

Accreditation Report

Field of Health Sciences

University of Iceland

January 2008

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1 Introduction

1.1 The Expert Committee

Professor David Hawkins, Children's Hospital of Eastern Ontario, Department of Pediatrics, University of Ottawa, Canada, Chair.

Mrs. Margaret Lane, Former Associate Dean of Students, City University, Institute of Health Science, London, UK.

Professor Raimo Hiltunen, Dean of the Faculty of Pharmacy, University of Helsinki, Finland.

1.2 Liaison Officer

Dr. Rebekka Valsdottir, Head, International Division, The Icelandic Centre for Research – RANNIS, Reykjavik, Iceland.

1.3 Terms of Reference

The Expert Committee was appointed by the Minister of Education, Science and Culture of Iceland to review applications for accreditation of Higher Education Institutions (HEI) within the field of Health Science, and as stipulated in the *Higher Education Act, number 63/2006, cf. rules on the accreditation of HEI according to article 3 of the Higher Education Act, No. 63/2006, No. 1067/2006*.

The committee was directed to receive all applications for accreditation for Higher Education Institutions within the field of health science after September 3rd, 2007. The role of the committee of experts is to review applications and subsequent information on the basis of the national qualification framework of Iceland and rules on accreditation of (HEI) No. 1067/2006. These were provided to the expert committee and its liaison officer.

The committee was directed as follows:

The review shall include the results of evaluation using criteria's laid out in article 2 (3) (A) – (i) in the rules of the following factors:

- Objectives and roles
- Administration and organization
- Organization of teaching and research
- Personnel qualifications requirements
- Admission requirements and student rights and obligations
- Teacher and student facilities and service
- Internal quality system
- Description of study according to learning outcomes
- Finances

The review shall further evaluate the following, cf. article 3 of the rules:

- Expertise and competence in the field of study and the subdivision therein with a view to the quality of teaching and research and the appropriate facilities the dissemination of knowledge and in service to society.
- The cooperation and support of the university towards the field of research, teaching staff and experts in any particular field. The appropriate measures for the education and training of its students.
- Special attention to fields of research and any subdivision therein. Cooperation between undergraduate and graduate studies and any other appropriate expertise.
- The status of fields of study subdivisions therein on a national and international comparison with view to cooperation with other HEI's and other institutions/organizations nationally and internationally in that particular field of expertise.

The committee was directed to submit a written report before January 1st 2008. Its evaluation was to be supported by detailed and objective reasoning, and shall also include recommendations for accreditation of the specific field of study within the applicant institutions. Further it was stated that the committee would have assigned to it an assistant from the Icelandic Centre for Research in Reykjavik who will serve as coordinator for the group (letter to the Chair from the Minister of Education, Science and Culture, dated Reykjavik 03.05.2007).

1.4 Working Method

The members of the expert committee received comprehensive information from the University of Iceland (UI) through the liaison officer in the form of a CD-ROM. This information was also available on a website; however, this was not as readily navigable as had been hoped; however the CD was more than adequate for the purpose. In addition, for the application for accreditation itself, the documentation was supported by a large number of appendices. A list of these is attached, along with the itinerary for the onsite visit.

The expert committee was directed to review the application, which included Faculties of Medicine, Nursing, Dentistry and Pharmacy. Within the Faculty of Medicine there are four divisions, namely, that of Medicine itself, Physiotherapy, Radiology, and Biomedical Sciences. Within the Faculty of Nursing midwifery is a key programme offered to qualified nurses.

The members of the expert committee met for the first time in an informal setting on the evening of Sunday, October the 14th, 2007. The following day the committee spent at RANNIS discussing the conduct of the accreditation surveys and agreeing on a modus operandi. It was clear from the beginning that the areas of expertise represented by members of the expert committee did not cover all those to be evaluated during the site visit. While the field of Medicine, Nursing and Pharmacy were covered; those of Occupational Therapy, Physiotherapy, and Odontology were not. Additionally, there was no particular expertise on the expert committee in the areas of Radiology and Biomedical Sciences. Since the primary purpose of the survey

was to evaluate the educational programme and related matters such as research this was not felt to be a significant problem and, indeed, to cover all possible fields would have resulted in an unwieldy committee and process.

It was agreed that members of the committee would take the lead in discussions in their particular areas allowing that any member of the committee could participate in any of the interview sessions. This worked out very well.

There proved to be relatively little free time during the surveys of the two Universities (Akureyri and Iceland) to discuss preliminary findings. However, a full day was made available for discussion among the committee and with the liaison officer on Friday, October 19th, 2007. The major objective of this meeting was to reach a consensus on the committee's findings and recommendations and this was accomplished without significant difficulty. It was agreed that the full accreditation survey report would be a joint project among the three members of the expert committee and that the liaison officer would act as a coordinator and her office would be a central repository for drafts of the report.

1.5 Evaluation of the work process

The expert committee worked well together. The assistance of Dr. Rebekka Valsdottir from RANNIS was invaluable. It was apparent right from the beginning that the itinerary was extremely busy and compressed and that keeping on time was going to be critical. Furthermore, the itinerary was probably somewhat ambitious and it was necessary to decompress the schedule on very short notice. Dr. Rebekka Valsdottir was extraordinarily helpful in facilitating these changes, which of course were not easily arranged. For future surveys it is probably advisable to take 3 full days for the on-site survey at the University of Iceland if it is to include the entire spectrum of the Health Sciences.

2 Roles and Objectives

The function of UI is described in the *University of Iceland Act No. 41/1999*. The requirement of the first article is that the University should be a scientific institution for research and instruction which should provide its students with education to enable them to pursue independent scientific projects and to serve in various capacities throughout Icelandic society (*The University of Iceland Act: Chapter I, Article 1, paragraph 1*).

UI shall also provide continuing education for those who have completed a university degree, disseminate information to the public and provide service to society through its knowledge, as provided for in detail in the Act and other rules, which apply to the institution. (*The University of Iceland Act: Chapter I, Article 1, paragraph 2*).

Goals and objectives of UI are described *e.g.* in the *Summary of Policies* approved by the University General Forum and the *University of Iceland Policy 2006 – 2011*, including the principal objectives: (1) outstanding research, (2) outstanding tuition and (3) outstanding administration and support services.

In January 2007 the Ministry of Science, Education and Culture and UI signed a contract concerning education and research for the next five years. The agreement is

largely based on the Policy of the *University of Iceland for 2006-2011* and on the *Policy of the Science and Technology Policy Council*. This agreement sets forth the University of Iceland's primary emphases for the term of the agreement. The shared objectives of the parties to the agreement are to guarantee the quality of teaching and research at UI and to promote ambitious future development of the School's operations during the term of the agreement. The agreement provides new funding for an expansion of research activity and post-graduate education.

2.1 Faculty of Medicine

The purpose of the Faculty of Medicine is to graduate medical doctors who are able to carry on training as doctors with organized guidance and supervision and who have not lost any opportunities concerning the choices of further studies. In other words, the Faculty intends to produce an undifferentiated physician who is able to pursue any particular specialty or subspecialty thereafter. Thus the graduate possesses clinical skills and a general understanding and overview of the basic subject areas of medicine on a par with the standards of neighboring countries.

Included in the goals of the Faculty of Medicine are the education and training of physiotherapists, radiographers and biomedical scientists for the country.

2.2 Faculty of Nursing

As stated in the section in Nursing, nursing and midwifery education are considered essential to Iceland society and are particularly supported. Nursing also has a document entitled *Faculty of Nursing Policy 2006-2011*. In this document the vision stated is that "*in order to serve Icelandic society as well as possible, the University of Iceland Faculty of Nursing has set itself the long-term objective of being a progressive, vigorous Faculty, which carries out research of the highest quality, as well as providing outstanding training*" Further the Faculty aims to strengthen research in nursing and midwifery by promoting high-quality clinical care and prevention. Faculty members plan to strengthen their participation in multidisciplinary and international research projects. The Faculty of Nursing is stated to be a *democratic* and *progressive* Faculty based upon strong academic leadership. The Faculty has strong ties both within the University of Iceland and outside, and is formally involved in University administration. A key aspiration of the Faculty is to enhance the working environment, and nurture further the Faculty's role as a leader of knowledge creation and its application.

The Faculty of Nursing policy clearly states their vision, values and objectives commensurate with the aspirations of the UI. (University of Iceland, Faculty of Nursing Policy 2006-2011). It is recognised that to achieve high quality research in nursing and midwifery of a global standard improved research facilities, stronger doctoral studies and increased collaboration with higher education institutes research bodies and healthcare institutes are essential.

Meeting society's needs for nurses and midwives educated to a global standard requires outstanding tuition and good conditions for study and objectives are clearly set by the Faculty of Nursing to achieve this. In response to Iceland's shortage of nurses the graduate intake has been increased from 75 to 105 in 2007. However, as identified by the Faculty and observed in practice there is a need for better conditions for students and faculty. One of the constraining factors for the Faculty of Nursing is

the allocation of funding by the UI. There appears to be an inequitable distribution of funding for teaching in the Faculty of Nursing in comparison to other health science provision. This can result in staff not being able to provide up to date problem based teaching to students. For example, the skills laboratory has dated equipment in its poor space that limits opportunities to enrich the curriculum that faculty are clearly mindful of. Many have studied overseas and experienced skills laboratories superior to those they use and are conscious of the impact this has on the quality of the education they deliver.

The partnership and collaboration between the UI and Landspítali University Hospital (LSH) is a critical component of enriching the educational milieu for healthcare students. The integration of the University and Hospital continues to evolve and service, teaching and research are key aspects of this that is steadily increasing. Close relationships and strategic planning between both parties working on the plans for the new hospital will be integrated into the UI objectives. The Faculty of Nursing embraces the proposals although some anxieties were voiced regarding the UI restructuring process.

2.3 Faculty of Odontology

The Faculty of Odontology (Dentistry) produced a policy and vision document dated 2006 – 2011 which states *“The role of the University of Iceland Faculty of Odontology is to train students in dental and oral science and thus to promote improved oral and dental health among the people of Iceland. It is also the role of the Faculty of Odontology to: pursue research and to promote creation of knowledge through post-graduate study programs; to provide continuing education and lifelong learning for dental professionals; to be in the forefront of providing guidance to the authorities on dental health; and to educate the public.”* The document goes on to note that both staff and students of the Faculty have been involved in the policy formulation. The Faculty is unusual, not only for its small size but also for the fact that includes a hospital-type clinic providing oral healthcare, combined with the training of students, research and service to the public. It participates in international research projects and student exchanges.

2.4 Faculty of Pharmacy

The Faculty of Pharmacy provides education in pharmacy and pharmaceutical sciences. The purpose of its Institute is to promote research and teaching in the rational use of medicines and pharmaceutical policy in Iceland and internationally.

The goal of the Faculty of Pharmacy at UI is to further knowledge in pharmaceutical sciences in Iceland, through quality education and research on par with the best found among Western universities offering pharmacy and pharmaceutical sciences.

In the application the Faculty of Pharmacy clearly states its objectives and roles in academic targets (*Policy - Faculty of Pharmacy, University of Iceland: 2006–2011*). The Faculty policy emphasizes teaching and research as a basic task along with societal interactions *e.g.* an interdisciplinary cooperation in the healthcare sector and international cooperation. As core values, the Faculty states, among others, impressive research, effective instruction, democratic procedures and fruitful relationships with collaborative institutes and companies. In the goals and action plan for the years 2006 – 2011 the Faculty emphasizes its intention to strengthen research within the Faculty.

In the action plan, targets are clearly set up and described. The Faculty also emphasizes teaching. In the action plan the Faculty's intention is to strengthen teaching facilities, increase the number of students and enlarge the supply of elective courses. Also in the cases of teaching the development areas are clearly depicted.

2.5 Conclusion

Function and goals have been set down in good accordance with Article 2 of the *Higher Education Institution Act No. 63/2006*. The opinion of Expert Committee (EC) is that *Application for Accreditation of Pharmacy, Medicine, Nursing and Dentistry* meets the requirements.

3 Management and Organization

The UI application has a clear description of the administrative structure and organization of UI in accordance with the University of Iceland Act No. 41/1999 and the rules (*cf. Rules for the University of Iceland No. 458/2000*) established by the University Council on the basis of this law. Administratively, UI is under the jurisdiction of the Ministry of Education, Science and Culture but has full autonomy in its activities. As a state institution the University is subject to the requirements in Icelandic law and regulations that pertain to the public sector, viz., the Act on the Rights and Obligations of State Employees, the Act on the Equal Status and Rights of Woman and Men and the Competition Act (*cf. the Legal Framework of Public Universities*).

According to the *Higher Education Institution Act No. 63/2006* (article 2, paragraph 3) the autonomy of the University and its self-determination in internal affairs are based on a few basic principles e.g. the principle of the autonomy of universities, and the principle of subsidiary in university activity. On the basis of these two principles, it is stipulated in *Act No. 41* (article 2, paragraph 3) that, before any laws or rules which affect the University or University Institutes are changed or supplemented, the University Council must seek the opinion of a University General Forum concerning the amendments or additions, as well as on any innovations.

The application clarifies the organization of the administration at the University. According to the *University of Iceland Act no. 41/1999* (article 2, paragraph 2) the governance of the UI is entrusted to the University Council, the Rector, the Faculty Forum and Deans. The Rector of the University is the head of the University administration and serves as the President of the University Council. The Rector is appointed by the Minister of Education, Science and Culture on the nomination of the University Council. The University Council is the highest decision-making body within the University.

The Higher Education Act no. 63/2006, the University of Iceland Act no. 41/1999 and, especially, *the Rules for the University of Iceland no. 458/2000*, contain the fundamentals of the policy formulation carried out in the last few years, such as the composition and role of the University Council, the University General Forum, the role of the Rector and Deans, organization of institutes, the administration of University, etc., including *inter alia*: *Code of Ethics, Human Resources Policy, Environmental Policy* and *Policy against Discrimination*.

In the UI application the structure and administration bodies of faculties, departments and institutes is plainly detailed. According to the *University of Iceland Act no. 41/1999 (article 9)* Faculties, which are autonomous in their own affairs, are the basic units of the University. Each Faculty has a Faculty Forum (*University of Iceland Act no. 41/1999 (article 10)*) which has decision-making power under the under the guidance of the Dean.

3.1 The Organization of the Field of Health Sciences

The field of health sciences includes the Faculties of Nursing, Pharmacy, Medicine and Odontology. The four Faculties have independent management and administration. Each Faculty has unhindered powers to decide on internal matters. The Faculty of Nursing is located at Eirberg, Eiríksgata 24, and the Faculty of Pharmacy in Hagi, Hofsvallagata 53, and the Faculty of Medicine and the Faculty of Odontology in Læknagarður, Vatnsmýrarvegur 16.

- The Faculty of Nursing provides education in nursing and midwifery.
- The Faculty of Pharmacy provides education in pharmacy and pharmaceutical Sciences.
- The Faculty of Medicine is divided into the following departments: Department of Medicine, Department of Physiotherapy and Department of Radiology and Biomedical Science.
- The Faculty of Odontology provides education in dentistry as well as courses for dental assistants and dental technicians.

All the Faculties offer undergraduate and postgraduate studies.

Fields of instruction within the Faculty of Medicine are distributed among the departments according to the decision of the Faculty Council. Each department is entrusted by the Faculty Forum with responsibility for issues pertaining to the fields of study within it; the department determines the content and organization of instruction and examinations, determines the distribution of instruction among individual instructors within the department and makes proposals to the dean regarding the appointment of sessional instructors as well as on necessary allocations of funds and new positions.

In the Faculty of Nursing, Faculty of Pharmacy and Faculty of Odontology, each respective Faculty Forum is responsible for issues pertaining to the fields of study within it; the Faculty Forum also determines the content and organization of instruction and examinations. The Faculty Forum and the Faculty Council make proposals to the dean regarding the appointment of sessional instructors as well as on necessary allocations of funds and new positions.

The University administration is divided into two parts. On the one hand, there is the central administration; on the other, the administration of Faculties. The UI accreditation application describes both the central administration level and the level of administration of Faculties. The UI application illustrated by a detailed organizational chart clarifies the role of the central administration and its six divisions (Operations and Resources, Finance, Human Resources, Academic Affairs, Science and Research and Marketing and Public Relations).

According to the *Policy - Faculty of Pharmacy University of Iceland 2006–2011* the Faculty of Pharmacy plans to increase administrative efficacy and create a positive and ambitious working environment. A strong Faculty Office and centralized administration will bolster an effective Faculty management. Administration of the Faculty will be conducted according to democratic ideals. Along with setting clear goals for itself, the Faculty will adopt efficient management methods and ensure proper communication, noting the importance of contributing to a positive, encouraging working environment. The Faculty of Pharmacy is starting to demonstrate ambitiousness on behalf of both its personnel and its students. Since 2006 the Faculty of Pharmacy has had a policy for strengthening the Faculty Office and is composed of documents defining working practices and regulations.

The Research Institute for Pharmaceutical Outcomes and Policy is an impartial and independent research and teaching institution operated by UI and is managed on the basis of *Regulation No. 345/2007* with later changes. The staff of the institute consists of a manager, the faculty members of the Faculty of Pharmacy and collaborating partners within the University and in the field of pharmaceuticals. The institute operates under the auspices of the Faculty of Pharmacy and is located there.

The Institute for Nursing Sciences is a co-operative project between the Faculty of Nursing and LSH which aims to encourage and support research in nursing and midwifery sciences. The faculty teachers and nurses and midwives in the hospital work collaboratively to initiate and maintain clinical and educational research projects. The Institute is based in the Faculty of Nursing and offers research facilities and is overseen by a faculty manager. Nursing faculty members with specialists and project leaders constitute the staff and there are facilities for doctoral and masters students as well as scientists. It was evident from discussion with faculty tenured staff and part time teachers that the research being undertaken was informing teaching and practice contributing to the evidence base for contemporary health care.

During the site visit members of Expert Committee became convinced that the structure of administration is democratically organized and that the officers so chosen command the respect and trust of their colleagues.

3.2 Conclusion

In the opinion of the accreditation committee, the University meets the requirements for governance and administration stipulated in Articles 15 and 16 of the *Higher Education Institution Act 2006* at institutional, faculty and departmental levels.

4 The Organization of Teaching and Research at UI

The study programmes proposed for accreditation are listed in Part 8 of the UI application.

The Application for Accreditation of Health Sciences in University of Iceland gives an overview of the regulations according to Chapter III in the Higher Education Institution Act, No. 63/2006. *The Course Catalogue* for UI describes the activity of the University, its organization, Faculties, programmes of instruction, instruction and studies, instructors, research institutes, services, etc.

According to Article 54 of the *Rules for the University of Iceland No. 458/2000*, University studies are organized in study programmes and shorter diploma programmes in accordance with the *National Qualification Framework for Iceland*. The Faculties of the University are responsible for instruction and for instruction-related research. They determine the structure of studies and their division into courses and grant a university degree upon completion of studies; the Dean then confirms the degree. Undergraduate studies generally take between 3 to 6 years and are divided into individual courses, which together form a cohesive whole.

As a general rule, studies offered at Higher Education level in Iceland provide instruction to the following degrees: a) a Bachelor's degree, which normally takes three years (180 ECTS) (however, Bachelor studies in nursing comprise a 4-year programme for a total of 240 ECTS of which 60 ECTS comprises clinical practice and a research project of 12 ECTS or 16 ECTS, b) a Master's degree, which normally takes one to two years in addition to a Bachelor's degree or its equivalence and c) a doctoral degree, which normally takes three to four years in addition to the required number of course credits for a Master's or a Candidatus degree. As each cycle can cover different qualification objectives, the cycles are divided into levels from 1 to 5 (first cycle; two levels, second cycle two levels and third cycle one level).

University instructors, who are appointed to university Faculties, are responsible for the choice of instructional materials and for instruction and assessment. The main goal of instruction at UI is to train students to pursue scientific projects independently and to serve in various capacities throughout Icelandic society. This entails that instruction takes into account both the needs of the nation and the essential requirements of each academic field. The main goal of studies at UI is for students to acquire knowledge, maturity and methodological discipline; and for them to be able to apply this knowledge in an independent, creative and critical way with a view to the creation of new knowledge.

The University aims to ensure that the quality of instruction and studies maintain standards comparable to those which are enforced in similar programmes at foreign universities.

Furthermore, the application overview outlines the obligations of the Faculties in establishing rules for themselves regarding instructions and instruction forms. Students are responsible for their own studies and methods of instruction assume active participation on their part. Faculties have made efforts to stimulate discussion and encouraged students in scholarly criticism.

The overview also describes the UI structure of an academic year and describes student's workload in accordance with Article 52 of the *Rules for the University of Iceland No. 458/2000*. According to Article 54 of the *Rules for the University of Iceland*, the University offers programmes for a Diploma, Bachelor's degree, Master's degree, Candidate's degree and Doctoral degree. Studies towards a Doctoral degree are offered across all Faculties in accordance with the requirement of Section VI of the *Rules for the University of Iceland*

The University aims to increase the annual number of candidates awarded the doctoral degree by a factor of five before the year 2011, to around 65. It is estimated that roughly one-third of the doctoral students at the University will be foreign students. The University's assessment is that the enhancement of doctoral studies is the key to the University's success in research in the future. The framework for graduate studies is established in Articles 68 and 69 in the *Rules for the University of Iceland*.

In the overview "Research and graduate studies" are discussed, detailing among other things, the freedom of research, responsibilities and duties of researchers, competences of teachers and researchers, and evaluation for research points. The guidelines and requirements for the quality of doctoral studies at the levels of general guidelines and concrete guidelines are also discussed. The University is about to complete preparations for the establishment of the Graduate School. According to the current proposal, this institution is intended to ensure quality and supervise masters and doctoral studies at the university. Research takes place within Faculties of the University. Each instructor has roughly 40% research duties whilst for research specialists this varies between 40% and 100%.

Research institutes (48) are divided into four categories as follows: 1) Research institutes under the jurisdiction of Faculties. 2) Interdisciplinary research institutes under the jurisdiction of the University Council, 3) Financially independent research institutes in a legal relationship with the University 4) Research institutes which are founded on the basis of a contract with a collaborative party.

4.1 Teaching in the Faculty of Nursing

Nursing programmes have been established at the University of Iceland since 1973 and in 2000 the Faculty of Nursing became an autonomous Faculty. Midwifery education also has a long history in Iceland and the transfer of nursing and midwifery studies to university level was a significant change in the professional preparation of these practitioners. These changes take account of meeting the needs of Icelandic society which requires well qualified nurses and midwives. The curriculum is based upon national and international predictions on health needs and the development of health services. It reflects the academic ethos found in Europe in particular as well as incorporating the wider North American and Australasian principles. This makes the programmes offered recognisable by other Nursing and Midwifery professional bodies.

In 1998, the master's programme was initiated and in 2004 a doctoral programme was established. In the beginning the main emphasis was placed on curriculum development, which is characterized as having a strong academic bias. Faculty teachers have steadily increased in numbers since the mid 1980s. Integration of theoretical and clinical aspects of teaching has been emphasized, *e.g.*, by joint and parallel positions of Faculty members in health institutions, in particular at LSH. This

has created a fruitful collaboration in teaching and, more importantly, clinical research which informs the curriculum. Furthermore, integration of theoretical and clinical education is strengthened by written practical assignments.

The M.Sc. and especially the doctoral programmes are relatively new. Three students are enrolled on the doctoral degree and 30 Master's degrees have been granted so far. 356 nursing students have graduated with a first degree in the past 5 years alongside 50 midwifery graduates.

Specialized, research-based graduate programmes in the areas of nursing sciences are steadily growing. Diploma courses at master's level are offered regularly in the specialized subjects of nursing science. Applications for graduate studies in the Faculty of Nursing are on the increase, both at the masters' and doctoral level.

In addition, 24 students registered for the course in health informatics in 2005 and 2006 and two students have graduated with a master's degree in that area.

Admission of graduates from the Faculty of Nursing to highly regarded universities abroad has been successful. The position of the profession in the Icelandic health system is strong and its influence within the health services is considerable. A survey from 2005 indicates that nurses are happy with the education provided by the Faculty and that graduates are well prepared for professional responsibility in Icelandic society. Further, 12 of the 20 teachers of the Faculty who have a Ph.D. degree have received it from universities ranked among the top 100 best universities in the world. The expert panel noted that publications of teachers in internationally peer-reviewed journals increased by 60% between the periods 2001-03 and 2004-06.

4.2 Teaching in the Faculty of Pharmacy

Studies in Pharmacy at UI are described well in the UI application. The development of pharmacy teaching during 1957 - 2004 in Iceland was very similar to the development in most comparable European universities. Initially, pharmacy education was restricted to few pharmaceutical disciplines and teaching was usually given in connection to teaching of medicine or natural sciences. In Iceland the teaching in pharmacy began in 1957 under the auspices of the Faculty of Medicine. Over time the curricula enlarged and teaching becoming expanded until an independent faculty had to be established and at UI Pharmacy became an independent Faculty in 2000.

Since autumn 2004 education at UI is based on a three-cycle structure in accordance with the Bologna process. From this time the teaching in the Faculty of Pharmacy has been comparable to that in the Bologna signatory countries. The requirements in cand.pharm.-programme (M.Sc.) at UI correspond to the requirements of the European Union on pharmacist education. According to the *Act on Pharmacists 57/1986*, the cand.pharm.-programme also includes practical training. This is in accordance with the requirements of the European Union which indicates that at least 6 months of practical training should take place in either pharmacies or hospitals. The new cand.pharm.-degree at UI provides mutual professional recognition in EU member countries. The other programmes in pharmaceutical sciences are illustrated in the application.

The teachers of the Faculty of Pharmacy have a strong research background. The Faculty of Pharmacy is among the smallest faculties of the University of Iceland in terms of the number of students but is the most active Faculty when comparing staff research points. About 7% of all articles published in the name of the University of

Iceland in international journals are submitted by the teachers of the Faculty of Pharmacy. Furthermore, of all the doctoral students who graduated from University of Iceland since 2000, 13% graduated from the Faculty of Pharmacy. Nevertheless, the Faculty receives only about 2% of the total funding extended to the University Faculties. The Faculty has thus proven to be a very vibrant research unit, according to international standards.

A fairly large number of cand.pharm.-graduates have continued on their doctoral studies abroad, both in the United States and in northern Europe. These students have without exception been very successful in their studies and most of them are now in key positions in Icelandic and foreign pharmaceutical companies. Since 1997, six students have completed doctorate degrees in the Faculty.

Some students who finished their B.Sc. degree in the Faculty of Natural Science have completed a research-oriented course in pharmaceutical sciences. They have all found employment possibilities with Icelandic drug companies.

Cooperation with LSH has increased in recent years with the participation of senior pharmacists in teaching of clinical pharmacy. Senior pharmacists are pharmacy graduates working in various departments of the hospital, who participate actively in the treatment of patients. Furthermore, research cooperation between LSH and UI has been increasing in the past few years.

Several innovation companies, *e.g.* Lyfjapróun, Oculis and Lífhlaup can be directly linked to research project activities of Faculty staff. The current growth in pharmaceutical companies in Iceland may in part be attributed to the decision made by UI some 20 years ago to initiate a five-year programme in pharmacy.

In the spring of 2007, a Research Institute for Pharmaceutical Outcomes and Policy was established, on the initiative of the Faculty. Along with the Faculty, the Institute is supported by the University of Iceland, the Ministry of Health and Social Services, LSH, the Icelandic Medicines Control Agency, the Surgeon General, and the Icelandic Pharmacists Association.

4.3 Teaching in the Faculty of Medicine

The purpose of medical studies

The purpose of the Faculty of Medicine is to graduate medical doctors who are able to carry on training as doctors with organized guidance and supervision and who have not lost any opportunities concerning the choice of further studies. Thus, the graduates possess clinical skills and understanding and a general overview of the basic subject areas of medicine on a par with the standards of neighboring countries.

Medical studies in Iceland take a total of 6 years. During the first two years, the teaching concentrates on the healthy body, its construction and functioning. The last 3 years are devoted to clinical training and practical work. In the third year, the subjects connecting these two main sections are taught; subjects that are based on the first two years are a foundation for clinical training. The first year also sees the introduction of communication skills, which leads to teaching in the relationship between doctor and patient, physical examination and preparing medical patient records. There is much emphasis on regular and thorough gathering of information, whether it is for the health services in the diagnosis of patients or treatment schedules for patients. It can be useful for quality reports and research in the health sciences.

The Medical Faculty draws its strength from the excellence of its students, who are selected through an entrance examination, the continuous and steady revision of the curriculum and a constant input of new teachers from abroad, especially in the later years of study. The Faculty also enjoys close cooperation with health institutions regarding access to teachers and training of students, and also research opportunities that may be on offer. The last major revisions of the curriculum were made in 1998 and 1999.

Studies – Foreign relations and comparison

Icelandic medical students may choose to complete their 3rd year research project abroad and many of them avail themselves of this opportunity.

Icelandic medical students may elect to stay abroad in their elective period in their 6th year. This may open doors to graduate studies and cooperative projects in research, either directly or later.

Nearly all young doctors go abroad for specialist studies. In faculties' opinion it is a valuable yardstick on the quality of student preparation, that foreign institutions will accept UI students for further studies or specializations.

The Department of Physiotherapy

A B.Sc. degree programme in Physiotherapy has been offered at UI since 1976. During the first years, physiotherapy was an independent unit affiliated with the Faculty of Medicine but in the year 2000, it became a formal department within that Faculty. The staff of the department consists of seven academic teachers in 50-100% positions, one office manager and a large number of part-time teachers.

At first, the main focus of the department was the development of its curriculum and teaching (including clinical teaching). However, emphasis on research has steadily increased, especially since the establishment of the Laboratory of Movement Science Research. Research facilities have similarly improved and that has facilitated research both by staff and students.

Organization of the B.Sc. programme: Twenty-five students are enrolled each year for the B.Sc. degree. The requirement for enrolment is to sit a competitive written test held in June each year where the top 25 are accepted. The basic education in physiotherapy is a four year B.Sc. programme which includes teaching of theory, practice and clinical skills.

The last two and half years are devoted to physiotherapy courses and pathology along with sociology and psychology. In the third and fourth years part of the study takes place in hospitals, rehabilitation centres and physiotherapy clinics where the students receive training in assessment and treatment under the supervision of experienced physiotherapists. Communication skills, professionalism and ethical issues are emphasized throughout the four years.

The programme is fully competitive with physiotherapy programmes at foreign universities.

The curriculum of the B.Sc. programme is under constant re-evaluation and has recently been reorganized with the aim of improving the integration of theory and practice and with an increased focus on evidence-based practice and research.

Venue of work: Physiotherapists work within a broad range of practice settings from hospitals to rehabilitation centres. They are employed in private practice, nursing homes, individual homes, within certain companies, and sport clubs.

Physiotherapists are increasingly participating in research. They conduct studies on specific conditions and injuries as well as the effectiveness of physiotherapy. The future of the profession is promising and the need for physiotherapy remains great. Longer life spans and less active lifestyles suggest a growing need for physiotherapists.

At the present time, the department also has research connections with eight universities and research centres abroad.

The Department of Radiology and Biomedical Science

Education in radiology and biomedical sciences started at UI 2005. Previously the education was offered at the Technical University of Iceland. When the Technical University merged with Reykjavík University, the decision was made to transfer the education in radiography and biomedical science to a new department in the Faculty of Medicine at UI. Students enrolled 2005 thus started their education there, however those who had already started will finish their education at Reykjavík University, the last 2008.

The Faculty of Medicine has provided further education in health sciences for biomedical scientists and radiologists. Last year (2006-2007) seven biomedical scientists and three radiographers were enrolled in the M.Sc. programme and one in the Ph.D. programme. The department is temporarily located at Ármúli 30 and will transfer to the university campus before the next school year.

Biomedical Science

Organization: The study for the B.Sc. degree in Biomedical Science is 3 years or 90 credits. To complete a study awarding professional qualifications as a biomedical scientist the student must complete the first year of the M.Sc. degree programme or 120 credits, a total of 4 years. The entrance qualification is a matriculation examination. A competitive examination is held at the end of the first term (in December). The number of students who continue after the competitive examination is limited to 15 every year.

The M.Sc. degree programme is two years, 60 credits, where the first year consists of courses with main emphasis on research-based practical training, or a research project, but in the second year a M.Sc. degree research project is completed. After 5 years of study, the student will receive the M.Sc. degree along with professional qualifications.

Radiology

Organization: The study for the B.Sc. degree in radiology is 3 years or 90 credits. To complete studies awarding professional qualifications as a radiologist the student must

complete the first year of the M.Sc. degree programme or 120 credits, a total of 4 years. The entrance qualification is a matriculation examination. A competitive examination is held at the end of the first term. The number of students who continue after the competitive examination is limited to 10 each year.

The M.Sc. degree programme is two years, 60 credits, where the first year consists of courses with main emphasis on research-based practical training, and/or a research project, but in the second year a M.S. degree research project is completed. After 5 years of study, the student will receive the M.Sc. degree along with professional qualifications

Upon completion of the M.Sc. degree the possibility is open for further study for the Ph.D. degree in a research-based doctoral programme, a total of 90 credits.

4.4 Teaching at the Faculty of Odontology

The role of the University of Iceland Faculty of Odontology is to train students in dental and oral science, and thus to promote improved oral and dental health among the people of Iceland. It is also the role of the Faculty of Odontology to pursue research and to promote creation of knowledge through postgraduate study programmes, to provide continuing education and lifelong learning for dental professionals, and to be in the forefront of providing guidance to the authorities on dental health, and of educating the public.

The Faculty of Odontology is unusual, not only for its small size, but for the fact that the Faculty includes a hospital-type clinic providing oral health care, which combines training of students, research and service to the public. The Faculty of Odontology meets international standards according to DentED peer evaluation, and participates in international research projects and student exchanges. Furthermore, teachers in the Faculty have participated in the formulation of joint European policy on the education of dentists.

Teaching of dentistry commenced at UI in 1945, after the Dentistry Training Act was passed by Parliament in 1941. The Act provided for dental training within the Faculty of Medicine, and for three dentists to graduate each year. New rules on training in dentistry took effect in 1947, whereby the training was restructured, and four dentists graduated each year. In 1958 the duration of studies was increased from five years to six. At the same time, a competitive examination was introduced at the end of the first year after which six students were accepted for continuing studies.

The Faculty of Odontology was established as a separate Faculty within UI in 1972. In 1980 construction of facilities for the Faculty commenced, while tuition in dentistry continued in the premises of LSH. In 1983 the Odontology building was completed, and the annual number of students was raised to eight. Today each year-group comprises six students and the course in dentistry for the degree of cand.odont. is six years. Tuition in two fields related to dentistry, for dental assistants and dental technicians, is carried out in collaboration with the Faculty of Odontology.

4.5 Conclusion

According to the accreditation committee, Faculties of Health Sciences at University of Iceland have arranged both teaching and research according to requirements defined in Article 2, paragraph 3, of the *Higher Education Act 63/2006*.

5 Personnel qualification and requirements of UI

University instructors are professors, associate professors and assistant professors (Article 17 of the *Higher Education Institution Act No. 63/2006*), including foreign lecturers, adjunct lecturers in term positions and non-tenured lecturers. Instructors may be hired to part-time positions in accordance with Rules adopted by the University Council. According to Article 18 of the same Act, Higher Education Institutions shall establish an evaluation committee to assess the merit of professors, associate professors, lecturers and specialists. Those that bear titles according to Article 17 shall have at least completed a master's degree or have equivalent knowledge and experience. Furthermore, they shall have demonstrated sufficient achievement in their work to enjoy recognition in the relevant field of study.

The new rules recently (17th February 2007) approved by University Council for hiring create, in essence, "tenure track" positions with temporary hiring at first and permanent employment only after a positive assessment at the end of a probationary period of four years.

The framework for required qualifications for employees, new appointments, promotion, duties, hiring procedures, and the procedure for assessment of applicants for positions and promotions are described in details in Chapter III, Articles 28 - 45 of the *Rules for the University of Iceland No. 458/2000*. The Articles 28-45 are a further corrective to a view of articles 11 and 12 of the *University of Iceland Act No. 41/1999*.

The qualification requirements for academic employees listed in the application in accordance with the *Rules for the University of Iceland No. 458/2000* are reasonable and largely applied in academic institutions all over the world. The final hiring for positions must be in accordance with the requirements of Article 4 of the rules of the University of Iceland regarding promotion (*Rules No. 863/2001*); these rules describe the minimum number of points for each rank of academic and research specialist. These points are based on the credit assessment system of UI (*University of Iceland and The Union of University Teachers Rules for evaluation*, according to Article 3.5 in the agreement between The Union of University Teachers and its negotiating parties), which is a system of quality assessment for research, instruction, administration and service.

Conclusion

In the opinion of the expert committee, the University of Iceland meets the requirements for personnel qualifications as stipulated in Article 17 and 16 of the *Higher Education Institution Act No. 63/2006*.

6 Admission requirements and the student rights and obligations at UI

6.1 Admissions Requirements and Limitations

The Faculty of **Pharmacy** requirements are a matriculation examination from an academic line and recommends that the students have completed the matriculation examination from the natural sciences line with an elective field in chemistry. It is also recommended that students will have taken courses at the elective fields of mathematics, biology and physics. If a student has studied in other academic fields, i.e. social sciences or languages, it is recommended that they add courses, which give comparable preparation in chemistry and mathematics, along with physics and biology.

The admission qualification for a B.Sc. in **Nursing** is a matriculation examination from an academic line or nurse assistant line. All students shall have completed the course Chemistry 103. From spring 2008, the course Chemistry 203 will become a requirement. Students from the nurse assistant line will also have completed 15 credits in Icelandic, 6 units in mathematics and 9 units in English. In addition to this requirement, it is recommended that the students have some knowledge of psychology, as well as biology, physiology and chemistry. It is also recommended that the students have completed more courses in English than the admissions requirements ask for. During the course work, students at the Faculty of Nursing are required to obtain two months of work experience in nursing outside the organized period of study.

The admission requirements for **Midwifery** are an examination in Nursing and an Icelandic Nurse's license. Nurses who have not completed the B.Sc. degree in nursing shall complete a preparatory course determined by the Faculty before the studies in midwifery can begin.

A *numerus clausus* has been in place in the bachelor programme in nursing for some years. LSH and Reykjavík Municipal Health Care Services are the venues of clinical teaching of student nurses in basic and graduate studies as well as midwifery students. This includes teaching in patient treatment and handling of personal health information. The number of positions in clinical studies is estimated before the beginning of each year in consultation with the Faculty of Nursing and the partners mentioned above. The limited number of study positions has been one of the factors that decide the *numerus clausus* of students at the Faculty of Nursing for the B.Sc. degree. The other factor is restricted budget to the Faculty.

For many years, a *numerus clausus* has been in force at the **Faculty of Medicine**, and the teaching volume of the smallest clinical departments, such as neurology and paediatrics, has brought about this limitation. The same applies in the department of physiotherapy. Therefore, a special entrance examination is held and it is the same for students of both departments.

The upper secondary schools are also so different that it has not been possible to use the results of the matriculation examination. For eighteen years a competitive examination (*numerus clausus*) was used, given by the Faculty itself after three or six

months of study. In the past five years on the other hand, a special entrance examination (competitive examination) has been held, based to a large extent on the course material of the secondary schools to a large extent. Extensive cooperation has been reached with the teachers of the secondary schools in compiling this test, but the Faculty of Medicine runs it. The composition of the examination is 70% from secondary school subjects, 30% is unprepared with about one third multiple choice questions on general knowledge, and 10% is prepared from a foreign test (the Medical College Admissions Test, MCAT) One third consists of essay questions submitting ethical problems and considerations for discussion by the applicants. The top ranked 48 students are admitted to medical studies.

The entrance requirement for the **Faculty of Odontology** is a matriculation examination from an academic line. In December, at the end of the first term a competitive examination is held. The first-year December examination is normally not repeated at other times of the year. In order to pass the competitive examination, a student must not score below 5.0 and not below 4.0 in each subject of the examination except in theoretical and practical tooth morphology where the minimum grade is 6.0.

Students who pass the competitive examination must present themselves at the Student Registration Office in the University main building for registration for the spring semester of the first year. Out of the students scoring the highest average marks on the competitive examination in December of the first year, no more than 6 are be admitted to continuing studies at the Faculty (subject to University Council approval. If the result of the tests is that fewer than 6 students receive the minimum mark, repeat tests will be held subject to further decision of the Faculty. These tests do not alter the position of those who already have passed the examinations.

If two or more students have the same average grade and a choice has to be made between them the procedure is that the student with the highest grade in practical morphology will continue his/her studies. If two students have the same grade in this subject, the highest grade in general chemistry will decide, then, the highest grade in general biology and finally the highest grade in theoretical morphology.

6.2 Numerus clausus

Competitive examinations, held in December each year are given in Nursing, Odontology, Radiology and Biomedical Science and the number of students that acquire the right to continue their studies is limited. (This only applies to undergraduate studies). An entrance examination in the Faculty of Medicine is held in June and the number of those who acquire the right to continue their studies in medicine and physiotherapy are limited.

The following entrance limitations are valid for the academic year 2007-2008:

Medicine:

- Medicine 48 freshmen
- Physiotherapy 25 freshmen
- Radiology 10 freshmen
- Biomedical science 15 freshmen

Nursing:

- Nursing 105 freshmen
- Midwifery 12 freshmen

Odontology:

- 6 freshmen on the average are admitted to further study at the end of the autumn term upon completion of a competitive examination, three dental technician apprentices and 12 dental assistant trainees begin their study each year.

For many years the Faculty of Pharmacy had *numerus clausus* entrance limitations but they were discontinued in 2000.

Article 19 of the *Higher Education Institution Act 2006* stipulates that regulations outlining students' rights and duties within HEI shall include rules for appeals within the institution. Article 20 states that the Minister of Education, Science and Culture appoints a board to deal with complaints from students in cases where a Higher Education Institution has made a final decision on the rights and duties of the students involved.

The rights and obligations of students concerning the decisions regarding admission of students, decisions to penalize students for violations of regulations, decisions regarding instruction, examinations and assessment, decisions on assessment of studies in other countries and decisions to deny a student's request for an exemption are based on the *Rules for the University of Iceland No. 458/2000*, Articles 46, 49, 50, 59 and 60. Student's rights and duties are also discussed in "*On Good Practice in Teaching and Examinations at the University of Iceland*" (Updated in January 2006 due to amendments to Rules no. 458/2000).

6.3 Conclusion

In the opinion of the accreditation expert committee, the University fulfils the purpose for admission requirements and student rights and obligations stipulated in articles 19 and 20 of the *Higher Education Institution Act 2006* at institutional and faculty levels.

7 Facilities for Teachers and Students and Services Provided

According to the Rules for the University of Iceland No. 458/2000, Article 27, UI shall provide Faculty institutes with working facilities, such as premises and equipment, to whatever extent is possible. In the same article is described the role of institutes under the auspices of Faculties. This article stipulates that the role of an institute is to serve as a forum for research and development (R&D) work in the scientific field concerned and strengthen the connection between research and instruction. In this role the institute shall provide graduate students with facilities and equipment for research work. UI has recognized its inadequacies in facilities and outlined in the Strategy, *University of Iceland Policy 2006 – 2011*, among other things that the University wishes to improve facilities for research and teaching in all fields in order to meet the criteria of international research universities. Facilities for

research, teaching and interaction on the University campus will be transformed in the coming years. The University will improve services to faculty and students, and foster interaction within the University.

In the Application of accreditation, the facilities for teachers and students and services provided are described carefully including: accommodations office facilities, computer and network services, classrooms, other general support services, the University library, library and information service of LSH (BUSV), instructional resource centre, the research liaison service, the university of Iceland press, services provided by the Faculty Offices, the legal environment: article 20 of the Act on the Health Services, agreement with the Icelandic international development agency, services for students the university intranet, Ugla, the course catalogue, the student registrar, the university student counseling centre (USCC), and many other short descriptions for the services and facilities.

The descriptions given provided the Expert Committee with a clear conception of facilities for teachers and students and of provided services.

The course catalogue contains detailed information about the operation of the university, studies in individual programmes, rules regarding studies, the rights and duties of students, registration, important dates with respect to registration for courses and examinations, semesters, examination periods, offices, institutes, employees, *etc.* This information is also found on the Ugla intranet, in which each course has its own web site. The Ugla intranet is a very sophisticated information gateway that facilitates communication between instructors and students in each course. Instructors can use the system to send messages, provide additional course material and transparencies. The information gateway also gives instructors direct access to their own data storage space from every workstation in the University. Through the intranet, students can obtain information about their courses and their academic record. In addition, various options are available, such as access to traditional electronic mail, the purchase of printing allowances and the option of being notified of their grades by SMS. Students can also register for and withdraw from courses (and examinations) through the system.

7.1 Office facilities

Nearly all tenured instructors have their own office. The most common office size is 13 to 15 m². All instructors have their own computer, either a desktop or a laptop computer according to their wishes, and some have both. Facilities for printing and photocopying are found in each building; in addition, many instructors have printers in their offices. Office facilities for sessional instructors who work outside the university are much more limited and sometimes nonexistent. There is some variation as to whether instructors in individual fields/programmes are located near one another. Because of a building shortage, it is often difficult to move instructors around. Major improvements regarding facilities for students of staff of the health sciences are foreseeable with a new University Hospital facility building which will be erected in 2009-2014 (see below).

7.2 Computer and Network services

The University operates its own computer and network service, which the University Computer Services (rules no. 725/2001) maintains. It serves the entire university

community. The University Computer network (HI-net) is the largest local network in the country; it connects all the university buildings with fibre optic cables; this network was one of the first fibre optic networks in the country. There is an internal network within each building and a powerful connection to the outside world through the Icelandic University Research Network (RH-net). RH-net connects to NORDUnet, the collective university and research net of the Nordic countries, which connects to other such networks around the world. The University is the largest shareholder in RH-net and owns a share in NORDUnet. A wireless network is available in many places on the university campus and in general students and instructors have direct access to it. All instructors and students have e-mail addresses and access to the University intranet, Uglá, which is their work space.

7.3 Classrooms

Classrooms can be general purpose, i.e., open to all Faculties, or else specialized for specific fields because of special equipment, for instance, research laboratories. The University of Iceland has over 3400 classroom seats, which are used for lectures, seminars, problem-solving groups, etc. In addition, there are roughly 300 seats in the university's computer laboratories.

Classrooms are of various sizes, from small seminar rooms to large lecture halls. All are equipped with chalk- or whiteboards, overhead projectors, LCD projectors and internet connections.

The buildings of the University of Iceland contain roughly 800 spaces for students to study and roughly 200 work spaces for graduate students in masters' and doctoral studies. Access to these spaces varies and thus it is difficult to specify the precise number for each field. In some instances, they are reserved for a specific Faculty, in others not. In addition, there are workspaces in many places within research laboratories.

At the National and University Library there are roughly 370 general seats for studying. In addition, there are roughly 300 seats which address various special needs. The National and University Library is open every day of the week, longer on weekdays than on weekends and over the examination period it is open until late in the evening by agreement with the University. Nursing, midwifery and medical students are able to make full use of the special library run in collaboration with Landspítalinn. This excellent resource complements the UI provision and ensures students have access to high quality clinical materials.

Students in all fields have some place where they can socialize and student organizations have facilities to hold meetings. There is some variation among fields as to how good these facilities are. University buildings are accessible 24 hours per day for the students and employees of the university. Hagi, the premises of the Faculty of Pharmacy and the Department of Pharmacology of the Faculty of Medicine are closed to students from 23h at night to 7h in the morning. The students are never permitted to work in research laboratories if they are alone in the building (e.g., on weekends) and this applies to students at all levels of study.

7.4 Faculty of Nursing

The Faculty of Nursing, housed at Eirberg, has 8 lecture rooms with places for from 15- 95 students, for a total of 350 students. All the rooms are equipped with internet

connections, a computer and a computer projector. The premises of the Faculty of Nursing also have 7 seminar rooms. These have room for 8-30 students, or a total of 72. The Faculty has one practical training room with places for 20-30 students. There are two computer centres, one for the B.Sc. students with 21 computer terminals and another for graduates with 6 terminals. There are 7 reading rooms with places for 56. There are insufficient facilities for practical teaching at the Faculty of Nursing and technical features and equipment are not up to standard. The practical teaching room is in a poorly ventilated basement room and improvements are urgently needed.

7.5 Faculty of Pharmacy

The Faculty of Pharmacy has 2 lecture rooms, located at Hagi, at Hofsvallagata with places for 102 students. Both rooms have internet connections, computer and computer projector. On premises, the Faculty of Pharmacy also has 1 seminar room, with places for 10-12 students. Three laboratories are located in the Faculty, where practical training can take place; each of them has places for 12 students, for a total of 36. A major part of practical study in the first three years of the pharmacy programme is done in other Faculties, in their laboratories. At the end of the third year, the students have 2-3 months of practical training in pharmacies and hospital dispensaries in the country. LSH and the Heart Association are venues for clinical teaching of students in their master's course in pharmacy. There is one computer centre with 11 terminals. There is one reading room seating 28 students, along with facilities for 16 work areas, for a total of 44 students. There are also work areas in many places in the laboratories. There is a small area for social activities for students in Hagi where they have their own copying service and access to a kitchen and tableware. The buildings of the University are open between 7:00h and 23:00h for students, but for 24 hours for university staff.

7.6 Faculty of Medicine

The Faculty of Medicine has teaching facilities in the following locations: Læknagarður, Hagi, Ármúli 30 and Skógarhlíð (physiotherapy) but clinical training, job training and clinical studies are carried out mostly in LSH and in the Regional Hospital of Akureyri, in the health clinics and other institutions and cooperative partners offering elective courses. Special agreements have been made with certain cooperative partners. At LSH, students have access to lecture rooms but because of the nature of their work, a combination of the daily routine, teaching, research and services, they are otherwise part of the teams that service patients and receive instruction in hospital wards and special seminar rooms in LSH. Since about 70% of the teachers are concurrently holding a position at LSH and also have a working area at the hospital, the teaching activities at LSH are quite considerable. A little less than 1100 students pass through every year and a special office has been set up, the Office of Teaching, Science and Development with 20 staff members whose task it is at the hospital to provide students in the health sciences with the best instruction within the hospital and ensure places, teachers and teaching hours for them.

About one half of the teaching time for students in the Faculty of Medicine is spent at LSH but there is also substantial instruction at health clinics in the country and the Regional Hospital at Akureyri. UI has made cooperative agreements with these institutions to ensure and define this activity of the Faculty. The cooperative agreement between UI and LSH is that LSH provides facilities for both theoretical

and clinical teaching/training. At LSH there are lecture rooms which are mostly used for medical student lectures. They are all well equipped for teaching and some may be used for clinical work, i.e., a real patient may be brought there. There are also facilities for observation through one-way mirrors. Video recordings are used to assess the performance of students as part of communication skills training.

Facilities at research laboratories

The research laboratories of LSH are mostly supervised by teachers at UI along with their other duties and are also the place of work for many other staff and faculty of the health sciences (microbiology, virology, immunology, organ pathology, blood pathology, biochemistry and molecular biology). The same applies for service laboratories e.g. imaging analysis. Furthermore, extensive basic research takes place at the Blood Bank and masters and doctoral students have graduated from there in recent years. Teaching and research therefore takes place in all these locations under the auspices of the University of Iceland/Landspítali–University Hospital even though no special agreements exist about the contribution of LSH regarding housing these facilities or other contributions to research.

7.7 Faculty of Odontology

The clinical area of the Faculty of Odontology is the hub of the Faculty, where clinical training of dental students and dental assistants takes place. This is a very crowded area with a large throughput of people so that when everything is accounted for: Students, teachers, staff and patients; the number of visitors to the clinic during term is from 320 – 400 per week or 70 per day on the average.

The school has one medium size lecture room seating 40 students and two smaller lecture rooms seating 12-15 students used for lectures, seminars and demonstrations. All are equipped with chalk- or whiteboards, overhead projectors, LCD projectors and internet connections. In addition, the dental and clinical laboratories are equipped so that they can also be used for lectures. The preclinical laboratory accommodates 8 students and the dental laboratory seats 20. Clinical facilities are divided into three sections: The main clinic equipped with 17 dental units; a separate closed clinic with 4 units for minor surgery and other procedures requiring privacy; and finally, two larger surgical rooms, one of which is used for teaching dental assistants. The facilities for the school for dental technicians consist of laboratories for 12 students as well as an office. The school for dental assistants has facilities for 12 students in a clinical classroom as well as an office. A study room with 30 cubicles is available for the dental students and the dental students' association has a room for their use. Dental students share access to a computer laboratory with the medical students.

The Faculty's staff and students have a 24-hour access to the building. However, the clinic floor is closed to students at night and weekends but access permission can be granted in emergencies. A cafeteria for the building's staff and students is located on the first floor (basement). Accommodation for master's and doctoral students are very limited and therefore need improvement.

7.8 The University Library

The National and University Library of Iceland is the library of the University according to a special collaborative agreement between the library and the University. The University library and the National Library of Iceland were united in 1994 into a

single library housed in the National Library building on the University campus. The library serves all Faculties and they contribute funds for book purchases, which the library administers. Most Faculties also have their own library.

The National Library contains approximately 900,000 volumes in the form of books, journals and other materials and has access to numerous electronic materials, journals and databases. There are fine facilities for study and work on the four floors of the library. The number of volumes contained in the library needs improvement.

7.9 Conclusion

In the opinion of the Accreditation Committee, the University provides services, facilities and working conditions to teachers and students in the field of the Health Sciences of a sufficient standard to enable the fulfillment of the roles and objectives of the institution. While the facilities for Medicine and Dentistry are excellent, those for Nursing are barely adequate. Pharmacy space is cramped but adequate.

8 Internal Quality Management

The *Application for Accreditation of Health Sciences at the University of Iceland* describes the internal quality management and quality assurance systems in the University of Iceland. Application is based on all the essential legislations (*Higher Education Institution Act No. 63/2006* articles 11 and 12; *National Qualification Framework for Iceland*, Chapter 3.3.), statutes (*Rules for the University of Iceland No. 458/2000*, article 24), standing orders (*Research and Education Policy*, 2003), strategic plans (*Summary of Policies approved by the University General Forum – the University of Iceland Policy 2006 – 2011*) and the other guidelines (*University of Iceland Quality Assurance Programme*) and elements at the levels of Ministry, University, Faculties, academic staff and students which are required to execute the demands of quality in teaching, research and administration. The university's internal quality assurance system is described in accordance with the University of Iceland Quality Assurance Programme.

The accreditation application thoroughly depicts systems and procedures in quality assurance under the main headings: Essentials of the internal quality assurance system of UI and its academic fields the University's internal quality assurance system; research – graduate studies and governance services.

According to the regulations, the Rector is formally responsible for the university's quality assurance system, though a specially appointed quality manager (who is also the official promoter for the Bologna Process in matters of quality assurance for Iceland) serves as the Rector's proxy in these matters. The deans, directors, department chairmen, and other members who administer individual operational units are responsible for quality assurance in their respective area.

The quality assurance of teaching and research in higher institutions is carried out by internal evaluation on one hand and external evaluation on the other hand. The *National Qualification Framework for Iceland* will affect both the internal and external evaluation of higher education institutions' activities.

In the application is also described the relationship of the National Quality System to the current progress of the Bologna Process, as well as other factors like a standardized system of grading, academic degrees, and diploma supplements in addition to determining a formal framework for higher education and academic degrees - in recent years there has been a growing emphasis on quality assurance in the work of higher education institutions.

Implementation of the quality assurance at HEI in Iceland has proceeded in a praiseworthy fashion in good accordance with the Bologna process. The quality assurance system stipulated in the law on Higher Education Institutions (*Higher Education Institution Act 63/2006*) is based on the standards and guidelines in the European Higher Education Area (EHEA) as well as the practice established during the Bologna process in Iceland which had been adapted to the Standards and Guidelines.

The quality system of the University of Iceland is applied to all Faculties and all academic fields at the university. Therefore there is no separate quality system for particular academic fields.

8.1 Conclusion

A Course Evaluation system exists at UI and evaluation surveys will be regularly performed according to the regulations. Implementation of the Bologna process has been under way since 2000 including the adaptation of the quality assurance system based on the criteria set out in the Berlin communiqué (2003) with a high degree of co-operation and networking. In the opinion of the Accreditation Committee, the University of Iceland has already workable methods and procedures for quality assurance needs in accordance with Articles 11 and 12 of the *Higher Education Institution Act 63/2006*.

9 Description of Learning Outcomes

According to the *Higher Education Institution Act No. 63/2006*, Article 5, Higher Education Institutions are required to issue comparable learning outcome descriptions, for every study programme. Descriptions shall be in accordance with the *National Qualifications Framework for Iceland* issued by the Minister of Education, Science and Culture on 8th February 2007. According to the framework, there are three subsequent cycles of higher education.

As a general rule, studies offered at Higher Education level in Iceland provide instruction to the following degrees: a) a bachelor's degree, which normally takes three years, b) a master's degree taking one to two years, and a doctoral degree, taking three to four years. As each cycle can cover different qualification objectives, the cycle is divided into levels. Below is a list of the programmes.

Basic medicine and Clinical medicine

- Medicine: 360 ECTS for the examination *candidatus medicinae* (cand.med.)
- Medicine: 60 ECTS studies for the BS – honours –degree

- Faculty of Medicine: 120 ECTS studies for the MS-degree
- Faculty of Medicine: 180-300 ECTS study for the Ph.D.-degree
- Pharmacy 180 ECTS units study for the BS.-degree.
- Pharmacy: 63 credits (126 ECTS) study programme for the title of Master of Science in Pharmacy (qualification for registered pharmacists)
- Faculty of Pharmacy: 120 ECTS units studies for the MS-degree in Pharmaceutical Sciences.
- Ph.D.-degree at the Faculty of Pharmacy: 180 ECTS units study.

Health sciences

- Master of Public Health: 120 ECTS for the MPH Degree
- Physiotherapy, 240 ECTS for the BS degree
- Nursing, 240 ECTS for the BS degree.
- Nursing, 40-ECTS diploma programme on the master's level in specialized fields of Nursing.
- Midwifery, 120-ECTS programme in midwifery studies on master's level for the degree of candidata obstetriciorum (cand.obst.).
- Nursing, 120-ECTS programme leading to master's degree (M.S.), special emphasis research training.
- Nursing, 120-ECTS programme leading to master's degree (M.S.), special emphasis on clinical specialization.
- Nursing, 180 ECTS programme leading to doctoral degree (Ph.D.).

Other medical sciences

- Radiographic Science: BS degree, 180 ECTS
- Radiographic Science: 60 ECTS education, a requirement for registration as Radiographer
- Radiographic science: MS degree, 120 ECTS
- Biomedical Science: BS degree, 180 ECTS
- Biomedical Science: 60 ECTS education, a requirement for registration as Biomedical Scientist
- Biomedical science: MS degree, 120 ECTS
- Biomedical science: Ph.D. degree, 180 ECTS
- Faculty of Odontology: 360 ECTS units studies for the candidatus odontologiae (cand.odont.) degree.
- Faculty of Odontology: 120 ECTS units studies for the MS-degree
- Faculty of Odontology: 180-300 ECTS units study for the Ph.D.-degree.

- Health Informatics, 120 ECTS for the MHI degree

The Faculty of Odontology is also responsible for the training of dental laboratory technicians to the journeyman's examination and for the theoretical and practical training of dental assistants according to special agreements with the Ministry of Education

Conclusion

In the opinion of the Accreditation Expert Committee, the University of Iceland has met the requirements of Article 5 of the Higher Education Act No. 63/2006 by publishing learning outcomes for programmes in Pharmacy in accordance with the National Qualifications Framework of Iceland.

10 Finances

According to *Financial Statement of the University of Iceland*, the revenues and expenditure in the Faculty of Pharmacy rose by 28.1% from 79,537,000 ISK in 2005 to 101,889,000 ISK in 2006. Over the same time span the total expenditure of the University increased by 13.9% between years 2005 and 2006. In the longer term, during the years 2000 – 2006, the total income of UI has nearly doubled from approximately ISK 4,500 million to ISK 8,158 million.

According to Chapter VIII, Article 21 of the *Higher Education Institution Act 2006*, the Minister of Education, Science and Culture determines the rules concerning state financial contributions to Higher Education Institutions. The Minister is authorized to negotiate an agreement for a period of three to five years with a Higher Education Institution regarding the financial contributions of the state to support teaching and research; in the agreement, conditions are laid down and common objectives agreed.

In the *Application of Accreditation of Health Sciences at University of Iceland*, Part 9 outlines the financial outlook for the period 2007 – 2011. A new contract on teaching and research for the following five years was signed between the University of Iceland and the Ministry of Education, Science and Culture. The contract provides the University with the sum of ISK 640 million for the year 2008, and an additional sum of ISK 640 million each year for the contract period to 2011. An additional sum for the year 2011 will be ISK 2,560 million. Both parties to the contract have set the strengthening of the University as their common goal, in order to make the University of Iceland one of the leading universities in the world.

10.1 University operations for 2006

Expenditure in 2006 totaled ISK 8,158.2 million compared with ISK 7,161.4 million in 2005. The operational surplus was ISK 200.7 million in total, compared with the ISK 29.8 million deficit the year before. Total expenditure increased by ISK 996.9 million or 13.9% between years. This increase breaks down into operational expenses which rose by ISK 447.8 million or 6.6% between years and construction projects, which rose by ISK 489.2 million. The increase in construction projects reflects the construction of the University Square, which began during the year. Man-years

increased slightly to 998, compared with 985 the previous year. The cost of wages and salaries grew by 5.8% up from ISK 4,883.6 million to ISK 5,164.5 million. The increase in employees, the cost of wages and salaries, and other operational costs in recent years is far less than the increase in students and price increases. Service revenue reached ISK 3,204.1 million compared with ISK 2,430.1 million the previous year, a year-over-year increase of 31.8%. Foreign revenue reached ISK 546.0 million, an increase of 22.8% from last year. Total spending authorizations reached ISK 5,025.0 million, increasing by 6.8% from last year. Total operational income reached ISK 8,229.1 million, compared with ISK 7,136.9 million the previous year, increasing by 15.3%.

Enrolment has increased rapidly with 9,471 students for the 2006-2007 academic year. Strict admission requirements were put in place in 2004 with 8,939 students in October 2005. At the same time the number of permanent academics has not increased and research costs have dropped substantially. Despite this, the university's faculties have accrued a deficit in recent years.

At year end 2006 UI released an academic report for 2006 in accordance with its performance contract. The report states that for the 2005-2006 academic year there were 8,939 students enrolled at the University. The portion of active students remained unchanged at 2/3 (66.7%), with 5,887 active students considered in the academic report. The number of active students rose by 166 (2.0%) between years. The national budget allowed for 5,665 active students. No funds were received for 223 students, who, according to the model, would have provided the university with ISK 148.6 million in additional funding. Over the last 6 years the university has presented 35,815 active students. According to calculations, over the last six years the cost of instruction has exceeded the amount assumed in the national budget by ISK 906 million.

10.2 Financial outlook for 2007-2011

The University's income is growing rapidly, reflecting the large increase in students. Service revenue has grown in line with the increasing number of students and increased funding, reaching ISK 3,204.1 million in 2006, or 38.9% of total income and 63.8% of appropriations.

The new contract on teaching and research between the University and the Ministry of Education, Science and Culture for the period 2006-2011 provides the University with an additional sum of ISK 640 million for the year 2008, and an additional sum of ISK 640 million each year for the contract period. Thus, the additional sum for the year 2011 will be ISK 2,560 million. These sums shall be indexed in the state budget according to price changes. Each year the University will inform the Ministry on how individual targets are accomplished. The common goal of both parties is to strengthen UI in the pursuit to become highly recognized amongst leading universities in the world, *e.g.* by increasing the number of post-graduate students and by improving the facilities and environment for teaching and research.

UI holds substantial assets in housing (60,000 sq.m.) and land, which the City of Reykjavík gave the school on its 50th anniversary in 1961. A conservative estimate values these assets at up to ISK 20 billion.

The financial fundamentals for steady operations at UI seem to be good for the next five years.

10.3 Conclusion

According to the Accreditation Expert Committee, the financial arrangements of the University are in full accordance with the rules stipulated in the *Higher Education Institution Act 2006*. The finances of the University of Iceland are organized, as a whole, in a manner that guarantees the fulfillment of all basic internal and external financial obligations and commitments.

11 Summary of Findings

While the expert committee found significant differences between the Faculties of Medicine, Odontology, Nursing and Pharmacy, there were some overriding areas of strength and areas of concern that are applicable to at least two or more of the four Faculties.

11.1 General areas of strength

1. The faculty members in all disciplines are highly committed and extremely hard working.
2. Part-time faculty, of whom there are a considerable number, provide great depth and breadth of professional experience and expertise.
3. Students in all faculties were uniformly enthusiastic and engaged in their own educational process.
4. Faculty to student ratios was quite good and the expression “small is beautiful” came up on a number of occasions, but particularly with respect to Odontology and Pharmacy.
5. Graduates of the university in the Health Sciences have very extensive opportunities to continue their studies in first-class institutions virtually anywhere in the world.
6. UI graduates in the Health Sciences are sought out and have no difficulty finding positions.

11.2 General areas of concern and/or opportunities for improvement

1. Faculty renewal is a major issue, and opportunities for well-educated Icelanders to return from advanced education overseas to funded, supported faculty positions with research avenues open to them, are quite limited.
2. There is a general deficiency in infrastructure, particularly as it pertains to support staff. This means that full time and even part time faculty has to compromise their academic endeavors to undertake staff functions to the detriment to the delivery of the educational programme.
3. Closely related to this is the fact that there are relatively small numbers of full time faculty who therefore carry extremely heavy administrative loads.

4. There appears to be very limited opportunity for students to influence their educational programmes and educational processes. From the student perspective responsiveness to their concerns was not always apparent.
5. There was considerable anxiety among faculty and students with respect to the proposed restructuring of the University, which would see the collapse of a large number of faculties and departments into a much smaller number of units.
6. The outcomes of the promotion and tenure process seem to vary across Faculties. It appears that experience gained overseas is not always taken in to consideration in this process but rather is restricted to that obtained in Iceland.

The following findings are more Faculty-specific.

11.3 Nursing – strengths and concerns/opportunities

1. The physical facilities for the Faculty of Nursing are inadequate and this problem has been exacerbated by the increase in student intake from 75 to 105 in 2007. Furthermore, faculty members are somewhat widely dispersed making communication more difficult.
2. There are many sessional teachers supplementing the educational programmes, however, the full time faculty members are responsible for all the administration required to run them. This makes tenured staff workload high, and may negatively affect the Faculty's objectives for research and scholarly activity.
3. The quality of the training in the Faculty of Nursing is compromised by the limitations of the teaching resources. The clinical skills classroom is, in particular, cramped and poorly located with multiple groups being taught alongside each other.
4. It is felt that students do not have adequate opportunity to learn and practice their clinical skills before actively participating in patient care.
5. There appears to be inequitable distribution of funding for teaching in the Faculty of Nursing in comparison to other health sciences.
6. The clinical skills laboratory has dated equipment in its poor space that limits opportunity to enrich the curriculum. Many faculty members have studied overseas and experienced skills laboratory superior to those they use and are conscious of the impact this has on the quality of the educational programme.
7. Sessional teachers are a valuable asset because they are anchored in practice and add to the quality of the learning experience. Although not specifically involved in strategic planning, they have access to plans and feel able to contribute to the direction the Faculty is taking. They also are able to influence the curriculum and have a great deal of autonomy with the aspects they deliver.
8. The workload in the graduate programme needs to be more spread out as there are significant peaks of assignment deadlines that affected study schedules.

9. Students felt that having 20 to 30 teachers involved in the programme led to some fragmentation and repetition that could be reduced if 2 to 3 faculty staff were focused on key aspects of the curriculum
10. Despite concerns about acquisition of clinical skills, the expert committee observed that many nursing students were in fact employed in the healthcare system from the early days of their nursing training and appeared to be functioning effectively and efficiently in the healthcare environment. This would tend to suggest that their clinical skills are in fact at least adequate, if not better. Furthermore, on graduation they are eagerly sought out for employment.
11. The *Numerus clausus* system creates tension for students in trying to meeting the required criteria, and for some it results in cessation of study. One suggestion put forward for consideration is that selection occurs prior to entry to the programme, such as employed in other countries.
12. The Faculty of Nursing has made great efforts to build up research and graduate studies in as many fields as possible. The acquisition of overseas higher degrees and doctorates has resulted in fruitful international collaboration, but creates a dilemma for the future with the Faculty aspiring to increase home-grown doctoral study and research programmes.

11.4 Odontology - strengths and concerns/opportunities

1. According to a former dean of the Faculty, this is “the best dental school in the world!” The Faculty is the epitome of the “Small is Beautiful” principle. They graduate 6 students per year and describe them as “Handmade in Iceland”.
2. Faculty: student ratios meet European standards for this criterion and over the years of study all faculty have close direct contact with all students.
3. Unlike products of other European dental schools, students are ready to practice on graduation. It is estimated that they have experienced as much as twice the amount of clinical work as students from several European countries.
4. The faculty is small and likely to remain so. They cannot hope to achieve a critical mass, particularly in the area of prosecution of research, and therefore have to collaborate and do so quite effectively.
5. There is no in-house start up funds for research but funding is available on a wider competitive basis.
6. The presence of an in-house clinic providing a full range of dental services to a segment of the population is a tremendous asset to the educational programme and helps fulfill the Faculty’s social responsibility.
7. All faculty and students felt that the real strength of the Faculty lay in the undergraduate programme.
8. Through extensive interviews with fulltime faculty, part-time faculty and students, the expert committee was really unable to elicit any significant concerns from any part of the constituency. The fact that the Faculty is small and will remain so is accepted and capitalized upon.

11.5 Pharmacy - strengths and concerns/opportunities

1. Both the Dean and the faculty have a clear vision and a well enunciated five-year strategic plan.
2. Faculty are of high quality and all eight have doctoral degrees.
3. Among them, they have an above average number of ISI publications.
4. The number of graduate students is increasing
5. Although in its early days, the faculty have started patenting discoveries and creating spin off companies.
6. The faculty recognize the need for collaboration because of their small size and have done so intensively with hospitals, institutes and the private sector.
7. The Institute for Pharmacoeconomics is a model of innovation and enlightened opportunism.
8. Classes are small with a great opportunity for faculty-student contact and individual attention to educational objectives.
9. Graduates of the school are sought out because of their high quality.
10. The numbers of support staff are felt to be less than optimal.
11. Student facilities are very limited and the building housing the Faculty itself is less than optimal, although quite functional. There are tentative plans to seek additional space adjacent to the building, particularly for student amenities.
12. There are relatively few elective opportunities available for students

11.6 Medicine - strengths and concerns/opportunities

1. The last reform of the curriculum occurred approximately five years ago and it is felt that it is time to revisit this issue. The expert committee noted that of the four Faculties, Medicine was the only one without a current updated strategic plan and vision statement.
2. In general, the curriculum reflects well current trends in modern medical education. There is opportunity to do electives and a third year block of 12 weeks is devoted to research, which may be done abroad.
3. The students perform well using external markers, such as the exams of the National Board of Medical Examiners, wherein 6th year students performed very well, and also on the USMLE exams where performance was equally good.
4. There is an important course on The Doctor, the Patient and the Illness, which reflects modern trends.
5. The major identified problem in Medicine is the lack of an overview or coordination of the curriculum, particularly the pre-clerkship curriculum. It is felt that there is a lack of linkage between the basic sciences and the clinical sciences.
6. There is not integrated institutional responsibility for the overall design, management and evaluation of a coherent and coordinated curriculum. Content is not particularly well coordinated and integrated within and across

the academic periods of study, in other words horizontal and vertical integration are lacking.

7. The essential problem is not so much the content of the curriculum per se, but rather the whole issue of curriculum management. Students describe curriculum offerings as piece meal with little or no connection between the various parts, a great multitude of teachers and instructors, and frequent gaps and redundancies. One group of senior students described curriculum management as being in a “state of chaos”.
8. The expert committee feels that much of this problem is due to a lack of staff at the management level. This would include additional assistant or associate deans with a primary responsibility for the pre-clerkship curriculum and the clerkship curriculum. There should be specifically designated faculty members responsible for oversight of each year’s programme, and perhaps most importantly, adequate numbers of staff to ensure that the actual delivery of the curriculum was efficient and effective. It appears that much of the responsibility for the coordination and the day-to-day management at the pre-clerkship level falls upon a single staff person who spends most of her time dealing with students over the telephone on a one-to-one basis.
9. Despite these problems the graduates are clearly of high quality and are sought out. The students confirmed that when they are abroad they feel that their knowledge and skills are equal to those of students in other European countries and the medical students in Iceland actually feel that they perform at a higher level than elective and visiting students from other European countries. Their performance in International examinations, such as the USLME and NBME, would tend to substantiate that opinion.
10. As in most Western medical faculties, there is a concern about a lack of clinician scientists. Linked with this is the lack of opportunity for overseas trained physicians and biomedical scientists to obtain funded faculty posts, particularly at a full time level, when they return to Iceland.
11. With respect to Physiotherapy they are in a process of rebuilding, particularly in the area of graduate studies.
12. Physiotherapy has only 6 ½ full time academic positions compared with 130 part time teachers. This ratio is felt to be inappropriate.
13. No particular issues were identified in the radiology or biomedical sciences programmes.

12 Recommendations

1. The expert committee recommends that the Faculty of Health Sciences (and its four component Faculties) at the University of Iceland be accredited to award those degrees in the fields for which it has applied, with the next review to occur in 2012.
2. The expert committee feels that a mechanism should be put in place to review progress in the Faculty of Medicine in those areas identified as being deficient and that this re-evaluation occurs in approximately three years time, which is in 2010.

Signatures of the Accreditation Expert Committee of Higher Education Institutions in the field of Health Sciences at the University of Iceland 2007:

25/01/2008

Professor David Hawkins

University of Ottawa, Ottawa Canada

Chair

Mrs. Margaret Lane

Institute of Health Science, London, UK

Professor Raimo Hiltunen

University of Helsinki, Finland.

Appendix 1: Agenda of site visit to UI

The Expert Committee site visit to the University of Iceland (UI) in Reykjavík, Iceland.
Division of Health Sciences 17th – 18th of October.

Expert Committee:

Professor David Geoffrey Hawkins, Chair of the Committee.
Childrens Hospital of Eastern Ontario/Departments of Pediatrics, University of Ottawa,
Canada.

Margaret Lane

Former Associate Dean of Students, City University, Institute of Health Science London, UK.

Professor Raimo Hiltunen

Dean of Faculty, Professor of Pharmacognosy, University of Helsinki, Finland.

Rebekka Valsdóttir from Rannís will be with the committee during the visit and Kristín Jónasdóttir facilitates the visit on behalf of the Health Sciences.

Wednesday 17th of October:

08:30-09:15 Visit to the Rector of the University of Iceland – Main building

Present: Kristín Ingólfssdóttir Rector of the University of Iceland, Þórður Kristinsson Head of the Division for Academic Affairs, Stefán B. Sigurðsson Dean of the Faculty of Medicine, Sóley S. Bender Dean of the Faculty of Nursing, Peter Holbrook, Vice- Dean of the Faculty of Odontology and Elín Soffía Ólafsdóttir Dean of the Faculty of Pharmacy.

09:15-09:30 Transportation.

09:30-10:10 Visit to the Chief Executive of the University Hospital – Landspítali.

Present: Magnús Pétursson Chief Executive of Landspítali, Níels Christian Nielsen Assistant to the Chief Executive of Landspítali, Stefán B. Sigurðsson Dean of the Faculty of Medicine, Kristján Erlendsson Chief Executive of Education, Research and Development at Landspítali University Hospital and Vice-Dean of Medical Faculty, Sóley S. Bender Dean of the Faculty of Nursing, Peter Holbrook, Vice Dean of the Faculty of Odontology and Elín Soffía Ólafsdóttir Dean of the Faculty of Pharmacy.

Anna Stefánsdóttir Chief Executive of Nursing at Landspítali and Björn Zoega Chief Executive of Medicine at Landspítali sent their excuses but were unable to attend.

10:10-10:30 Library of Landspítali at Eirberg.

Present: Sólveig Þorsteinsdóttir, Director.

10:30-10:45 Coffee.

10:45-11:00 Introduction to Eirberg – Building of the Faculty of Nursing.

Present: Sóley S. Bender Dean and Guðrún Kristjánsdóttir Vice-Dean.

- 11:00-11:50 Meeting with Tenured Staff of the Faculty of Nursing.**
Present: Sóley S. Bender Dean, Guðrún Kristjánsdóttir Vice-Dean, Helga Jónsdóttir Professor, Marga Thome Professor, Páll Biering Associate Professor, Helga Bragadóttir Assistant Professor, Helga Gottfreðsdóttir Assistant Professor, Þóra Jenný Gunnarsdóttir, Assistant Professor (unable to attend due to illness)
- 11:50-12:30 Meeting with Sessional Teachers.**
Presents: Erlín Óskarsdóttir R.N. at Landspítali University Hospital and Adjunct, Stefanía Arnardóttir R.N. & M.S. from the Primary Health Care of the Capital Area, Dagmar Rósa Guðjónsdóttir, R.N. and M.S., Hildur Kristjánsdóttir, midwife from the Directorate of Health, Auðna Ágústsdóttir, R.N. from the Office of Education, Research and Development at Landspítali-University Hospital, Þorsteinn Jónsson R.N. & M.S. at Landspítali University Hospital and Adjunct.
- 12:30-13:10 Meeting with Students.**
Present: Arna Huld Sigurðardóttir 4. year, Katrín Guðmundsdóttir 4. year, Sigrún Sunna Skúladóttir 4. year, Guðrún Sesselja Sigurðardóttir 3. year, Hrafnhildur Ólöf Ólafsdóttir 2. year, Þórey Rósa Einarsdóttir 3. year, Jóhann Kristján Eyfells 2. year, Helga Reynisdóttir 2. year, Sigríður Zoega M.S. student, Sylvía Ingibergsdóttir M.S. student, Harpa Ósk Valgeirsdóttir 1. year midwifery student.
- 13:10-14:00 Lunch with the representatives from the Faculty of Nursing and Faculty of Pharmacy at Skróður, Hótel Saga, Radisson SAS.**
- 14:00-14:15** Transportation.
- 14:15-14:30 Introduction to Hagi. Building of the Faculty of Pharmacy.**
Elín Soffía Ólafsdóttir Dean and Már Mátsson Vice Dean.
- 14:30-15:20 Meeting with Tenured Staff of the Faculty of Pharmacy.**
Present: Elín Soffía Ólafsdóttir Dean, Már Mátsson Vice Dean, Sveinbjörn Gizurarson Professor, Þórdís Kristmundsdóttir Professor, Anna Birna Almarsdóttir Professor and Hákon Hrafn Sigurðsson, Associate Professor.
- 15:20-16:05 Meeting with Sessional Teachers.**
Present: Þorgerður Árnadóttir, Ph.D. virologist, Landspítali University Hospital; Vala Friðriksdóttir, Dr. Scient., Keldur The Institute of Experimental pathology, University of Iceland; Stefán Róbert Gissurarson, Cand. Pharm, MBA; Þórunn K. Guðmundsdóttir, Cand. Pharm. Clinical pharmacist, Landspítali University Hospital; Jóna Freysdóttir, Ph.D. immunologist, Centre for Rheumatology Research, Landspítali University Hospital; Jóhann Lenharðsson, Cand. Pharm. From Icelandic Medicines Control Agency.
- 16:05-16:20** Coffee.
- 16:20-17:00 Meeting with Students.**
Present Pétur Sólmar Guðjónsson 1. year B.S., Berglind Árnadóttir 2. year B.S., Baldur Finnsson 3. year B.S., Elínborg Kristjánsdóttir 1. year M.S., Jón Pétur Guðmundsson 1. year M.S., Páll Þór Ingvarsson 1. year M.S., Guðrún Stefánsdóttir 2. year M.S.
- 17:00-17:45 Research Institute of Pharmaceutical Outcomes and Policy.**
Present: Anna Birna Almarsdóttir Professor.

Thursday 18th of October:

- 08:30-09:00 Introduction to the University Intranet “Uglan”.**
Present: Hreinn Pálsson Head of Examinations and Eiríkur Steingrímsson Professor.
- 09:00-09:15 Introduction to Læknagarður. Building of the Faculty of Medicine.**
- 09:15-10:10 Meeting with Tenured Staff of the Faculty of Medicine.**
Present: Stefán B. Sigurðsson Dean, Kristján Erlendsson Vice-Dean, Helga Ögmundsdóttir Professor, Gísli Heimir Sigurðsson Professor, Guðmundur Þorgeirsson Professor, Ragnhildur Steinbach Adjunct and Director of teaching, Martha Hjálmarsdóttir Associate Professor and Head of department of Radiology and Biomedical Science, Árni Árnason Associate Professor and Head of department of Physiotherapy.
- 10:10-10:25** Coffee.
- 10:25-11:15 Meeting with Sessional Teachers.**
Present: Alma D. Möller Department of Medicine, Alma Eir Svavarsdóttir Department of Medicine, Björn Zoéga Department of Medicine, Engilbert Sigurðsson Department of Medicine, María Heimisdóttir Department of Medicine, Tómas Guðbjartsson frá Department of Medicine, Pétur Henry Pétursson Department of Medicine, Ólöf Ámundadóttir, frá Department of Physiotherapy, Jónína Guðjónsdóttir Department of Radiology and Biomedical Science
- 11:15-12:05 Meeting with Students.**
Department of Medicine:
Present: Halldór Ólafsson 2. year, Guðrún María Jónsdóttir 3. year, Guðrún G. Björnsdóttir 4. year, Martin Ingi Sigurðsson 5. year, Þórarinn A. Ólafsson 6. year, Bylgja Hilmarsdóttir M.S. student, Sævar Ingþórsson M.S. student.
Department of Physiotherapy:
Gunnar Magnússon ? year, Birkir Már Kristinsson 4. year.
Department of Radiology and Biomedical Science
Valdís Klara Guðmundsdóttir 2. year, Margrét Arnadóttir 2. year.
- 12:05-12:30 Consultation amongst the Expert Committee**
- 12:30-12:45** Transportation.
- 12:45-13:45 Lunch at Vox, Nordica Hotel, representatives from the Faculty of Medicine and Faculty of Odontology.**
- 13:45-14:00** Transportation.
- 14:10-14:25 Introduction to Læknagarður. Building of the Faculty of Odontology.**
- 14:25-15:15 Meeting with Tenured Staff of the Faculty of Odontology.**
Present: Inga B. Árnadóttir Dean, Peter Holbrook Vice-Dean, Karl Örn Karlsson Assistant Professor, Sigfús Þór Elíasson Professor, Sigurður Rúnar Sæmundsson Associate Professor, Bjarni E Pjetursson Associate Professor, Teitur Jónsson Assistant Professor, Sigurjón Arnlaugsson Assistant Professor.

- 15:15-15:30** **Coffee**
- 15:30-16:10** **Meeting with the Sessional Teachers.**
Present: Stefán Helgason Cand odont., Lúðvík Helgason Cand odont., Gunnar Leifsson, Cand odont, Ingibjörg Benediktsdóttir Ph.D, Ingólfur Eldjárn Cand odont. & M.S., Pétur H Petersen Ph.D.
- 16:10-16:50** **Meeting with Students.**
Present: Sigríður Rósa Víðisdóttir M.S. student, Heiðís Halldórsdóttir 6. year, Sólveig Anna Þorvaldsdóttir 6. year, Eva Guðrún Sveinsdóttir 5. year, Rögnvaldur Björnsson 5. year, Arnar Geir Rúnarsson 4. year, Eydís Hildur Hjálmarisdóttir 4. year, Sverrir Örn Hlöðversson 3.year, Jenný Magnúsdóttir 3. year, Aron Guðnason 2. year, Áshildur Þóra Reynisdóttir 1. year, Raket Sigurjónsdóttir 1. year.
- 16:50-17:00** Transportation
- 17:00-17:20** **Consultation amongst the Expert Committee**
- 17:20-18:00** **A joint meeting of all the Health Science Faculties and the Expert Committee at Eirberg.**
Present: Stefán B. Sigurðsson Dean of the Faculty of Medicine, Kristján Erlendsson Chief Executive of Education, Research and Development at Landspítali University Hospital and Vice-Dean of Medical Faculty, Sóley S. Bender Dean of the Faculty of Nursing, Guðrún Kristjánsdóttir Vice-Dean of the Faculty of Nursing, Helga Jónsdóttir Professor, Inga B. Árnadóttir Dean of the Faculty of Odontology, Peter Holbrook Vice- Dean of the Faculty of Odontology, Karl Örn Karlsson Assistant Professor, Elín Soffía Ólafsdóttir Dean of the Faculty of Pharmacy, Már Mátsson Vice Dean of the Faculty of Pharmacy, Sveinbjörn Gizurarson Professor.

Appendix 2: List of documents received

Higher Education Institution Act No. 63/2006 (Draft translation).

National Qualification Framework for Iceland (Draft translation).

Accreditation of Higher Education Institutions according to Article 3 of Higher Education Act, No. 63/2006, No. 1067/2006 (Draft translation).

Application for Accreditation of Health Science at the University of Iceland.

Attachments to application:

The University of Iceland Act No. 41/1999

Rules for the University of Iceland No.458/2000

Research and Education Policy

Summary of policies approved by the University General Forum

The University of Iceland Policy 2006 – 2011

Agreement between the Ministry of Education, Science and Culture and the University of Iceland concerning teaching and research.

Policy and Vision, Faculty of Odontology 2006 – 2011.

Líf-hlaup – Bio-Gels Pharmaceuticals

Policy, Faculty of Pharmacy, University of Iceland 2006 – 2011.

University of Iceland, Faculty of Nursing Policy 2006 – 2011.

Organisation chart

Legal Framework of Public Universities

Regulations concerning the organization and rules of procedure of the University General Forum

Cooperation agreement between The Icelandic State Hospital and Íslensk erfðagreining ehf.

Law concerning the Institute for Experimental Pathology at Keldur, University of Iceland

Law about the Fish Disease Laboratory

Collaboration agreement between the Faculty of Medicine, University of Iceland, and the Research Centre for Rheumatic Diseases, National University Hospital, on the promotion of tuition and research in rheumatic diseases.

Charter of University of Iceland/Reykjavík Hospital Gerontological Research Centre.

Rules on the Institute for Research in Nursing at the University of Iceland and the National/University Hospital.

The University of Iceland Regional Research Centres

University of Iceland quality control system, Standards and requirements for quality of doctoral programmes at the University of Iceland.

Overview of Research Institutes and other University affiliated institutions

University of Iceland Code of Ethics

Rules for the University of Iceland Institute for Research Centres, No. 176/2003

Procedures on Submitting Student Grades

Rules for the Master's programme at the University of Iceland Faculty of Medicine

Rules for PhD studies at the Faculty of Odontology

The DentEd Project

DENTED Visit, 23-26th Sept. 2000, final report

Continuing Education and Training of Icelandic Dentists from 1995 – 2005 at Foreign Universities

The Faculty of Odontology in international context

Collaboration agreement between the University of Iceland and the University Hospital

Regulations on Master's and Doctoral programmes in Public Health Sciences at the University of Iceland

List of publications of Faculty of Medicine 2005 – 2006

List of specialities in the Medical Faculty and in the University Hospital

Medical curriculum

Titles of research projects performed by 3rd year medical students in the spring term 2007

Electives in Year 6 of Medical Studies

A letter to Kristjan Erlendsson, MD, Associate Professor, Vice Dean of Medical Faculty and Associate Dean of Education from the national Board of Medical Examiners (USA).

Elective studies for 6th year medical students, List of Projects 2007

Speciality training of Icelandic doctors – List of academic institutions

Physiotherapy department

Overview of Grants received 2005 and 2006

Collaboration agreement between the University of Iceland on behalf of the Faculty of Medicine and the Icelandic Cancer Society with respect to tuition and research in health sciences.

Rules for the Master of Science (MSc) Programme at the University of Iceland Faculty of Medicine

Rules for PhD studies at the Faculty of Medicine

Faculty of Pharmacy Bachelor of Science in Pharmacy Programme Rules

Faculty of Pharmacy Master of Science in Pharmacy Programme Rules
Faculty of Pharmacy Master of Science in Pharmaceutical Sciences Programme Rules
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Fields and Sections of Science in the Faculty of Nursing
Memorandum of agreement between the University of Minnesota (School of Nursing & School of Public Health) and the University of Iceland
International cooperation agreement, Pace University, New York, and University of Iceland.
Table 3-1 Faculty of Nursing 2002 – 2006: Number of students and graduates
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University of Iceland and the Union of University Teachers Rules for evaluation
Rules on Promotion of Instructors, Specialists and Scholars at the University of Iceland
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Education of the staff of the Faculty of Odontology
List of teachers with the Faculty of Odontology, University of Iceland

Part-time teachers in the Faculty of Odontology 2007

Link to CVs of teachers in Odontology on website

Collaboration agreement between the Faculty of Medicine and the company AstraZeneca on the promotion of tuition and research in allergology and clinical immunology at the University of Iceland

Collaboration agreement between the Faculty of Medicine and the Research Centre for Rheumatic Diseases on the promotion of tuition and research in rheumatic diseases at the University of Iceland Faculty of Medicine

Rules on processes regarding employees who hold a dual appointment at University of Iceland and Landspítali University Hospital

Collaboration agreement between the Faculty of Medicine and the companies AGA Linde Healthcare and Pharmaco on the promotion of tuition and research in anaesthesiology and intensive care at the University of Iceland Faculty of Medicine

Collaboration agreement between the University of Iceland and Íslensk erfðagreining (DeCode Genetics)

Agreement on the funding of a post of associate professor at the University of Iceland Faculty of Medicine

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Table 4.1 Proportion with doctoral degrees. Assistant, associate and full professors at the University of Iceland

Table 4.2 Source of the doctoral degree. Assistant, associate and full professors at the University of Iceland

Table 4.3 Employees of the University of Iceland

Table 4.4 Health sciences in August 2007

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Regulations concerning admission requirements at the University of Iceland, No. 573/2005

On Good Practice in Teaching and Examinations at the University of Iceland

A weblink to the Lisbon Recognition Convention

Procedures on Submitting Student Grades

Rules on admission of students to the Department of Medicine and Physiotherapy of the University of Iceland Faculty of Medicine

Rules for PhD studies at the Faculty of Medicine

List of teaching facilities in Faculty of Medicine

Office of Education Research and Development – Landspítali University Hospital

Collaboration agreement between the University of Iceland and the University Hospital

Collaboration agreement between the University of Iceland and Capital Area Primary Healthcare on tuition and research in health sciences

Collaboration Agreement between the University of Iceland and the Regional Hospital at Akureyri with respect to tuition and research in health sciences

Agreement between the University of Iceland Faculty of Medicine and the Icelandic International Development Agency (ICEIDA) on research projects for two Icelandic medical students in 2007 in connection with development and training projects in the health sector, carried out by ICEIDA at Monkey Bay, Malawi.

Landspítali University Hospital of Iceland, Competition on planning

University of Iceland Quality Assurance Programme

Overview of external evaluations/peer reviews of the University of Iceland and the Faculties/fields of study for which accreditation is sought

Learning Outcomes for the Faculty of Odontology

Faculty of Odontology, Dental Laboratory Technology Program

A contract on teaching Dental Laboratory Technology

Faculty of Odontology – Dental assisting course (Study programme for dental assistants)

Agreement between the Faculty of Odontology, University of Iceland and the Health Department of the Armula College in Reykjavik concerning training of dental assistants.

University of Iceland, Learning Outcomes in Health Sciences

Financial statement: University of Iceland 2005-2006