

## **Re-Accreditation of Study Program – PhD in Experimental Biomedicine in the University of Prishtina “Hasan Pristhina”**

### **A. The accreditation process**

An Expert Team visited University of Prishtina “Hasan Pristhina” (referred thereafter as UP) on 9 of July 2015 for the purpose of considering the reaccreditation of the PhD programme in Experimental Biomedicine.

The Expert Team included (in alphabetical order):

- Professor Dr Jadwiga Mirecka, Jagiellonian University in Krakow, Poland
- Univ.-Prof. Dr. Wolfgang Patsch, Paracelsus Medical University, Salzburg (A)

The Team was supported by two members of the Kosovo Accreditation Agency:

- 1 Ms Furtuna Mehmeti, Acting Director, Expert for Evaluation and Accreditation
- 2 Mr Fisnik Gashi, Officer for Evaluation and Monitoring

### **The report is based on:**

- 1 Self-evaluation report 2014
- 2 Meetings and discussions which took place during the site visit
- 3 The Code of Good Practice, Guidelines for Site-Visit and Guidelines for Experts (academic programs) provided by the Kosovo Accreditation Agency
- 4 Site-visit of the facilities
- 5 Additional document (List of equipment) provided on 10<sup>th</sup> of July
- 6 The response of UP, Faculty of Medicine to the draft evaluation report

### **and is the result of:**

Collegial work of experts appointed by the Kosovo Accreditation Agency.

### **Site Visit**

1. The Expert Team visited UP on Friday, April 17, and during this visit had meetings with:

- 1 Authorities of the Medical Faculty: Salih Ahmeti (Dean of the Faculty), Merita Berisha (Vice Dean for Academic Issues), Agim Begzadi (Vice Dean for Financial Issues), Shaip Krasniqi (Coordinator for Academic Development, Burim Neziri (responsible for the Study programme) and Suzana Manxhuka (Director for PhD Studies)
- 2 Faculty members responsible for the organization of the accredited programme (*pleno titulo*): Ilir Begolli, Bajram Berisha, Dashnor Nebiu, Kreshnik Hoti, Shemsedin Dreshaj, Gani Bajraktari

- 3 Representatives of academic teachers and supervisors involved in the programme
- 4 Representatives of PhD students

The Expert Team (ET) wishes to acknowledge here the openness and good will of the Faculty Managers and Programme Organizers who created a nice working atmosphere during the meeting.

## **B: THE PROGRAMME OF STUDY: PHD IN EXPERIMENTAL BIOMEDICINE**

### **1.: Academic programme and student management**

#### 1.1 Accreditation History:

The PhD programme in Experimental Biomedicine had been created as an outcome of the Tempus project (159034-TEMPUS-2009-XK-JPHES for “Education, Research and Training in Medical and Natural Sciences”) , in cooperation with partners from the University of Ghent, the University of Edinburgh, the University of Vienna and the University of Graz. Primary accreditation for the programme was granted in 2012. On the one hand, the programme currently subjected to accreditation can be regarded as a continuation of the programme, mentioned above (acc. to the statement from SER). On the other hand, the fact that the Tempus project had been finished should open the possibility for looking at the programme from a new perspective, without formal restrictions imposed by the previous project.

With regard to the questions raised in the former Accreditation Report in relation to admission procedure, staff employment, their development and international cooperation, they have been answered adequately. However, the two aspects, mentioned in this Report, namely: the proper assurance of financial resources for research activities of PhD candidates and their mobility, as well as unrealistic expectations regarding the publication of research paper one semester after defining the topic of research are still not fully clarified (see below).

#### 1.2 Relation to institutional mission and labor market

The PhD programme in Experimental Biomedicine reflects the UP strategy for development of research and researchers and complies with the national policy in this field. It is understood that the programme will produce future employees mostly for the University itself and for pharmaceutical industries in the region.

#### 1.3. The curriculum in comparison to international standards

The formal length of the programme (3 years) stays within the limits recommended in Europe for doctoral programmes (3-4 years according to Salzburg Principles). The latter however specify that such a period should apply to PhD candidates engaged in research on a full time basis. This is not the case with the PhD candidates currently enrolled in the evaluated programme, who, at the same time, carry out other duties as university assistant or clinical residents. In this situation it is very difficult to learn new methods, plan and perform research, write and publish papers, prepare and defend the final thesis within declared 3 years. This is evident by the fact that none of the PhD candidates initially admitted to the programme has defended the thesis until now.

The authorities of the Faculty of Medicine should then consider either extension of the programme, or recruitment of candidates free of other obligations.

The general construction of the programme does not expose adequately the research activities of PhD candidates. The first two semesters are filled with courses accompanied by various forms of theoretical assessments including final exams. That leaves too little time for engagement of candidates in their own research. And without such time, it is hardly possible to present a thesis proposal as expected in the third

semester. And it is even less possible to have results ready for publication in the fourth semester.

The comparison of the evaluated programme with “European programmes” as presented in SER on page 10 is rather superficial and not quite accurate, because other programmes (including those of the Tempus partners) define main themes of research (instead of study disciplines), devote much less time to the teaching component and do not use ECTS points to measure the PhD candidates’ workload related to research.

All the courses listed are elective and PhD candidates should choose 3 of them in each semester, from the module (corresponding to their disciplines of studies), to which they are prescribed. Contrary to that, it is commonly accepted in European PhD programmes to offer core courses which are mandatory for all PhD students plus elective courses to be chosen depending on the field of research. In particular all PhD students should learn: methodology of research, ethics of research, informatics, statistics and project management. In addition, all of them should practice critical analysis of data, participate in discussions and forming opinions. In view of this it is recommended to distinguish from the existing list of courses the core set which will be mandatory and should include: Methodology of Research, Medical Informatics, Statistics (Biostatistics), Ethics of Research, Intellectual Property Rights and Project Management, as well as Journal Club. The workload of the core courses should be reduced to the equivalent of 30 ECTS. The Journal Club should be continued throughout the whole period of studies. Also the consultations with professors which seem to be related only to courses in the 1<sup>st</sup> and 2<sup>nd</sup> semesters should be continued during the next semesters, as consultations with respective supervisors. In addition, the curriculum should include doctoral seminars which will give students an opportunity to present their research data and discuss further work within the specific projects.

Since graduates from medicine, dentistry, pharmacy and veterinary medicine may need upgrading of their knowledge in basic sciences it would be desirable to enrich the offer of courses with: Cell Biology, Biochemistry, Genetics and Molecular biology. Many programmes at other universities contain introductory lectures comprising various medical research topics that are successfully carried out by the research groups at the respective institutions. Such lectures may facilitate the identification of the field which a student will choose for his/her research.

The content of the course on Ethics (no need to call it “Proper ethics”) should focus on ethics of research (including trials on patients and work with animals) but not on doctor-patient relationship.

The curriculum does not underline properly a practical engagement of PhD students in laboratory techniques. Experts were told that laboratory training is covered by “exercises”, but this is not evident, because exercises are mentioned also in courses which have no laboratory component (Ethics, Informatics, Intellectual Property). Therefore laboratory rotations should be explicitly indicated in addition to the courses concerned.

The training in transferable skills is not adequately addressed, although some elements of it can be found in courses on Project Management and in Journal Club (provided that PhD candidates choose these courses).

### **Recommendations:**

- 1 The authorities of the Faculty should consider either extension of the programme

or recruitment of candidates free of other obligations

- 2 The existing courses should be divided into mandatory core courses including: Methodology of Research, Medical Informatics, Statistics (Biostatistics), Ethics of Research, Intellectual Property rights and Project Management, plus Journal Club and elective (remaining) courses providing knowledge in selected fields. The workload of the core courses should be reduced to the equivalent of 30 ECTS.
- 3 The Journal Club should be continued throughout the whole period of studies.
- 4 Consultations with respective supervisors during 3rd, 4<sup>th</sup> and 5<sup>th</sup> semesters should be formally indicated in the curriculum.
- 5 The list of courses should be enriched by some courses related to basic sciences like: Cell Biology, Biochemistry, Genetics and Molecular Biology.
- 6 The curriculum should include doctoral seminars which will give students an opportunity to present their research data and discuss further project work.
- 7 Laboratory rotations should be explicitly indicated in the context of the courses concerned.
- 8 The content of the course on Ethics should be altered focusing on ethics of research, not on doctor-patient relationship..
- 9 More attention should be paid to training in transferable skills.

#### 1.4. ECTS credit points .

It is not required in Europe to use ECTS points as a measure of the workload in PhD studies, although it is not forbidden either. Most commonly ECTS points are used only for the teaching component, to facilitate the comparison of courses taken in other places. The research component of PhD studies (particularly the one based on experiments and bench work) is generally regarded as “immeasurable” in terms of the working hours.

It is understood that usage of ECTS points in the evaluated programme is imposed by the UP Regulations for Doctoral Studies. In practice however the stress on credit points somehow distorted the overall conception of the programme which has been perceived as a process of “collecting the ECTS points” (see SER), instead of performing the original research leading to the creation of the new knowledge.

It would be recommended to re-consider the University Regulations regarding the ECTS points in PhD studies, taking into account the specific requirements of research in life sciences.

#### **Recommendation:**

- 1 University Regulations regarding usage of ECTS in relation to bench research in life sciences should be re-considered

#### 1.5 Course description, methods of teaching and assessment

The courses are described according to the new rules in terms of learning objectives and outcomes, although their meaning is not always clear (a matter of translation?). Sometimes learning objectives and outcomes do not match the title of courses (e.g.,

Methodology of Scientific Research, Transplantation and Organ Failure).

The methods of teaching and assessment do not reflect the specificity of the doctoral studies and simply reproduce models used in studies of the 1<sup>st</sup> and 2<sup>nd</sup> cycles. In order to expose research related activities, it would be better if the term “self-learning” or “e-learning” were replaced by “own research” or “new data generation” or “searching for data”. With few exceptions, teaching methods are simply “copied and pasted” without relevance to the subject. “Seminars, interactive discussion and workshops” are not the best methods to learn technical skills (methods). The courses related to laboratory techniques lack referral to laboratory practice, with indication of the relevant laboratory.

Assessment focusses chiefly on theoretical knowledge, laboratory work is seldom mentioned. Students are overloaded with multiple assessments related to single courses (even Journal Club ends with exam – on what?). Instead of preparing for four types of evaluations, students should be requested to demonstrate their ability to use specific techniques, to handle the animals, to perform the reaction etc. (depending on the course). The abilities of students to present their research data, possibly in different formats (oral, written, power-point presentation, posters, etc.) and to participate in the discussions should be also assessed

**Recommendation:**

- 2 The descriptions of course should be modified according to the research components of the studies
  - 3 The amount of assessment procedures per course should be reduced and assessment of practical skills should be introduced.
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1.6 Thesis requirements and assessment :

The entire process of project acceptance (by scientific and ethical committees is described in the UP Regulations for Doctoral Studies. Before presenting a thesis, the student is required to publish at least one scientific paper in a peer reviewed journal. The thesis has to be evaluated by 3-5 members of the committee including one reviewer from abroad. Because of that the thesis has to be written in English. After positive evaluation of the thesis, the student is eligible for the oral defence.

All the described procedures comply with the European practice and, to a large extent, also with the ORPHEUS/AMSE/WFME Standards.

The only problem mentioned by PhD students at the meeting with the ET is the long time which it takes to collect all these approvals and decisions (several months between the thesis proposal submission and forming of the committee for its approval). This is in disagreement with the above cited Regulations and should not be acceptable. We recommend that immediate actions are taken to reduce such bureaucracy.

**Recommendation:**

Immediate action should be taken to reduce bureaucracy related to the thesis proposal

submission, evaluation and acceptance.

### 1.7 Students' admission

The admission criteria are transparent and based on correct criteria. It is however not quite clear whether the given number of 10 students applies to the whole program, or to each study year. If the latter were the case, then it would be difficult to accommodate all students in relatively small laboratories (see below) even when they choose different ones.

## **2. STAFF**

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The list of University staff involved in the programme contains 14 full time employees with PhD degree (including 3 professors), 4 part time PhD holders plus 4 visiting professors. The full time staff represents faculties of medicine/dentistry and pharmacy, while the part time staff belongs to veterinary medicine and natural sciences.

The above numbers of staff can assure an adequate supervision of PhD candidates, even in conditions that one mentor (supervisor) cannot be responsible for more than 2 candidates.

According to the UP Regulations for Doctoral Studies academics undertaking the role of supervisors for the first time should pass the appropriate training. The exact nature (topics) of this training was not clarified during the meeting with teachers.

It seems however that it is the teaching role with which the staff members chiefly identify themselves (out of 7 staff members present on the meeting only two were supervisors).

### **Recommendation:**

- 4 Staff training including not only supervisors, but also other teachers involved in the programme should address the specificity of the III-rd cycle which may require resignation from the traditional methods of teaching and assessment and adoption of new methods.

## **3: RESEARCH AND INTERNATIONAL CO-OPERATION**

### 3.1 Research:

The staff members employed in the Faculty are involved in research. The publication list of the academic staff of the Faculty of Medicine is included in SER. It presents 150 entries, but is not prepared carefully enough since there are around 30 entries listed repeatedly (one of them even 4 times).

The list shows a high content of topics related to public health, but during the site meeting the following areas were indicated as an institutional strength: respiratory system, physiology, pathology, pharmacology. These fields are mostly represented in courses offered within the evaluated programme.

SER includes also the list of various research projects in which the Faculty staff is

involved. Although none of them extends beyond the year 2015, the ET was assured during the site visit, that funding of these programmes is automatically prolonged by the Ministry.

### 3.2 Internationalisation:

Since the evaluated programme has been developed within the Tempus project, some international relations with the project partners have been established from the very beginning. These are being used now for sending PhD students to laboratories of all partners for at least 3 months. Some students get then extension of the stay for 6 months or 1 year. Others are invited to come again.

In addition to that, other possibilities for PhD students emerged from meetings with visiting professors or private contacts of their supervisors. Thus, besides Ghent, Vienna and Edinburgh the list of international sites ready to host the students from the programme includes also Milano and Bordeaux.

Besides the Tempus project UP was also involved in two international research projects, one funded by EU, the other one by WHO, but both are finished by now.

### 3.3. Students involvement in research and cooperation.

At the meeting with the ET only 3 PhD students appeared, which does not allow to draw conclusions regarding the whole group. All attendees had been three years in the programme, but none has defended the doctoral thesis (one seemed to be close to it). All of them have had opportunity to spend some time performing research abroad. Whereas such a stay is undoubtedly a crucial step in the development of a student's research skills, two problems were noticed. The first was that in principle students were joining projects already carried out in hosting laboratories and sometimes were not eligible to use the results obtained for their own thesis. The second problem was that experiments performed abroad could not be continued at home due to lack of the equipment needed. Such situations may require more careful planning of stays abroad by local supervisors and intensification of attempts to create joined degrees.

Despite of these difficulties all three students expressed their satisfaction from the stays abroad as well as from friendly attitudes of the staff met.

It has been noticed that PhD students are not represented in statutory bodies dealing with their affairs: the Central Doctoral Studies Council or the Doctoral Study Councils at Faculty levels. This is in disagreement with the rules of the Bologna process.

### **Recommendations:**

- 5 The stays of students in laboratories abroad should be carefully planned by local supervisors from the perspective of the students' thesis and intensive efforts to



create joined degrees should be undertaken.

- 6 Representatives of PhD students should be co-opted to Doctoral Study Councils (but not to evaluation committees).

#### **4.. Finances and Infrastructure:**

##### 4.1. Finances:

UP is a public institution financed by the government and the budget of the Faculty of Medicine is under the control of the University. Budgetary sovereignty for the Faculty of Medicine, either within the University of Prishtina or in form of a separate Medical University that may also include the Medical Centre, may be strongly considered, to facilitate financial planning, purchasing of necessary equipment and reagents, reducing processing times, etc.

With respect to the research within the evaluated programme, SER states that it will be supported by UP projects, Ministry of Education, Science and Technology of Kosovo and other international organizations. The fees required from PhD students (1000 Euros) are not mentioned in this context.

The financial plan for the PhD Program of Experimental Biomedicine is thus rather vague. During the meeting with the ET, professors involved in the programme stated that support for reagents is very limited and may affect the research work of students within the program. Students have the opportunity to apply annually for monetary research support from the Ministry, but typically only few students obtain such grants. It is clear that funds for reagents are indispensable to perform the experimental studies required for the thesis. This requirement is stated in Article 4.8 of criteria and procedures for the accreditation of programs leading to the award of Doctoral degrees and must be fulfilled.

There is an urgent need to guarantee more funds for the laboratory work from the Ministry. UP should also look for possibilities of co-funding the research by local pharmaceutical industry.

##### **Recommendations:**

- 1 Budgetary sovereignty for the Faculty of Medicine, either within the University of Prishtina or in form of a separate Medical University that may also include the Medical Centre, may be strongly considered, to facilitate financial planning and purchasing of necessary equipment
- 2 There is an urgent need to guarantee more funds for the laboratory work from the Ministry. UP should also look for possibilities of co-funding the research by local pharmaceutical industry.

##### 4.2. Space and equipment

Enough space for teaching component of PhD studies is guaranteed by the UP (lecture hall and seminar rooms). The facilities for research are provided by the Kosovo Interdisciplinary Knowledge Triangle Center (KIKTC) established within the already mentioned Tempus project. The Center consists of the four laboratories:

- 1 Experimental Laboratory of minor surgery intervention and isolated organs
- 2 Respiratory physiology and patophysiology unit
- 3 Laboratory for Clinical sPharmacology
- 4 Immunohistochemistry and microscopy unit.

Laboratories are equipped with most essential and modern devices. Their space has not been specified but they are relatively small and one cannot imagine more than two PhD students working in each of them.

In addition to these laboratories, PhD students have access to other laboratories in the Institute of Anatomic Pathology of the Medical Faculty, the Department of Microbiology and Department of Hygiene in the National Institute of Public Health or in the Hospital clinics.

## **5. Quality management**

The quality assurance mechanisms in the UP are based on evaluation of teaching by students' questionnaires. However, the ET was informed that no feedback is given to the teachers who were evaluated. This makes the evaluation much less useful.

The questionnaires for PhD programme evaluation by students should include different criteria than those used in Bachelor and Master studies. The quality of supervision, availability of consultation with other experts, access to laboratory facilities, opportunity for international mobility constitute more important characteristics of a doctoral programme than the quality of teaching.

An additional important and convincing quality control measure would be to follow up future activities and employments of graduates.

### **Recommendations:**

- 1 The results of students' evaluation questionnaires should be communicated to evaluated teachers
- 2 The questionnaires for PhD programme evaluation by students should be modified reflecting specificity of the doctoral studies

### **FINAL SUMMARY AND ACCREDITATION CONCLUSIONS:**

The Programme for PhD in Biomedicine has numerous, but not irreparable deficiencies. In the response to the draft evaluation report, UP Faculty of Medicine agrees to the recommendations of the expert team, but the approval of the Senate is required for many of the changes necessary. Furthermore, the total number of ECTS for courses

seems to be too high, while the time for own research is not indicated. We therefore recommend conditional accreditation of the programme in Biomedicine for three years and for 10 students (per 3 years) . The conditions for programme approval are adequate corrections/resolutions of the following points within 6 months:

1. The authorities of the Faculty should consider either extension of the programme, or recruitment of candidates free of other obligations.
2. The existing courses should be divided into the mandatory, core courses including: Methodology of Research, Medical Informatics, Statistics (Biostatistics), Ethics of Research, Intellectual Property rights and Project Management, plus Journal Club and elective (remaining) courses providing knowledge on selected fields. The workload of the core courses should be reduced to the equivalent of 30 ECTS.
3. The Journal Club should be continued throughout the whole period of studies.
4. Consultations with respective supervisors during 3rd, 4th and 5<sup>th</sup> semesters should be formally indicated in the curriculum.
5. The list of courses should be enriched by courses related to basic sciences like Cell Biology, Biochemistry, Genetics and Molecular Biology.
6. The curriculum should include mandatory doctoral seminars which will give students an opportunity to present their research data and discuss further project work.
7. Laboratory rotations should be included during the first year and explicitly indicated in addition to the courses concerned.
8. The content of the course on Ethics should be altered focusing on ethics of research and not on doctor-patient relationship.
9. More attention should be paid to training and assessment of transferable skills.
10. The description of courses should be modified by underlining the time for laboratory work and the research component.
11. The amount of assessment procedures per course should be reduced and assessment of practical skills should be introduced.
12. Immediate action should be taken to reduce bureaucracy related to thesis admission, evaluation and acceptance.

13. Staff training including not only supervisors, but also other teachers involved in the programme should address the specificity of the III-rd cycle which may require resignation from the traditional methods of teaching and assessment and adoption of the new ones.
14. The stays of students in laboratories abroad should be carefully planned by local supervisors from the perspective of students' thesis and intensive efforts to create joined degrees should be undertaken.
15. Representatives of PhD students should be co-opted to Doctoral Study Councils (but not to evaluation committees)
16. There is an urgent need to guarantee more funds for the laboratory work. These funds should be secured for each student prior to his/her acceptance into the programme.
17. The results of students' evaluation questionnaires should be communicated to the teachers who have been evaluated.
18. The questionnaires for PhD programme evaluation by students should be modified reflecting the main aspects of the doctoral studies.

Additional points to be considered, but not essential for the current re-accreditation):

1. University regulations regarding usage of ECTS in relation to bench research in life sciences should be re-considered.
2. Budgetary sovereignty for the Faculty of Medicine, either within the University of Prishtina or in form of a separate Medical University that may also include the Medical Centre may be strongly considered, to facilitate financial planning and purchasing of necessary equipment.
3. UP should also look for increased funding for laboratory work from the ministry and possibilities of co-funding the research by local pharmaceutical industry.