



**REPORT  
of the Expert Panel  
on the  
RE-ACCREDITATION OF  
THE FACULTY OF PHARMACY AND BIOCHEMISTRY,  
UNIVERSITY OF ZAGREB**

**Date of the site visit:  
2 - 3 March 2015**

March, 2015

## 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>
ADVANTAGES OF THE INSTITUTION .....	7
DISADVANTAGES OF THE INSTITUTION.....	7
FEATURES OF GOOD PRACTICE.....	8
RECOMMENDATIONS FOR IMPROVEMENT .....	9
<b>DETAILED ANALYSIS OF INSTITUTIONAL COMPLIANCE TO THE STANDARDS AND CRITERIA FOR RE-ACCREDITATION.....</b>	<b>12</b>
Institutional management and quality assurance .....	12
Study programmes .....	13
Students.....	14
Teachers.....	15
Scientific and professional activity .....	15
International cooperation and mobility.....	16
Resources: administration, space, equipment and finances .....	17

## INTRODUCTION

This report on the re-accreditation of the Faculty of Pharmacy and Biochemistry, University of Zagreb 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 operating 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 programmes.

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 Peter Hylands**, Institute of Pharmaceutical Science, King's College London, United Kingdom of Great Britain and Northern Ireland
- **Professor Sven Frøkjær**, Faculty of Health and Medical Sciences, University of Copenhagen, Kingdom of Denmark
- **Professor Vera Vlahović-Palčevski**, Faculty of Medicine, University of Rijeka, Republic of Croatia
- **Professor Ernest Meštrović**, Pliva, Research and Development, Republic of Croatia
- **Andrea Markovinović**, student, Department of Biotechnology, University of Rijeka, Republic of Croatia.

In the analysis of the documentation, the site visits and writing of the report the Panel was supported by:

- mr. sc. Sandra Bezjak, coordinator, Agency for Science and Higher Education,
- Ksenija Anić, translator during the site visit, and
- Vlatka Derenčinović, translator of the report, Agency for Science and Higher Education.

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

- The Management,
- The Working Group that compiled the Self-Evaluation document,
- The students,
- The Heads of the study programmes,
- The Teachers,
- The Heads of research projects, and
- Teaching assistants and junior researchers.

The Expert Panel also had a tour of the classrooms, laboratories, library, student register desk at the The Faculty of Pharmacy and Biochemistry, University of Zagreb, where they held a brief question and answer session with the students who were present.

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 licence** 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 Faculty of Pharmacy and Biochemistry, University of Zagreb**

ADDRESS: **Ulica Ante Kovačića 1, 10000 Zagreb**

NAME OF THE HEAD OF HIGHER EDUCATION INSTITUTION: **Professor Jerka Dumić**

ORGANISATIONAL STRUCTURE: 15 Departments, 2 Centers, 11 independent courses and support services.

LIST OF STUDY PROGRAMMES:

- Integrated undergraduate and graduate university study programme in *Pharmacy*
- Integrated undergraduate and graduate university study programme in *Medical Biochemistry*
- Postgraduate specialist university study programme in *Clinical Pharmacy*
- Postgraduate specialist university study programme in *Dermatopharmacy and Cosmetology*
- Postgraduate specialist university study programme in *Drug Development*
- Postgraduate specialist university study programme in *Medical Biochemistry and Laboratory Medicine*
- Postgraduate specialist university study programme in *Molecular Diagnostics*
- Postgraduate specialist university study programme in *Pharmacogenomics: A new Approach to Optimizing Therapy*
- Postgraduate specialist university study programme in *Phytopharmacy and Dietotherapy*
- Postgraduate specialist university study programme in *Toxicology*
- Postgraduate doctoral university study programme in *Pharmaceutical-Biochemical Sciences*.

NUMBER OF STUDENTS: 944 full time undergraduate students and 204 postgraduate students.

NUMBER OF TEACHERS: 52 full time teachers appointed into scientific-teaching grades.

NUMBER OF SCIENTISTS: 51 full time researchers.

TOTAL BUDGET: 34, 582,577.00 kuna.

MSES FUNDING: 92%

OWN FUNDING: 8%

#### SHORT DESCRIPTION OF HIGHER EDUCATION INSTITUTION:

Teaching of pharmacy at the University of Zagreb began in 1882 with the establishment of the Pharmaceutical Scholarly Course at the Faculty of Philosophy of the University of Zagreb. The Department of Pharmacognosy was founded in 1896. In 1928, the Division of Pharmacy at Faculty of Philosophy was established and finally Faculty of Pharmacy University of Zagreb was established in 1941. The Faculty changed its name in 1963 when it became The Faculty of Pharmacy and Biochemistry, University of Zagreb. Currently it delivers 11 study programmes at undergraduate and postgraduate level.

## **CONCLUSIONS OF THE EXPERT PANEL**

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

1. The Faculty of Pharmacy and Biochemistry, University of Zagreb has a long and impressive history in providing education in the pharmaceutical sciences. Currently it provides a suite of attractive study programmes which are in line of the needs of Croatian society. Academic and administrative processes are adequately formalized. Based on interviews of students and staff members during the site visit, the student-teacher relationships seemed to be very good.
2. The goals, the learning outcomes and teaching and learning methods are well described in the syllabuses of the study programmes. The implementation of e-learning is progressing well – students have access to an e-learning platform known as Merlin that is highly appreciated by the students.
3. The student/teacher ratio is optimal allowing, e.g., relatively good capacity for personal supervision and mentoring by the teachers. The Faculty has a well-functioning system to monitor the quality of teaching and learning as well as, e.g., work load, and course attendance by students.
4. At the Faculty there are young, internationally orientated and capable PhD students and young researchers (with good knowledge in English) who are committed to developing the scientific quality and productivity of the Faculty. There seemed to be a positive and optimistic spirit concerning the quality improvement of the scientific efforts at the Faculty, especially among young researchers.

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

1. Despite its long history, the scientific activities and research productivity have not developed adequately for the twenty-first century. There are too many small research projects ongoing, only few research grant applications have been delivered on a yearly basis, and there is insufficient evidence of long-lasting cooperation with international research groups.
2. There has been a recent change in senior management and it is evident that strategic thinking and strategy formulation by the Faculty is in its infancy. The research strategy presented was strongly influenced by history and historical approaches and allegiances. The panel felt that the plan paid too much attention to the existing departmental structure (there are too many at the moment) which considerably distorts the management structure.
3. The Faculty of Pharmacy and Biochemistry has suffered from chronic lack of space, split on to 4 sites. This cannot promote cohesiveness or collaborative working. However, a new building is planned which will go a long way to address these problems.
4. The international profile of the Faculty is not at the level it could be both educationally and in terms of scientific research. The staff and student mobility and its support mechanisms are only in the developmental phase. There are only a few signed international

agreements with universities in Europe and elsewhere. So far the Faculty has not attracted foreign scholars or exchange students and its profile is not known enough in international academic pharmaceutical science circles. Significantly, there are no formal study courses in English for international students.

5. The current organisation structure results in a heavy administrative workload for some staff members. These administrative duties diminish the amount of time employees have for developing education and research activities.

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

1. The Faculty regularly monitors the achievements of students in the study programmes using the following indicators: number of students in the generation according to accumulated ECTS points; number of students who accumulate all ECTS points; and the number of students who drop out of their studies. A positive trend is that the number of dropout students is decreasing each year.
2. All the courses at the Faculty's homepage have uploaded detailed syllabuses, examination dates, and other necessary information.
3. The Faculty of Pharmacy and Biochemistry has created measures and awards (honourable mention, plaque and money award) for the encouragement and motivation of students. Special measurements for motivating teachers are, e.g., awards, acknowledgements and co-financing visits to scientific conferences have also been recently set up and will soon be implemented. This will give number of benefits, for example, teachers who go for professional and scientific in-service training may have reduced regular faculty activities.
4. The Faculty of Pharmacy and Biochemistry will intensify the activities with aim of getting more international scientific grant money, especially the ones from the HORIZON 2020 programme.



## ***RECOMMENDATIONS FOR IMPROVEMENT***

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

- The Faculty of Pharmacy and Biochemistry should reformulate its mission, vision and strategic goals in a more concrete and strategic way including expected outcome indicators that have to be reached and robust methods for their evaluation.
- The Faculty of Pharmacy and Biochemistry has developed a research strategy. However it is recommended that it should incorporate both short term goals and achievements (on a yearly basis) as well as long term goals and achievements (for 3-10 year period). In addition, it is felt that the strategy should be more forward looking and not simply reflect historical achievements (see comments above in Disadvantages). The research strategy has to include concrete proposals for activities which will enable the institution to reach the strategic research goals. Research priorities must also be described in Faculty's research strategy.
- The study programmes are recommended to develop in a way that they are in line of the Faculty's mission, vision and strategic goals.
- The Faculty of Pharmacy and Biochemistry should build up a functional system for monitoring and evaluating scientific activities.

### **2. Study Programmes**

- The Faculty of Pharmacy and Biochemistry has to develop its study programmes in a way that they become more comparable and competitive to those implemented at renowned European institutions.
- Each study programme must be developed based on the latest scientific discoveries. The amount of international literature as learning and teaching materials must be increased and updated.
- The Faculty of Pharmacy and Biochemistry should widen the opportunities for students to implement their learning in the context of practical situations and environments, such as through internships, business and other commercial partnerships, community services, or similar arrangements. Generally, experiential learning should be increased, as should effort to integrate traineeship into the new study program in order to fulfill EU Directive requirements.

### **3. Students**

- The Faculty of Pharmacy and Biochemistry should develop and make more use of an alumni register and collect statistical data on their employment and career. The Faculty of Pharmacy and Biochemistry should more actively maintain contact with its former students, e.g., arranging get-together seminars, informing about Faculty news and inviting former students to share their experiences in their working life.
- Student feedback, opinions and expectations must be respected and taken into account. Although mechanisms exist for the collection of students' views, the

feedback loop must be closed by ensuring that there is an adequate mechanism for reporting back to the student representatives how their opinions have improved the Faculty's practice.

#### **4. Teachers**

- The Faculty of Pharmacy and Biochemistry should make more efforts in recruiting qualified professional practice-based staff. The pharmacy profession is becoming more clinically based globally, and educational programmes must reflect this change by increasing significantly their proportion of experiential learning.
- The Faculty of Pharmacy and Biochemistry has to rationalize administrative duties and decrease administrative workload of their teaching and science staff in making the Faculty's bureaucracy structure lighter, e.g., by merging several bodies and committees.

#### **5. Scientific and Professional Activity**

- The Faculty of Pharmacy and Biochemistry should formulate its strategic research agenda, the implementation of which is monitored, evaluated and reviewed through more clearly defined milestones and performance indicators. It should benefit from external review (see the bullet below) and that by a widened stakeholder involvement, as well as being more explicit about the involvement of the various responsible bodies, and the monitoring and evaluation procedures.
- It is recommended that an international Scientific Advisory Board be established to guide in the setting of research activities, and also to monitor progress and achievement every three years.
- The Faculty of Pharmacy and Biochemistry has to strengthen interdisciplinary research within its departments and it has to cooperate much more with other scientific organizations in Croatia and abroad.
- The Faculty of Pharmacy and Biochemistry should publish more scientific articles in international peer-reviewed scientific journals. The Faculty should increase its support services for international publishing in terms of translation and support for the fees associated with publication.
- The Faculty of Pharmacy and Biochemistry needs to develop a tenure track system which motivates young researchers to take positions abroad in the knowledge their experience will be rewarded, or at least they should not be disadvantaged, should they choose to return. Career enhancement should not only depend on retirement of more senior staff.
- The research staff must be encouraged more actively to apply for large project grants funded both from domestic and international sources, including EU-research programmes (e.g., HORIZON 2020). The quantity of ambitious and innovative research projects should be doubled in the next three years.
- The Faculty of Pharmacy and Biochemistry should encourage and strengthen the research-based technology transfer of knowledge in the industry and/or public sector. The pharmaceutical industry is developing in Croatia and it is felt that there is an opportunity for much closer cooperation with industry, both in experiential

training and in education. Of particular interest is the possibility of co-operation between Faculties, perhaps with industry as well, to be able to apply to for multi-million euro grants from, for example, HORIZON 2020.

- The professors and researchers need to create more opportunities for cooperation with highly qualified international researchers. The Faculty of Pharmacy and Biochemistry researchers should make more efforts to be invited to international research networks or projects. The communication skills in academic English, already good, must be improved.
- The Faculty of Pharmacy and Biochemistry should also increase its effort to attract distinguished foreign professors and senior researchers to visit the Faculty and contribute to research courses and doctoral programmes in general.

## **6. International Cooperation and Mobility**

- The Faculty of Pharmacy and Biochemistry should enable and facilitate mobility of both students, teachers and non-teaching staff.
- Of particular interest should be joint PhD programmes (possibly international) to promote the mobility of and develop young researchers.
- One way of increasing the profile of the Faculty would be to increase the number of international conferences hosted by the Faculty of Pharmacy and Biochemistry.
- In order to appeal to students and teachers from abroad the Faculty of Pharmacy and Biochemistry should give some consideration to offering some courses, particularly those of wide European appeal such as those involving professional development, in the English language.

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

- The Faculty of Pharmacy and Biochemistry needs to increase its and study spaces. It is of particular importance to develop a library in line with international standards suitable for scientific demands of the departments, teachers and students. Wide access to on-line databases is essential.

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

## ***1. Institutional management and quality assurance***

1.1. The Development Strategy document includes strategic goals, success indicators, responsible bodies and implementation deadline. However, there were no evidences that the views of all the various stakeholders had been included in the document.

1.2. Legal documents such as internal regulations exist. However, the panel were of the view that the Institution's development is hampered by the existence of too many departments, sometimes with very few staff. There was a tendency for researchers and teachers to work in isolation (often entirely within departments) with a relatively low level of cooperation between departments. The panel was informed that the Faculty management recognises this deficiency and is planning to reduce the number of departments.

1.3. The Faculty is the only constituent of the University that offers study programmes in pharmacy and medical biochemistry: Graduate Programmes - Master of Pharmacy and Master of Medical Biochemistry, and PhD programmes in Pharmaceutical-biochemical sciences and postgraduate specialist studies. It is apparent that these programmes represent the needs of the country.

1.4. The programmes are in line with the institutional mission.

1.5. The Faculty has a range of procedures for addressing and ensuring quality, policy and operational procedures. However, the panel were not convinced that a full range of stakeholders' opinions had been included in the generation of these protocols.

1.6. The Faculty does possess mechanisms for monitoring of teaching quality which were known and understood by both the staff and students but it is not certain that improvements in teaching quality on the basis of student comments are implemented. The students were unaware of the mechanism by which their feedback was used to improve teaching quality.

1.7. It was apparent that within the Faculty the quality of research was discussed and to some extent monitored but it was felt that the implementation of research committee with a wide brief, to facilitate the apparently lacking focus on interdisciplinary research, would be beneficial.

1.8. Mechanisms for monitoring unethical behaviour exist.

## **2. Study programmes**

2.1. The Faculty of Pharmacy and Biochemistry has effective procedures for monitoring and improving the quality of study its programmes but, again, there was no evidence the views of all stakeholders had been included in their formulation. The students interviewed complained that there were too many general courses, often delivered in isolation and not integrated with the courses of other disciplines from other departments. This is a further compelling case for the reduction in the number of departments which should go some way to address this deficiency. Furthermore, with the global developments in the practice of the profession of pharmacy, there is clear need for more professional-related courses.

2.2. Enrolment quotas are in line with the needs of society.

2.3. Enrolment quotas are broadly in line with the institutional resources. In common with many university programmes, the panel noticed a significant drop-out rate at the end of the first year. This is somewhat to be expected with first year students needing to adjust to the different style(s) of teaching in the university compared with school, and the need to adapt to become independent learners as befits a university programme.

2.4. Learning outcomes are defined both at the level of individual subjects and overall programmes. A clear catalogue with precise learning outcomes was provided for both programmes.

2.5. Assessment guidelines were provided for the learning outcomes, in line with the defined different levels of expectation of both the subjects and programmes.

2.6. Calculation of the appropriate ECTS is increasingly well adjusted to actual student workload so that equivalence has more transparency but improvements are still needed.

2.7. The programme is broadly in accordance with EU Directive particularly with regard to practice-related topics but the panel had concerns that with the technical subjects, in particular the most advanced scientific developments may not have been included.

2.8. Although it was clear that that different teachers use a range of different teaching methods, there was only little evidence of student learning but this may be related to 2.9 (below) and other resource issues.

2.9. The panel noted with dismay that with the national economic situation, the Ministry had been forced into stringent economy measures. A particular harsh action which has wide impact is the government's decision to discontinue paying subscriptions in order to access electronic journal databases. This has a significant negative influence on the learning experience of students as well as research. It is obviated to some degree by individual staff members having their own private access to certain compilations but it is a significant deficiency.

2.10. A period of interneeship is included in the Master's in pharmacy programme. There is some monitoring and control on that activity by the Faculty but a perceived area for improvement is felt to be significantly increased cooperation with the pharmaceutical industry, and increased experiential learning.

### **3. Students**

3.1. The Faculty performs regular analyses of the qualifications of the students at entry. These admission criteria demonstrate that it attracts excellent candidates.

3.2. The panel noted that the possibilities for extracurricular activities were somewhat limited. This is doubtless connected with the obvious deficiency in space which will be overcome by the envisaged new building.

3.3. Students of the first and second year are assigned mentors which helps their academic progress and development but the panel felt that professional orientation processes could be improved.

3.4. It is evident that various methods of knowledge assessment are used. However, the students complained that there was inconsistency on passmarks between various modules – some had very high thresholds for passing the examinations.

3.5. Despite the fact that the Faculty does keep the contact details of its former students, the panel felt that they could improve on this - they have a great opportunity for increased benefit from these contacts, and that the use of alumni could be significantly strengthened.

3.6. The Faculty is active in informing the public, not least by its webpages (<http://www.pharma.unizg.hr/>).

3.7. Mechanisms exist so that students can express their opinions, and their representatives are included in various bodies.

3.8. On the other hand the students stated that they were unaware of any results and improvements carried out on the basis of their suggestions. This procedure needs improvement and an increased transparency.

## **4. Teachers**

4.1. Full-time qualified teachers cover core disciplines, however this could be endangered by the fact that new job positions are not opening. This is unlikely to improve without a national policy change and a redefinition of political will.

- a. The panel felt that historically there had been inadequate human resources policies regarding the personal development and growth of staff.
- b. Of particular note is the need to find a process for the development of young staff so that they are introduced to educational roles including lecturing in a structured way – this will greatly assist in their development as rounded academics.

4.2. The ratio between students and teachers complies with the the minimal criteria proscribed by law but it could be better if they want to reach best quality international standards standards.

4.3. The policies for professional development of scientific-teaching staff are *ad hoc*, and not well developed. Particularly, for example, there are some full professors who have not been able to go abroad on conferences for many years.

4.4. It is apparent that some teachers are overloaded. There is a feeling that this is an overarching problem. Currently the distribution of teaching workloads is *ad hoc*, and mostly depends on the individual arrangements in each Department. This again relates to the suggestion that some rationalisation (reduction) in the number of departments may ameliorate this situation and allow more equitable assignment of duties and responsibilities.

4.5. External commitments of employed teaching staff do not affect their obligations at the Faculty.

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

5.1. The Faculty has developed a new revised research strategy. The panel felt however that it reflected too much the obvious strengths of the past few decades and was still guided by allegiance to the historical division into a very large number of departments. As a consequence, the research priorities defined in the strategy document are too general. The panel felt that a better plan for the twenty-first century should be more cohesive, multidisciplinary and encourage collaborative working across departments. It is felt that it may be better to significantly reduce the number of departments to facilitate cooperation and multidisciplinary working. Global pharmaceutical research is becoming more translational and the panel felt that more emphasis on external collaboration, with the industry and professional practice groups, for example, would be of tangible benefit.

5.2. In planning and implementing the new research strategy cooperation with other scientific organisations, nationally and internationally, should be strengthened.

5.3. The Faculty has sufficient number of researchers to implement its research strategy.

5.4. The quality of publications is adequate.

5.5. A system for the rewarding of excellent researchers has just been put in the place but there is insufficient experience of its operation to pass comment on its suitability or operation. Staff were aware of the potential of the system but were fearful that implementation may not be achieved.

5.6. The number of publications is adequate.

5.7. A good number of projects was reported but there is an obvious lack of projects involving cooperation with the industry. There appeared to the panel to be a culture of monitoring and reporting on the number of projects as a criterion of success. The panel felt that a better measure would be to concentrate on fewer projects but each with a significantly increased monetary value, as well as being multidisciplinary and externally collaborative.

5.8. The process of technology transfer and cooperation with the industry need to be improved. Staff were only broadly aware of the potential which both the Faculty of Pharmacy and Biochemistry and the central university itself had in this respect and the service regarding intellectual property protection had not been well used yet.

5.9. Following from the comment in 5.8, it is felt important that there should be improved and increased support for professional activities, services and counselling.

5.10. The language of doctoral theses limits the potential for high quality and profile external reviewers to participate in the evaluations. The number of published articles apparently required for the award of a PhD degree seems to be quite high. Some PhD students complained about the high percentage of theoretical courses and law required to be undertaken. There may be a case for the reduction of these courses to those more directly concerned with the individual PhD topic.

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

6.1. N/A.

6.2. The lack of student mobility was a major topic of student concern. They complained that there were only few possibilities to undertake and complete part of their study abroad. It may



be a timetableing issue because although it is possible to undertake their master's thesis abroad, they cannot take the lectures and examinations because they will lose the year in Zagreb. The resolution of this problem should be a major focus of the Faculty - if it can be resolved there are many benefits: the students would benefit from a period in another country, possibly with access to specialisations that the Faculty currently lacks, there will be increased possibilities for staff interaction (addressing a research deficiency), and the student satisfaction rating will increase. Additional effort should be put to strengthen this issue.

6.3. Equally, the panel felt that efforts should be made in to increase staff mobility. Currently, few teachers had spent some time abroad.

6.4. The Faculty is a member of a number of international organizations.

6.5. The Faculty has the potential to attract international students but currently language is a severe obstacle.

6.6. In this age of internationalisation, the panel felt that the Faculty of Pharmacy and Biochemistry should try to attract an increased body of foreign teachers who would be able to bring an international aspect to the educational experience. This goal should definitely be strengthened since it is seen by the panel as significant deficiency.

6.7. The Faculty has a number of Erasmus and bilateral agreements.

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

7.1. Learning resources are appropriate for the number of students enrolled. Currently, the Faculty of Pharmacy and Biochemistry has space spread over 4 locations. This has obvious negative logistical consequences but a new building is planned which will improve the environment considerably. This rationalisation of facilities should be a major priority of the Faculty.

7.2. The Faculty appears to have an adequate number of administrators. The panel were impressed that some documents that they asked to see (including some very specifically selected examination papers) were correctly provided in a very short time indicating the existence of a robust and efficient filing and retrieval system.

7.3. However, it appeared to the panel that the excellent non-teaching staff were not well supported regarding their professional development. It was felt that policies for their development should be improved. With regard to research, the panel felt that improved administrative support of projects is needed.

7.4. The equipment available for the educational mission of the institution are adequate and fit for purpose.

7.5. With regard to institutional equipment available for leading research however it should be replaced and updated where appropriate.

7.6. The library is small but benefits from a core of dedicated and knowledgeable staff. Its operation however is hampered by the lack of current access to on-line resources (see 2.9, above). With plans for an improved new building, space and facilities for the Library should be improved in the new building and this should be seen as a priority.

7.7. With a robust intake of excellent students the panel felt that financial stability is assured.

7.8. The Faculty have not used sufficiently the potential for having own funds. This should be changed in the future. It is felt that running short courses, particularly in professional development, and perhaps those of interest to industry (specialist analytical training, for example), would provide a source of revenue which the Faculty could use for its own infrastructure and other development.