useful solutions to specific current social problems. Prof. Luka Traven's HORIZON 2020 project PIXEL deals with the development of port technology which, after the approval of the final project report, can be offered to ports for use in the form of technology transfer.

b) The higher education institution has an effective support system for research and knowledge and technology transfer

Until the middle of 2023, 10 projects were financed through the Researchers Support Fund, of which 5 projects were led by our experienced researchers and 4 were led by our postdoctoral researchers, with HRK 20,000.00 being the largest amount of financial support per project. Funding for projects approved by the Researchers Support Fund covers a period of a maximum of 18 months, and research topics cover both clinical and preclinical research fields (Appendix 5.2.2.). Apart from the Faculty's own funds, the Researchers Support Fund is also financed through donations. A total of HRK 70,260.00 in donations from 15 different business entities was paid to the Faculty of Medicine in Rijeka for the needs of the Researchers Support Fund (Appendix 5.2.2.). The goal is to attain substantial financial support for the Researchers Support Fund through donations from partner institutions from the private sector and especially alumni of the Faculty of Medicine.

The Faculty also supports research activity by not charging its employees tuition fees for doctoral studies. It has signed cooperation agreements with its teaching bases that regulate in various ways the financing of doctoral studies for employees of teaching bases.

The Faculty received another HRK 105,000 in donations for scientific research independent of the Fund (HRK 75,000.00 from Sanofi-Aventis, HRK 15,000 from HEP (Croatian electricity company), and HRK 15,000.00 from the Agency for Electronic Media).

Given that the Center for Proteomics has the most market-aimed projects and other activities and is partly market-financed, it is reasonable to conclude that this organizational unit is a forerunner in the field of patents and technology transfer (Appendix 5.2.3.). *Fess slices* is a 3D anatomical model of the head used in teaching and was developed on a project and trademarked in cooperation with the Technology Transfer Office, and the University donated it to the Faculty (Appendix 5.2.3.). Professors A. Šustić, A. Protić, and Z. Matić patented a procedure for B-line detection and quantification in thoracic ultrasound for the diagnosis of lung diseases (Appendix 5.2.3.). Professor Štifter's ESOPATH is a diagnostic preparation for medical purposes – adhesive

strips for diagnostic purposes in the field of histology, pathology, endoscopy, and oncology (Appendix 5.2.3.). The ECOMRI scientific paper is an example of technology transfer resulting from the INTERREG ITA-CRO ECOMOBILITY project. The Faculty is involved in the work of the University's Technology Transfer Office and the Science and Technology Park (StepRi), which employs some former employees of the Faculty of Medicine that started their career at the Center for Proteomics.

The capacity of the Faculty of Medicine in Rijeka for technology transfer and its market orientation is also visible through the start-up company Nectin Therapeutics. Nectin Therapeutics is a spin-off company founded in 2017 with its headquarters in Israel. Its founders (and owners) are Prof. Stipan Jonjić, MD, Head of the research group at the Faculty of Medicine in Rijeka, Prof. Ofer Mandelboim, MD, Head of the research group at the Hebrew University of Jerusalem, Pinchas Tsukerman, PhD, Research Director of the Nectin Therapeutics, Faculty of Medicine of the University of Rijeka, Yissum – technology transfer company of the Hebrew University of Jerusalem, and Integra Holdings – venture capital fund specializing in investments in the field of biomedicine and health. The knowledge and technology transfer to the company Nectin Therapeutics was preceded by a series of successful fundamental research derived from the long-term collaboration of scientists led by Prof. Stipan Jonjić from the University of Rijeka and Prof. Ofer Mandelboim from the University of Israel, who are the world's leading experts in the field of immunology and viral immunology. These researches have resulted in publications in top scientific journals (Journal of Experimental Medicine, Immunity, Proceedings of the National Academy of Sciences of the USA, etc.), numerous scientific awards for excellence, and patent applications due to the significant clinical and market potential of antibodies produced against certain ligands and receptors of the immune system as a basis for the development of smart drugs in the fight against tumors. The above-mentioned researches were carried out using the resources of the University of Rijeka and primarily the Center for Proteomics of the Faculty of Medicine in Rijeka (headed by Prof. Stipan Jonjić), whose primary focus is on the technology of monoclonal antibody production and its application in the development of various research tools and diagnostic and therapeutic preparations.

c) Teachers and associates participate in the scientific, artistic and professional associations

Employees of the Faculty of Medicine in Rijeka are members of numerous expert bodies, with the largest number having membership in the Croatian Medical Chamber (Appendix 5.2.4.). The Dean of the Faculty of Medicine in Rijeka is the Chairman of the Croatian Medical Chamber Council and the Chairman of the Primorje-Gorski Kotar County Committee of the Croatian Medical Chamber. One of our professors is a member of the German National Academy of Sciences (Leopoldina), the European Science Foundation, and the German-Israeli Foundation for Scientific Research and Development. One of our professors is the President of the Tularemia International Society. Another professor is a project reviewer at the European Research Council (ERC) and the European Molecular Biology Organization (EMBO) and a proposer of candidates for the Nobel Prize in Physiology or Medicine. One of our professors is the Chairman of the European Association for Gastroenterology, Endoscopy and Nutrition (EAGEN). One of our professors is a member of the American Academy of Forensic Sciences. Several of our employees are associate or active

members of the Croatian Academy of Sciences and Arts. Employees of the Faculty of Medicine in Rijeka are also involved in numerous expert, public and advisory bodies in the private and public sector (Appendix 5.2.5.). The Faculty of Medicine in Rijeka encourages every form of popularization of science, including writing science popularization articles, and has been involved in various science popularization activities at the University level and beyond for many years (Appendix 5.2.6.). Our employees also hold numerous scientific forums and workshops (Appendix 5.2.7.), and their professional and scientific engagement generally enriches the public life of their immediate and distant environment. The data on our employees' social, scientific, and professional engagement presented in this section is only a summarized representation of the overall engagement covering various spheres of social life, ranging from high politics and dedicated laboratory work to working in the Croatian health system, which is extremely demanding, challenging and responsible even in normal conditions, let alone during a global pandemic.

5.3. Scientific and professional achievements of the higher education institution are recognized in national and international frameworks

a) Teachers, associates and professional staff have received university, national and international awards and recognitions for scientific/professional achievements

The Faculty employees' achievements contribute to the reputation of the Faculty of Medicine, the University of Rijeka, and the Republic of Croatia. Our Faculty's teachers, associates, and professional staff (95 of them) have received numerous national and international recognitions and awards for their work, including the highest state science awards in the Republic of Croatia. In 2021, among the 31 laureates of the Croatian National Science Award, five scientists from Rijeka, of which three were from the Faculty of Medicine in Rijeka. In previous years, more than 20 of our teachers have received state science awards, Croatian Academy of Sciences and Arts awards, University of Rijeka Foundation awards, professional society awards, Faculty of Medicine in Rijeka awards, City of Rijeka awards, and Primorje-Gorski Kotar County awards. In addition, they have won numerous awards for scientific and professional contributions in the field of biomedicine and health, including the Croatian Medical Association award, Charter of the Republic of Croatia, the Golden Plaque of the City of Rijeka, and a large number of lifetime achievement awards (Appendix 5.3.1.). Our teachers are also winners of the University of Rijeka award for scientific excellence in project activities.

b) The higher education institution is the holder of an appropriate number of scientific/professional projects (university, national, international)

Our institution's leading scientists are holders of numerous scientific and professional projects (Table 5.3. in the analytic supplement, Appendix 5.3.2., Figure 5.3.1.). From November 1, 2019, to January 24, 2021, there were 160 project applications registered at our Faculty (not counting the regular cycles of funding university projects) – 98 projects were accepted for funding, 48 were

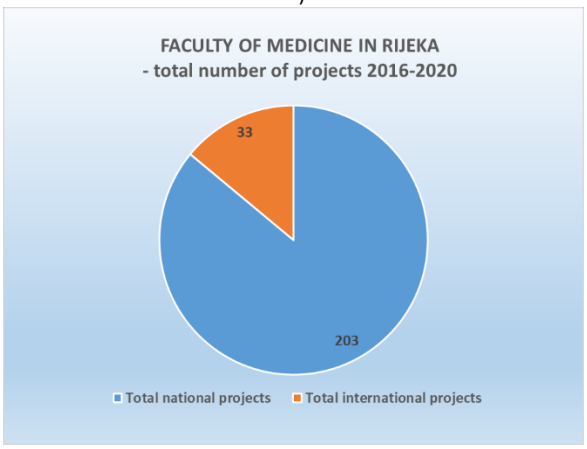
rejected, and 14 are in the evaluation process. In the observed 2016-2020 period, the Faculty of Medicine had 236 active projects, of which 203 national and 33 international. Of the 203 national projects, 25 are projects funded by the Croatian Science Foundation (CSF), two are centers of excellence funded by the Ministry of Science and Education, two are infrastructure projects funded by the Ministry of Science and Education (MSE), 160 are projects funded by the University of Rijeka through regular cycles. The observed period includes two cycles of university research projects for experienced researchers and several university projects for young scientists, of which the most successful are usually joined in the regular funding cycle. The Faculty of Medicine in Rijeka annually contracts 10-15 incentive grants from the parent university. This is a fixed amount of HRK 10,000.00 awarded based on the call for applications to the leaders of competitive national and international projects as an incentive for further work and a way to cover actual costs not foreseen by the competitive project budget. In the observed period, the Faculty of Medicine in Rijeka also had 20 CSF-funded projects for young researchers' career development. Through these projects, the Croatian Science Foundation finances the four-year salary of a doctoral student who participates in research on one of the existing projects. In the same period, the Faculty was awarded four incentives from the Ministry of Science and Education to apply for European Union projects, which have approximately the same function as the University's incentive grants. From 2021, the Faculty has been financing 10 projects from its own funds.

In addition to regular three-year cycles of funding scientific research projects, the University of Rijeka also funds two multidisciplinary projects for SARS-CoV-2 virus research and seven projects aimed at developing online courses. The Faculty also has four smaller projects funded by the City of Rijeka (mainly educational activities for the general public) and one slightly larger project funded by the Primorje-Gorski Kotar County related to the conceptual project documentation for the development of teaching infrastructure adapted for people with visual impairment, and two MSE projects financed through the bilateral cooperation with Slovenia. The total contract value of national projects is more than HRK 50,000,000, of which HRK 40,000,000 belongs to the Faculty.

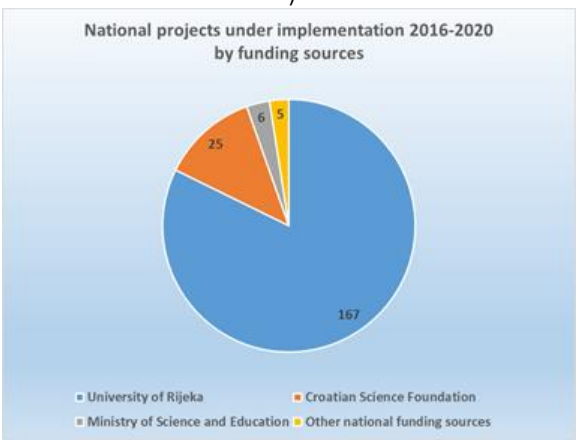
Of the 33 international projects, 6 were funded by the European Regional Development Fund. This category includes two scientific centers of excellence, one of which we are the holder of (the corresponding ministry initially funded the Center of Excellence for Viral Immunology and Vaccines, but since 2017, it has been funded as an EU project). The European Regional Development Fund co-funded the infrastructure project for the energy renovation of the main building of the Faculty of Medicine, scientific research project cooperation with the Jadran Galenic Laboratory and the Faculty of Veterinary Medicine in Zagreb. Three projects were funded by the European Social Fund, one of which is concerned with the adaptation of the study of Medicine to the Croatian Qualifications Framework. In the observed period, we also had three HORIZON 2020 scientific research projects, two projects funded by the European Research Council, six ERASMUS+ educational projects, two INTERREG-funded projects, two projects funded by the EU Health Programme, three IPA cross-border cooperation projects, one project funded by the German Research Foundation (DFG), one project funded by the HERA research network, two projects funded by the US National Institutes of Health (NIH), and one FP7-funded project. The total contract value of international projects exceeds EUR 50,000,000 and USD 5,000,000 for NIH-funded projects, of which more than EUR 9,000,000 belongs to the Faculty and slightly more

than USD 500,000 for NIH-funded projects (Table 5.3. in the analytic supplement, Appendix 5.3.2.).

A)



B)



C)

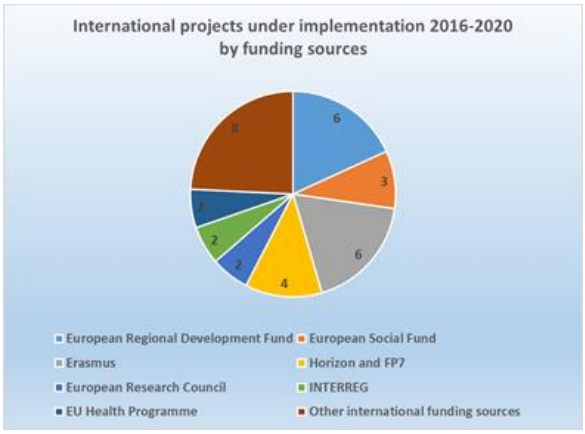


Figure 5.3.1. The Faculty of Medicine in Rijeka is the holder of numerous scientific, professional, and infrastructural projects: A) Total number of projects 2016-2020; B) National projects under implementation 2016-2020; C) International projects under implementation 2016-2020.

c) Teachers, associates, and experts participate to a significant extent in invited lectures at national and international meetings and conferences

Teachers, associates, and experts of the Faculty of Medicine in Rijeka are internationally recognized and distinguished as invited lecturers. From 2015 to 2021, teachers and associates of the Faculty held over 1,000 invited lectures in the country and abroad (Appendix 5.3.3.). A large number of invited plenary lectures is one of the indicators of international recognition and scientific excellence of the Faculty's employees.

d) Teachers and associates are members of committees of scientific/professional meetings and journal editorial boards

In the observed period, teachers and associates of the Faculty of Medicine participated in numerous committees of scientific/professional meetings held in the country and abroad (Table 5.4. in the analytic supplement). In addition, many teachers are members of editorial boards of scientific journals. It is especially noteworthy that 10 of our employees are editors-in-chief or editors of scientific topics in national and international scientific journals (Table 5.5. in the analytic supplement, Appendix 5.3.4.). Fourteen of our teachers are prominent members of academies in the country and abroad (Appendix 5.3.5.).

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

a) The Science Strategic Plan is in accordance with the higher education institution's development vision

The Science Strategic Plan 2016-2020 of the Faculty of Medicine in Rijeka defines the main strategic goals with precisely defined tasks and target values. The strategy is harmonized with the current Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025 and the University of Rijeka Strategic Development Plan 2014-2020. Furthermore, the University of Rijeka annually collects data on the fulfillment of strategic indicators, thus monitoring and harmonizing the integration of all constituents into the University of Rijeka research area (link). The high level of scientific and innovation activity is monitored through strategic indicators: the number of defended PhD theses per year, the number of full-time postgraduate university (doctoral) students, the number of published papers in the Scopus database, the total equivalent number of scientific papers, and the number of published papers in the first quartile and excellence category. Integration into the European Research Area is monitored through the following indicators: the number of project leaders and the number of registered and received European projects. Mobility is monitored through the following indicators: the number of people arriving at the higher education institution per spent day and the number of people leaving it to spend time at another higher education institution. The annual amount of funds received from EU funds is also monitored.

Based on the results of competitive scientific research, the Faculty of Medicine's scientific mission and vision is to enable the acquisition of new and relevant knowledge, improve the education of students, future teachers, researchers, and clinicians, improve medical practice, and thus contribute to the development of the wider community, respecting the principles of scientific excellence and creativity, scientific integrity and ethics, freedom in scientific research, integration of scientific research, education and medical practice, collegiality, cooperation, and social responsibility. The Faculty of Medicine in Rijeka is continuously developing as a research higher education institution in the field of biomedical research integrated into the European Research Area.

The scientific goals of the Science Strategic Plan for the period 2016-2020 have been achieved for

the most part. The elements that had not been realized have been implemented in the new strategic plan, and we expect the full realization of all goals in the upcoming years (Appendix 5.4.1.).

The Science Strategic Plan 2021-2025 of the Faculty of Medicine was prepared in accordance with the Strategic Development Plan of the Faculty of Medicine in Rijeka 2019-2025 and the University of Rijeka Strategic Development Plan 2021-2025. The quality of scientific research at the Faculty of Medicine in Rijeka is a dynamic concept that meets generally accepted standards in accordance with the University of Rijeka Strategic Development Plan based on the principle of academic freedom, encouraging innovation, open science, strengthening European cooperation, and transfer of knowledge to the community to increase the quality of life and well-being of the community.

b) Scientific activities of the higher education institution represent the realization of the strategic plan

The Science Strategic Plan 2021-2025 of the Faculty of Medicine is harmonized with the University of Rijeka Strategic Development Plan 2021-2025, which is guided by the motto *European University of the Future*.

The Faculty of Medicine is actively involved in the European Research Area (ERA) and the European Higher Education Area (EHEA). It strongly encourages all forms of international cooperation that enable knowledge and technology transfer and improvement of standards in scientific production, teaching quality, and student mobility.

International cooperation is based on signed bilateral agreements, membership in international scientific and professional networks and associations, participation in scientific and professional research projects, work of student associations, exchange of students, young scientists, and university teachers, and all other relevant activities that aim to establish, improve, and maintain international cooperation.

The implementation of the strategic plan is based on monitoring global research trends and further development of the institution's key research areas, laboratory research work, aspiration towards multidisciplinary research, strengthening ties with the business community, applying for new scientific research projects, and publishing papers involving scientists from different organizational units of the Faculty, CHC, and University constituents, strengthening institutional visibility, internationalization, and intensive researcher mobility.

The newly acquired knowledge and skills are expected to enable the development of new scientific groups, a much more competitive approach to scientific research, and thus a better capacity to attract European and other international funding sources.

Scientific activities of the higher education institution representing the implementation of the strategic plan (from the document Science Strategic Plan 2016-2020 of the Faculty of Medicine

in Rijeka) are submitted every academic year within the Report on the Implementation of the University of Rijeka Strategic Development Plan 2016-2020 at the Faculty of Medicine in Rijeka. The Report analyzes the achievement of defined goals and target values of their indicators from the Faculty's Strategic Development Plan, and this is posted on the University's website (UNIRI). In addition, an action plan is defined, which states the plan of activities, target values, and appointed persons for the following year. Also, department heads submit their annual reports to the Dean, after which the department's most important scientific achievements are presented at the scientific forum on the occasion of the Faculty Days ceremony.

The implementation of the strategic plan in the field of scientific and research activity is monitored through the following key indicators:

- The number of defended PhD theses in the observed period was 89 (Appendix 5.1.3.). In 2020, the Faculty launched a Doctoral School of Biomedicine and Health with five study programs.
- In the observed period, the total number of papers published in the databases was 1521, of which 1036 in WosSCC and 1491 in Scopus.
- The number of papers published in first-quartile (Q1) journals was 300 in WosSCC, 487 in Scopus, and 208 in the Excellence category.
- The Faculty implements scientific research and professional projects from various scientific fields (Appendix 5.4.2.). In addition, a large number of research projects are currently implementation at the Faculty, which has established its Researchers Support Fund.

c) The higher education institution has adequate resources for scientific activities

The scientific research activity of the Faculty of Medicine in Rijeka is sustainable and developmental. The Faculty has a high number of quality researchers, research infrastructure, and available scientific literature. Scientific research groups of the Faculty of Medicine in Rijeka are competitive and internationally recognizable in their research, which significantly contributes to the development of the Faculty as a whole. According to the records on December 31, 2021, the number of our employees with the scientific-teaching, associate, or teaching rank, including laboratory assistants, is 420. There are 245 employees with the scientific-teaching rank, 4 with the teaching rank, 92 with the associate rank, and 51 employees working as laboratory assistants or senior laboratory assistants. In addition, 28 young researchers, i.e., postdoctoral researchers and doctoral students, were employed at the Faculty from the project funds.

The Faculty has premises in buildings at the address Braće Branchetta 20 in Rijeka. Within the preclinical departments located at this address, there are 39 laboratories equipped with scientific equipment that represents a strong foundation for conducting modern scientific research. The development of scientific research work is accompanied by significant investments in much-needed scientific equipment, which is mainly purchased from earmarked funds from the Croatian Science Foundation, international projects, and the Faculty's own revenues. The list of scientific and capital equipment is presented in Table 4.9. in the analytic supplement. The Faculty has computer rooms and multifunctional lecture rooms equipped for remote work (Table 4.8. in the

analytic supplement). Also, students have access to computers in the Faculty hall and the Library.

The Faculty's scientific-teaching organizational units consist of 39 preclinical and clinical departments. The Faculty is also the founder of the Center for Proteomics (CAPRI), whose primary task is the production and characterization of monoclonal antibodies and the development of drugs and biotechnological products. Although an integral part of the Faculty of Medicine in Rijeka, CAPRI is funded exclusively by competitive national, EU, and international projects and commercial activities, which makes it unique in the Croatian academic sector. Furthermore, the Center for Genetic Education was established in 2020, whose primary goal is to raise the health professionals' level of genetic literacy through scientific research, educational, and professional activities. The Faculty also has the Center for Improvement of Teacher Competencies and Communication Skills, the Center for Biomodelling and Innovations in Medicine, the Center for Integrated and Palliative Care, and the Center for Research and Education in Underwater, Hyperbaric and Maritime Medicine. The Faculty also has a Laboratory of Mouse Engineering and Breeding Facility (LAMRI) with a very large breeding capacity (up to 40,000 mice). In addition, the Department of Physiology, Immunology and Pathophysiology and the Department of Basic and Clinical Pharmacology and Toxicology have two additional experimental facilities for breeding and housing laboratory mice and rats. In 2020, the Faculty of Medicine in Rijeka established a Stool Biobank and thus expanded its spatial capacity. The Stool Biobank is located in one of the buildings of the Faculty of Medicine, where the cryopreservation system is currently located. The Stool Biobank represents the first and only collection of human feces in the Republic of Croatia. It is a repository and distribution center not only for our country but also for neighboring countries, given that the nearest such center is located in Rome. Networking into the European network of biobanks is also planned, which will be the basis for the Biobank's cooperation and establishing partnerships at the European level.

An essential part of scientific research is the availability of relevant scientific literature. The Biomedicine and Health Library was created based on the functional integration of the Clinical Hospital Center's Library and the Faculty of Medicine's Library. The Library has 36,269 books, about 5,000 textbooks, about 19,000 printed volumes of domestic and international journals, and about 5,000 items of bachelor's, master's, and PhD theses. In the last five years, the Library has acquired a large number of books, which is shown in detail in Section 4.5. (Table 4.10. in the analytic supplement).
Clinical research is conducted in the premises of the Clinical Hospital Center Rijeka and in collaborating healthcare institutions, which are also teaching bases of the Faculty of Medicine.

d) The higher education institution recognizes and awards its employees' scientific achievements

The Faculty regularly nominates its most prominent scientists for awards. The Faculty's employees are frequent winners of state awards, Croatian Academy of Sciences and Arts awards, University of Rijeka Foundation awards, City of Rijeka awards, and other science awards (link and Appendix 5.4.3.). On the occasion of the Faculty Days ceremony in December, awards are traditionally presented to best young scientists for basic medical sciences, clinical medical sciences, and public health and health care. The Ordinance on Awarding Best Young Scientists

clearly defines the grading criteria for scientific papers published in journals indexed in SCIE/CC, journals indexed by other relevant databases, articles/chapters in a book, and active participation in congresses and projects. As the grading criteria include the journal impact factor multiplied by the number of points, young scholars are encouraged to publish their papers in journals with high impact factors. The presentation of best young scientists before the Faculty Council and the participants of the ceremonial session with media coverage is stimulating for young scientists in terms of scientific competitiveness.

e) The higher education institution continuously improves its scientific activity by funding, expanding human resources, managing spatial capacity and investing in the necessary equipment, acquiring necessary literature, supporting the dissemination of results and preparing PhD theses

The Faculty of Medicine in Rijeka continuously improves its scientific activity by financing employees from its own resources. In 2020, salaries and material benefits for a total of 86 employees were financed from the Faculty's own and project funds. Also, the Faculty takes special care of the development of the Office of Science, Projects and Doctoral Studies, and two employees in the Office are financed from the Faculty's own funds. The Faculty of Medicine is also improving its scientific activity by financing the costs of doctoral studies. The Faculty's employees do not pay the costs of doctoral studies, while employees of our teaching bases pay 1/3 of the tuition fee. Scientific research infrastructure is of great importance to the Faculty. In 2020, the Faculty invested HRK 9,031,048.90 from its own and project funds in the procurement and maintenance of laboratory equipment, experimental vivarium, development of IT infrastructure, and maintenance of the Faculty's premises and laboratories. Part of these funds was provided through scientific projects, while the other part (HRK 1,895,202.71) was provided from the Faculty's own funds (Table 4.11. in the analytic supplement).

The Faculty of Medicine in Rijeka is a co-publisher of several relevant journals: Croatian Medical Journal, Medicina Fluminensis, European Journal of Bioethics (JAHR), and Acta medico-historica Adriatica (AMHA). At the beginning of 2020, the Faculty of Medicine in Rijeka established its Researchers Support Fund, modeled on eminent universities worldwide that offer this form of internal funding for scientific research work. Funds for the Researchers Support Fund are distributed from the Faculty's own funds and collected from donations. In order to achieve its basic purpose, the Researchers Support Fund uses financial resources for support of scientific research, repairs, maintenance, and upgrades of scientific equipment, as well as for protection and maintenance of intellectual property rights and registered patents (Appendix 5.4.4., Appendix 5.4.5., and Appendix 5.4.6.). During the academic year 2020-2021, a call for applications has been announced for awarding research grants to experienced researchers and postdoctoral fellows, allocating a total of HRK 200,000.00 to five projects of experienced researchers and five projects of postdoctoral researchers employed or appointed a (scientific) teaching rank at the Faculty of Medicine in Rijeka or its teaching bases. The implementation of approved projects began in December 2021. The largest amount of funding per project is HRK 20,000.00, and the duration of these projects is 18 months. The aim of this call for applications is to encourage those scientists who have not yet had competitive projects to raise funds for their scientific research work, which will indirectly result in increasing the overall scientific research capacity of the Faculty of Medicine in Rijeka.

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

a) Space and equipment for scientific research and professional activities are used in undergraduate, graduate, and postgraduate teaching

At the Faculty of Medicine in Rijeka, equipment for scientific research and professional activities is used in teaching at all levels of study (undergraduate, graduate, and postgraduate).
The Faculty's scientific-teaching organizational units consist of 39 preclinical and clinical institutes and departments. The Faculty is the founder of six centers: the Center for Proteomics (CAPRI), the Center for Genetic Education, the Center for Improvement of Teacher Competencies and Communication Skills, the Center for Biomodeling and Innovations in Medicine, the Center for Integrated and Palliative Care, and the Center for Research and Education in Underwater, Hyperbaric and Maritime Medicine. The Faculty also has the Laboratory of Mouse Engineering and Breeding Facility (LAMRI) and two additional experimental facilities for breeding and housing laboratory mice and rats at the Department of Physiology, Immunology and Pathophysiology and the Department of Basic and Clinical Pharmacology and Toxicology (Table 4.8. in the analytic supplement).

The Faculty also has 39 laboratories that operate within preclinical institutes and departments for the purpose of performing scientific and professional work and, to a lesser extent, the practical part of teaching. Laboratories are equipped with scientific equipment representing a strong foundation for conducting modern scientific research and teaching. In order to make better use of laboratory equipment, the Faculty has formed an internal list of laboratory equipment. While preclinical research is conducted mainly in the premises of the buildings at the address Braće Branchetta 20 in Rijeka, clinical research is conducted in the premises of teaching bases, the largest of which is the Clinical Hospital Center Rijeka.

The Faculty also has two computer rooms equipped with computers and licensed computer programs that meet all teaching and research needs of students and teaching staff. In accordance with the possibilities, software licenses are periodically updated. Six multifunctional lecture rooms have recently been set up for the purpose of conducting hybrid teaching during the pandemic.

Scientific and professional literature are indispensable elements in scientific research and teaching, and the Biomedicine and Health Library is available to all students and teaching staff. Although it is formally an organizational unit of the Faculty of Medicine, the Library operates through joint investments of all contracting institutions (Faculty of Medicine in Rijeka, Clinical Hospital Center Rijeka, Faculty of Dental Medicine in Rijeka, and Faculty of Health Studies in Rijeka) and provides students and employees with a richer selection of scientific and teaching literature. In this way, the Library contributes to the development of higher education, science, and profession in biomedicine and health.

Material and information resources for conducting research available to the Faculty employees are explained in detail in Section 5.4.

b) Undergraduate, graduate, and postgraduate students are involved in scientific/artistic/ professional projects of the higher education institution

Since their enrollment, undergraduate and graduate students have been involved in the faculty's scientific activities, which encourages scientific thinking and orientation towards the postgraduate level of study. It is especially worth mentioning the efforts to stimulate students' interest during the first years of study in scientific work and research, organizing student congresses, working with mentors, and publishing scientific papers with the aim of early scientific methodological "literacy". In this way, we systematically encourage critical scientific thinking in the field of biomedicine so that our graduates can adopt all the knowledge and skills essential for continuous scientific work and training. One of the examples is the Student Section of the scientific and professional journal Medicina Fluminensis. Its main activities are conducting scientific education and providing professional support to student scientific conferences. The Student Section organizes and conducts workshops called *How to Write a Good Case Report* and *Master the Art of Congress without Stress*, which are accompanied by three handbooks published by the Faculty of Medicine, University of Rijeka. Also, the Section representatives select the best papers at national and international student scientific conferences, which are then published in the journal.

In the observed period, 103 students of all years of study were directly involved in scientific and professional projects as associates, of which more than 90 were postgraduate university (doctoral) students (Appendix 5.5.1.). The total number of PhD theses resulting from these projects is 32 (Appendix 5.5.2.). Graduate and undergraduate students are also involved in projects by preparing seminar papers and bachelor's and master's theses that are thematically related to projects. In this way, the knowledge gained through research on the project is directly transferred to students.

Student involvement in scientific projects is also visible through publications. In the five-year period at the Faculty of Medicine in Rijeka, a significant number of papers was published in journals indexed in SCIE/CC in co-authorship with students. Since these are all top researches, this mostly implies postgraduate university (doctoral) students (Appendix 5.5.3.).

The increase in the number of research involving students can be explained through two items:

- One of the requirements of the Croatian Rectors' Conference for the evaluation of teaching and professional activities in the process of election to scientific-teaching ranks is the publication of papers together with students by teachers who mentored their bachelor's, master's, or PhD theses.
- The doctoral study program imposes the obligation of publishing papers in the field of the PhD thesis topic, obtaining ECTS credits through public presentations at congresses, and staying at a scientific institution outside the University of Rijeka. In this way, doctoral students are involved in scientific research work at other scientific institutions, enabling them to acquire additional knowledge and skills and encouraging work creativity.

c) Teaching at postgraduate university studies and PhD theses reflect scientific/artistic research, professional activity, and achievements of the higher education institution

Course coordinators in postgraduate university (doctoral) studies are employees of the Faculty and other higher education institutions and are internationally recognized scientists and experts in their field who pass on the results of their research and knowledge to students. The study program clearly prescribes the requirements that the mentor of the PhD thesis must meet. All employees who meet the defined requirements are potential mentors of PhD theses. Registration of general topics by mentors who have an adequate mentoring capacity and evaluation of the registered topics by the Committee for Scientific Research Activity encourages the relevance of research topics. It is common practice for researchers employed on scientific projects to enroll in postgraduate university (doctoral) studies. Accordingly, they register the general topics of their PhD theses in accordance with the research conducted within these scientific projects.

The curricula of five university postgraduate (doctoral) studies within the Doctoral School of Biomedicine and Health are very flexible and can be individually adapted to the doctoral student's field of research. Compulsory courses intended for acquiring the basic knowledge required to prepare a scientific paper and develop generic skills are common to all five study programs of the Doctoral School. During their study, each student must attend eight invited lectures of their choice held by eminent international scientists. Students can enroll in elective courses from other study programs within the Doctoral School, provided at least 50% of courses are from the enrolled study program. The content of many courses in doctoral studies is directly thematically related to projects.
The course selection process during enrollment in a doctoral study is carried out through the consultations of the doctoral student with their mentor and the head of the postgraduate university (doctoral) study.
In accordance with the above, the conclusion is that there is no good teaching process without a good scientific base.

VI. Appendixes