



**REPORT  
of the Expert Panel  
on the  
RE-ACCREDITATION OF  
The University Department for Forensic Sciences,  
University of Split**

**Date of the site visit:  
22<sup>nd</sup> March 2016**

October 2016

## CONTENTS

<b>INTRODUCTION</b> .....	<b>3</b>
<b>SHORT DESCRIPTION OF THE EVALUATED INSTITUTION</b> .....	<b>5</b>
<b>CONCLUSIONS OF THE EXPERT PANEL</b> .....	<b>7</b>
<b>ADVANTAGES OF THE INSTITUTION</b> .....	<b>7</b>
<b>DISADVANTAGES OF THE INSTITUTION</b> .....	<b>7</b>
<b>FEATURES OF GOOD PRACTICE</b> .....	<b>8</b>
<b>RECOMMENDATIONS FOR IMPROVEMENT</b> .....	<b>8</b>
Management of the Higher Education Institution and Quality Assurance .....	8
Study Programmes .....	8
Students .....	9
Teachers .....	9
Scientific and Professional Activity.....	10
International Cooperation and Mobility .....	10
Resources, Administration, Space, Equipment and Finance .....	10
<b>DETAILED ANALYSIS OF INSTITUTIONAL COMPLIANCE TO THE STANDARDS AND CRITERIA FOR RE-ACCREDITATION</b> .....	<b>11</b>
1. <i>Management of the Higher Education Institution and Quality Assurance</i> .....	11
2. <i>Study Programmes</i> .....	11
3. <i>Students</i> .....	12
4. <i>Teachers</i> .....	13
5. <i>Scientific and professional activity</i> .....	13
6. <i>International cooperation and mobility</i> .....	14
7. <i>Resources: administration, space, equipment and finances</i> .....	14

## INTRODUCTION

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

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

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

The report contains:

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

The members of the Expert Panel were:

- Professor Ate Kloosterman, Faculty of Science, University of Amsterdam Faculty of Science, Kingdom of the Netherlands (Chair of the Expert Panel)
- Professor Jørgen Lange Thomsen, Institute of Forensic Medicine, University of Southern Denmark, Kingdom of Denmark
- Professor Davor Derenčinović, Faculty of Law University of Zagreb, Republic of Croatia
- Adam Vrbanić, student, Faculty of Medicine University of Zagreb, Republic of Croatia

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

- Dr. Josip Hrgović, coordinator

- Goran Briški, translator

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

- Department Management;
- The Working Group that compiled the Self-Evaluation;
- The representatives of the Quality management commission;
- The students, i.e., a self-selected set of students present at the interview;
- Teaching assistants and junior researchers;
- Teaching staff.

The Expert Panel also had a tour of the laboratory, and the classrooms at the Department where they held brief question and answer sessions with the students and non-teaching staff.

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

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

1. **issue a confirmation** to the higher education institution, which confirms that the higher education institution meets the requirements for performing the higher education activities or parts of activities, in case the Accreditation Recommendation is positive,
2. **deny a license** for performing the higher education activities or parts of activities to the higher education institution, in case the Accreditation Recommendation is negative, or
3. **issue a letter of recommendation** for the period up to three (3) years in which period the higher education institution should remove its deficiencies. For the higher education institution the letter of recommendation may include the suspension of student enrolment for the defined period.

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

## **SHORT DESCRIPTION OF THE EVALUATED INSTITUTION**

NAME OF HIGHER EDUCATION INSTITUTION: The University of Split University Department for Forensic Sciences

ADDRESS: Ruđera Boškovića 31/4, 21000 Split

NAME OF THE HEAD OF HIGHER EDUCATION INSTITUTION: Professor Josip Kasum, PhD,

STUDY PROGRAMME: Graduate university study programme Forensic Sciences

Modules:

- Crime Scene Investigation (CSI),
- Forensic Chemistry and Molecular Biology (FCMB),
- Forensics and National Securities (FNS) and
- Financial Accounting Forensics (FAF).

NUMBER OF STUDENTS

Full-time: 35

Part-time: 0

Absolvent: 0

NUMBER OF TEACHERS

Full-time: 4

Cumulative: 1

External associates: 72

TOTAL BUDGET (in HRK): 1,893,199.00

MSES FUNDING (percentage): 86.3%

OWN FUNDING (percentage): 13.7%

#### SHORT DESCRIPTION OF HIGHER EDUCATION INSTITUTION:

University Department for Forensic Sciences of the University of Split (in further text Department) is the scientific and educational subsidiary component of the University of Split through which the University directly organizes and performs studies and develops scientific and professional activities in scientific areas of biomedicine and health care, biotechnology, natural sciences, technical sciences, social sciences, humanities and art, all connected to forensic sciences, by coordinating activities within the University. The founder of the Department is the University of Split, and the Department is established and could be dissolved by decision of the Senate of the University of Split. The Department is not a legal body, thus rights and obligations issuing from its activities and management are held by the University of Split. The Department is registered in the Court Register. Department registration report is submitted by the University. By decision of the Senate of the University of Split dated 24 July 2009, the University established its Subsidiary Member – University Study Centre for Forensic Sciences. On 26 September 2011 the Senate of the University of Split issued a directive regarding the change of the title of this Subsidiary Member and now its title is “University Department for Forensic Sciences”.

## **CONCLUSIONS OF THE EXPERT PANEL**

### ***ADVANTAGES OF THE INSTITUTION***

- Forensics as an innovative field of study that cannot be found anywhere else in Croatia nor in neighbouring countries;
- Positive ratio between number of staff and students;
- High motivation of students and teachers;
- Very low drop-out rate and very high and passing rate at the exams;
- There is a dedication and a strong wish to promote scientific research and to strengthen the teaching part.

### ***DISADVANTAGES OF THE INSTITUTION***

- Problems in formal recognition of the academic title on the labour market;
- Lack of methods for assessing applicant's competences through the admission procedure;
- Absence of clear learning outcomes;
- Lack of feedback to students on the measures that have been taken on the basis of their opinions and suggestions for improvement of the quality of studying;
- Insufficient number of full time employed staff;
- Lack of scientific and research activities and insufficient international cooperation;
- There is still room for improvement in acquiring modern equipment in the Research Laboratories;
- The institution is small and sensitive to changes including financial cut downs. The „product“ is teaching and research – not based upon any practical or concrete activities for the benefit of the local, the regional or the Croatian society.

## ***FEATURES OF GOOD PRACTICE***

- Small group classes with possibilities of individualized approach beneficial for students and rewarding for the lecturers;
- Activities of the Alumni association;
- The institution is monitoring the practice of teaching and the students are heard.

## ***RECOMMENDATIONS FOR IMPROVEMENT***

### **Management of the Higher Education Institution and Quality Assurance**

- The Department should consider the inclusion of more forensic core issues such as forensic pathology.
- The Department should strive towards external forensic services for instance for the police. They may start with analyses of samples for drivers under the influence of alcohol or drugs as forensic chemistry is one of the study modules. There is a need for teaching on the basis of concrete work.
- Teaching should reflect the ambition of international cooperation using English textbooks, creating more library facilities and employing foreign teachers.

### **Study Programmes**

- If the Split University forensic program wants to expand further and to attract students from abroad, i.e. developing countries the program and website should be in the English language.
- Expand the cooperation with relevant Croatian stakeholders (Industries, police, public prosecution service and other academia's).
- Take further initiatives to further expand international cooperation with leading forensic institutions in and outside Europe.
- The results of this evaluation can form the basis for measures that to further improve the course. Staff members, students, alumni and the professional field in which graduates of the course are to be employed must be actively involved in the initiatives for improving the teaching program.



## **Students**

- To improve admission procedures in order to get the best candidates for the study;
- To analyse reasons for low interest for some modules and to consider reform of the current structure of the programme (i.e. through introducing new modules or abandoning the existing ones with low interest of potential students);
- To provide further support for establishment of student's networks and associations as well as for organized sport activities within HEI;
- HEI does not have structured learning outcomes. Therefore, there is an urgent need for HEI to discuss and adopt feasible learning outcomes. Students and other relevant stakeholders should also be involved in this process;
- To improve feedback on the measures that have been undertaken based on their opinions and suggestions for the improvement of the quality of studying, as well as the measures that have been undertaken in order to solve the problems that affect them;
- To improve the way of informing the public about study programmes, learning outcomes, qualifications and employment opportunities, suggesting the creation of English web sites.

## **Teachers**

- Due to the fact that low number of fully employed staff is an obstacle for research activities of HEI, the new employments seem as a necessary step forward in overcoming of this issue. Since the employment of new staff from state budget resources is not realistic at the time, HEI should turn to the alternatives such as hiring scientific-teaching staff and post-doctoral researchers through domestic and international research projects.;
- The Strategic program of scientific research adopted in 2015 (for period 2015-2019), should be amended to serve as a ground for planning research activities and to set indicators of the efficiency of their implementation (including responsible persons, deadlines etc.);
- Outreach activities of the HEI should be improved in order to get attention of relevant international audience.

### **Scientific and Professional Activity**

- The Department should aim towards international projects in research.
- Concrete research projects should be described, including participants and deadlines.
- More full time teachers may become a stimulus for research, as they spend more time at the Department, and scientific merits must count much when a new teacher is employed.
- The Department should focus on the strong research areas such as accounting and anthropology.
- It should be considered to exchange or supply areas of interest in order to gain a wider perspective.
- Describe and define a post doc program.

### **International Cooperation and Mobility**

- Network of international partners should be extended in order to increase opportunities for international mobility of students and faculty. This particularly goes for mobility through Erasmus+ program that has not been sufficiently addressed by HEI;
- HEI should, with the support (including financial) of the University, encourage its employees and external associates to introduce courses taught in English;
- In addition to Croatian students, HEI should develop proactive strategies to bring more students from the neighbouring countries.

### **Resources, Administration, Space, Equipment and Finance**

- Department must find ways to attract alternative funding from sources other than the state of Croatia.

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

## ***1. Management of the Higher Education Institution and Quality Assurance***

At the time of Self-evaluation there were 35 students, out of which only seven foreign. The lowest number of students (15) was in Forensic Chemistry and Molecular Biology.

The strategy is described in a not sufficient way. It holds no deadline but many excuses, many of which refer to shortcomings of funding. International cooperation is seriously wanted (and needed), but so far the Department has only established cooperation with local institutes and The Penn State University in USA. The latter seems to be focused on anthropology, however not being one of the core issues in the education. It is all very preliminary, and this is clearly reflected in the term on page 28 in the Self-evaluation: "We are also planning to prepare-----".

The Department does not produce a "product" for external use, nor do they provide services for external partners. The Department is occupied with teaching and research ethics. The teachers are mainly part time employed at the Department but the students report a will from the teachers to contact with the students and a willingness to respond to the queries and criticism from the students.

The institution has monitoring functions for the teaching quality. The panel was not introduced to detailed study programs, but it was noted that the module on forensic chemistry and molecular biology did not have a study module on pharmacology. The panel also noted the lack of textbooks, especially comprehensive books in English.

## **2. Study Programmes**

The Panel considers it important that the Department arranges an own identity and invests sufficiently in academic research and the development of forensic science as an academic discipline. The enrolment quotas correspond with the needs of society. Effective recruitment of national and international students can further increase the number of students. The enrolment quotas correspond with the funding to allow good education. Department can recruit additional (part time) teachers that can be paid by expanding the number of international students (i.e. Erasmus Mundus).

The exit qualifications of the do not yet fully correspond to general, internationally accepted descriptions of the qualifications of a Master. Department takes significant steps to implement a comprehensive assessment of the learning outcomes. Allocation of ECTS reflects a representative estimation of the workload. Program contents and quality of the study programs

become in line with international standards. The participation in European programs can give a further impulse to reach this.

Teachers demonstrated their teaching qualities in the interviews and showed professionalism in the relevant fields. Resources for knowledge acquisition are mostly implemented. A main objective of any forensic science program is practical competence. External practices in the homeland and foreign countries are in the starting phase of implementation.

### ***3. Students***

The admission criteria are clear, concise and in accordance with the demands and expectations of students' future careers. Furthermore, the criteria can be found on the Department's web pages. However, during the interviews with the students, there have been allegations about incompleteness during the process of enrolment itself. Thus, some students mention they did not undergo any kind of additional assessments of their skills, not even psychological testing, which is one of the admission's criteria. It was simply sufficient to hand in the required documentation for the enrolment.

Extracurricular activities are provided and supported not on the Department's but on University's level. Used knowledge assessment procedures and methods are various and vary from written, oral and practical exams to their combinations. Students confirm that they have always been given the possibility of having an insight in their exams as well as obtaining detailed explanations of their results. Students have the possibility of rejecting a given mark, keeping in line with one of the main students' rights. A panel of experts stresses the need for improving the way of informing the public about study programmes, learning outcomes, qualifications and employment opportunities, suggesting the creation of English web sites.

The panel indicates the lack of communication between students and professors putting this as a first line problem. Even though students think they have been given the possibility of expressing their opinions, which is mainly through questionnaires, as well as giving suggestions for the improvement of the Department, there still seems to be a great lack of motivation on the Department's behalf in order to realise this. For that reason the Department's teaching staff has been advised to improve the communication with students by introducing internal lecture evaluations, internal students questionnaires, more frequent meetings with the representatives of every study year, etc.

Due to the fact that students claim that they do not receive any feedback, they should receive feedback on the measures that have been undertaken based on their opinions and suggestions for the improvement of the quality of studying, as well as the measures that have been undertaken in order to solve the problems that affect them. However, praise is due to the Department for keeping evidence of its alumni as well as for maintaining a good relationship and communication with them. The Department successfully tracks its former students publishing the information about their places of work. Former students occasionally meet with recent

students and some of the alumni were present on the panel of experts meeting with the students of the Department.

#### ***4. Teachers***

Self-evaluation pointed out the disproportion between either full-time or part-time employees in relation to external associates. Number of scientific-teaching staff is indeed very low but still in line with legal requirements under Croatian law and could be explained with interdisciplinary profile of HEI that requires experts from various disciplines as well as short time since the establishment of the Unit.

This program, as required by the law, should consist of purpose and activities of the HEI, analysis of its scientific potential, strategic goals, estimated outcomes of the program, list of topics for research, plan of organizational development of the HEI and efficiency indicators in the implementation of the program.

*Ratio* in number of students and staff is not an issue at the HEI, and that is a good precondition for full dedication of staff and providing whatever is necessary for the students. Small group classes with possibilities of individualized approached is beneficial for students and rewarding for the lecturers. Students are mostly satisfied with qualifications, knowledge and approach of the lecturing staff as well as with teaching methods.

For the moment, there are no teachers from abroad that are employed at the HEI. Visiting lecturers are mostly limited to those who appear at international conferences (such as ISABS). There is no mention in the Self-evaluation, neither was it told during the meeting, that information on job vacancies and competitions have been advertised internationally. Even if they are, there is still very low profile outreach of HEI. For instance, the respective web page is only in Croatian that makes very difficult for foreign students and professors to get acquainted even with very basic information about the HEI.

#### ***5. Scientific and professional activity***

The Department has produced a number of articles, mainly in Croatian language. The index factors are given, mostly around 1, with the exception of an article in Journal of Sexual Medicine about the origin of syphilis with an impact factor of 3.15.

It should be mentioned, that impact factors are not very reliable per se as a criterion of quality, and the Department seems to be too focused on them. There is a genuine interest in scientific research. We met this enthusiasm especially in anthropology and forensic accounting. A number

of PhD studies have been completed, but we were unfortunately not able to read them, as they were written in Croatian.

The panel had a meeting with the PhD student who were satisfied with the supervision and guidance they received. There does not seem to be stimuli for student research. There is practically no international cooperation. There is no reward system and or plan for scientific research with the description of concrete projects.

## **6. *International cooperation and mobility***

International cooperation of HEI is limited to several universities in Europe (Ljubljana, Maribor) and United States (Pennsylvania State University). Connections and effective cooperation with these prestigious high education and research institutions should be welcomed. This also goes for bringing together scholars and practitioners who, during participation at worldwide known ISABS (International Society for Applied Biological Sciences) conferences, share their knowledge and experiences with staff and students of HEI.

Internationalization of the HEI would depend, *inter alia*, on number of relevant courses that are offered to foreign students in world languages. Since there are no such courses offered at the time.

Since the year 2012 the number of applicants with the finished graduate study program has been in decrease as well as the number of enrolled students.

## **7. *Resources: administration, space, equipment and finances***

The forensic program in Split has facilities that can be classified as up-to-date: appropriate and equipped classrooms are available, as well as necessary space for self-study. It was concluded by the panel that with the present number of students the ratio between teaching and non-teaching staff is up to the standard. HEI has established policies for the staff members for their professional development.

Laboratory rooms are modern, but have to be equipped before they are operational. Students, PhD students and teaching staff are pleased with the teaching equipment. Library facilities and teaching materials meet the (international) standards of today. The institute is funded by the state. The financial situation of the Department is sound. Ways must be explored by the institute to attract alternative funding from sources other than the state.