



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

**Α.ΔΙ.Π.**

ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ

ΑΝΩΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

HELLENIC REPUBLIC

**H.Q.A.A.**

HELLENIC QUALITY ASSURANCE  
AGENCY

FOR HIGHER EDUCATION

## **EXTERNAL EVALUATION REPORT**

**MEDICAL SCHOOL**

**UNIVERSITY OF THESSALY**

February 2011

### **External Evaluation Committee**

The Committee responsible for the External Evaluation of the Medical School of the University of Thessaly consisted of the following five (5) expert evaluators drawn from the Registry constituted by the HQAA in accordance with Law 3374/2005 :

**1. Professor Nikolaos Robakis (President)**

Mount Sinai School of Medicine (NYU), New York, USA

**2. Professor George Iliakis**

University of Duisburg-Essen Medical School, Essen, Germany

**3. Professor Demetrios Demetriades**

University of Southern California, Los Angeles, USA

**4. Professor Angelos Halaris**

Loyola University, Chicago, USA

**5. Professor Peter (Panagiotis) Katsikis**

Drexel University College of Medicine, Philadelphia, USA

**N.B.** The structure of the “Template” proposed for the External Evaluation Report mirrors the requirements of Law 3374/2005 and corresponds overall to the structure of the Internal Evaluation Report submitted by the Department.

The length of text in each box is free. Questions included in each box are not exclusive nor should they always be answered separately; they are meant to provide a general outline of matters that should be addressed by the Committee when formulating its comments.

## **Introduction**

### **I. The External Evaluation Procedure**

The External Evaluation Committee visited the Medical School of the University of Thessaly at Larissa from Monday, February 21<sup>st</sup> through Wednesday, February 23<sup>rd</sup> 2011. The members of the committee had been provided and were familiar with the Internal Evaluation Report of the Medical School. Prior to the visit, the Committee members were briefed in Athens by Professor Achilleas Gravanis, Member of the Board of the HQAA, and by the Chairman of HQAA Professor Spyros Amourgis.

Upon arrival at the Medical School campus, the Committee met with the senior leadership of the University and the Medical School including Professor Konstantinos Gourgouljanis, Rector of the University of Thessaly, the Vice Rector for Academic Affairs Professor Ioannis Theodorakis, the Dean of the School of Health Sciences Professor Ioannis Messinis and the Dean of the School of Medicine Konstantinos Malizos.

During the visit, the Committee had numerous meetings and extensive discussions with University and Medical School leaders, faculty, researchers, residents, postgraduate students and administrative staff. In addition, Committee members met privately with representatives from the faculty body (ΔΕΠ), undergraduate medical students, postgraduate students, associations of medical school students and alumni, and members of the technical laboratory staff (ΕΤΕΠ). The Committee also met with the administrative leadership of the University Hospital of Larissa.

The Committee reviewed records of Departments and individual faculty members, educational and research programmes and other activities. In addition, Committee members visited the student cafeteria and spoke with individual students; laboratories where they spoke with scientific and technical staff; and clinical care facilities where they spoke with residents and students. Finally, the Committee visited teaching, research, library and information technology facilities.

## **II. The Internal Evaluation Procedure**

The Committee commends the School of Medicine, its leadership, faculty and staff for an excellent job in preparing, compiling and organizing extensive and detailed documentation that was provided to the External Evaluation Committee.

Detailed records for research activities, teaching programs and curricula of the Medical School were available and any additionally requested information was promptly provided. Records for individual Sectors (Τομείς), Departments and CVs of faculty members and scientific staff were made available for review. In addition to the extensive written records, the Committee heard oral presentations and overviews of programs. These files and documents helped the Committee understand the function and programs of the Medical School and to conduct its evaluation. The Committee felt the evidence reviewed and provided to be of good to very good quality.

The Committee found the Internal Evaluation report well prepared and informative. However, important regulatory issues such as Human Subject Protection, Institutional Review Board, animal welfare, biosafety and radiation safety were not addressed. There was no information or evaluation of faculty and departmental funding.

Although instructional issues and deficiencies were identified in the Internal report, implementation of modern teaching approaches such as group-

oriented, problem-based and e-learning were not fully addressed in the documents provided to the Committee.

## *A. Curriculum*

### **APPROACH**

- a) **Undergraduate:** The Committee determined that the Curriculum in general reflects the goals and objectives of the Medical School with appropriate courses for the training in preclinical and clinical sciences.
- b) **Resident training:** The Committee determined that the curriculum for resident training was overall satisfactory, but deficiencies were identified in some Departments.
- c) **Graduate and Doctoral Programs:** The Committee found that the curriculum offered in the Masters programs was satisfactory. However, doctoral programs had significant deficiencies.
- d) The Committee was surprised to find that there is no established internal process for regular review, revision and updating of the teaching curricula. This was true for both undergraduate and graduate programs.

## **IMPLEMENTATION**

a) **Undergraduate studies:** The students felt that in some courses the syllabi were not clear and specific enough to guide them in their studies. There is insufficient access to electronic resources, such as full text articles and books. The students complained that there is no web-based course selection and registration.

b) **Residents:** In some Departments there was no evidence of a structured curriculum for resident education.

c) **Graduate and Doctoral Programs:** Masters programs had defined curricula, but there are no well-structured doctoral curricula, courses, qualifying exams and committees for approval of thesis proposals.

## **RESULTS**

The overall implementation of the curriculum is good. However, infrastructure limitations and underfunding impede its full implementation.

It is unclear if a Curriculum Committee exists for the undergraduate program and, if it does, whether it meets at regular intervals. This is a significant weakness that impedes revisions and updates to meet modern educational needs, to assess the effectiveness of teaching, and to address problems.

A significant deficiency of the Graduate Program is the lack of financial support for doctoral candidates.

**IMPROVEMENT**

The leadership of the Medical School appears to have a good understanding of the key aspects of a modern curriculum, especially for undergraduate studies, and has made proposals for corrective actions. However, many curriculum issues regarding postgraduate studies, such as lack of a defined curriculum for doctoral studies and a weak curriculum for many residency programs, must be addressed.

The Medical School needs to establish a Curriculum Committee that meets regularly to monitor, revise and update the teaching curricula of the undergraduate and graduate programs.

A course on Scientific Integrity needs to be included in both the undergraduate and graduate curricula.

## ***B. Teaching***

### **a) Undergraduate studies:**

The Medical School relies heavily on formal lecture-type learning with emphasis on memorization and far less on small group problem-based learning. Medical student education is heavily theoretical and weak in clinical skills training. In addition, it was felt that there was a rigid separation, both in semester structure and course content, between preclinical and clinical subjects. A curriculum that integrates aspects of clinical and basic training could address this need. Information technology utilization for the teaching of undergraduate students was limited.

The Committee felt that the teaching faculty to student ratio and the teaching resources available to students need to be improved.

Students expressed concern about the fragmentation of teaching locations and the underutilization of the excellent teaching facilities in the new campus. This results in lengthy and disruptive commutes between University facilities.

Some aspects of the current examination system require significant improvement to enhance student performance and increase student satisfaction. Examinations at the conclusion of individual course modules could complement and/or replace comprehensive final exams. In addition, wider use of multiple choice question-based examinations, rather than the use of narratives, will allow standardized and objective testing. Some students expressed concerns about inadequate supervision during written exams. Better supervision would improve the integrity of the process.

A significant concern is the high failure rate in certain subjects and the widespread practice of allowing students to start clinical training without previous successful completion of all required preclinical courses.



The regulation that allows students to extend their studies for many semesters, indeed years, beyond the regular 6 years of training (sometimes even 6 plus 6 plus 5 years) has a serious negative impact on training, wastes limited resources, and reduces the overall quality of the graduate's education.

The implementation of the concept of "student advisor" would greatly facilitate monitoring student progress, help address training problems as they arise, and help guide career choices.

The lack of a systematic and continuous process for the evaluation of teaching (both methods and teacher performance), such as structured student questionnaires, needs to be addressed.

#### b) Residency Programs:

Education is heavily theoretical and lacks in clinical skill training. The use of laboratories for the teaching of clinical skills, the systematic use of log books of clinical cases seen and procedures performed, and the requirement of a minimum number of specific procedures would address these concerns.

#### c) Graduate programs:

Graduate education suffers from the lack of research resources, most notably equipment. The doctoral program requires the introduction of structured graduate courses in addition to the thesis. The Committee recommends that doctoral committees should consistently include external members.

There was also a major concern regarding the large number of awarded doctoral degrees and the excessive rate (95%) of "Άριστα", even though many of these theses did not produce publications. This results in devaluation of the degrees and diminished credibility of the programs.

### ***C. Research***

The Committee would like to commend the faculty for good research productivity, as evidenced by the number of publications in peer-reviewed journals despite limited resources. Some departments have reached levels of excellence as shown by their competitive funding and publications.

Most research projects are based more on individual efforts rather than on a strategic research plan of the School. The School should develop a strategic plan for research focusing on areas of existing strength and local and national needs. Such a plan is best developed by a Research Committee appointed by the Dean of the School of Medicine. The Research Committee should be advisory to the Dean and should deal with issues of equipment, fund raising, seed support and related matters.

The Committee believes that the Medical School should be better supported financially for its research activities. A policy of start-up funding for promising programs and new faculty should be implemented. In addition, this will allow the recruitment of high quality faculty.

With few exceptions, the faculty of the Medical School has a rather poor record in attracting competitive research funding. This is an important issue that deserves serious consideration by the leadership and faculty of the School.

Although the Committee found the new building facilities satisfactory, the research infrastructure was perceived as inadequate. There is a need for essential core research equipment to serve many laboratories and an urgent need for a state-of-the-art animal facility. The school should develop a strategy to attract funds with the purpose of improving the research

infrastructure of the Institution. Absence of the appropriate research facilities is a serious impediment to the successful competition for funding.

The committee recommends the implementation of an Institutional Review Board (IRB), Animal Welfare, Biosafety, and Radiation Safety Boards. Formal Committees need to be established that approve research protocols, and monitor research compliance and training. A training course should be designed for all those who wish to engage in research activities. Such a course should be completed periodically and a certificate of successful completion should be a prerequisite to being able to conduct research, whether basic or clinical.

Most research activities and productivity are associated with clinical research and applications rather than basic research. This was perceived as an important deficiency and this imbalance should be addressed with the improvement of basic research efforts.

The committee was surprised by the disproportionately low numbers of technical support staff for research compared to a large number of Medical School administrative (secretarial) staff.

#### ***D. All Other Services***

The Committee determined that there is no formal mechanism to provide Student Mental Health Services to the undergraduate, graduate and post-graduate trainees. At a minimum, such a service should be provided in the form of crisis intervention to the student in need with a prompt assessment and emergency intervention. If long-term treatment should be required, the student should be referred to an outside practitioner. Student Mental Health Services should be provided by a staff member who is not involved in the teaching and evaluation of the trainees to avoid conflict of interest.

Student associations are not provided with any space and support for their activities.

Major delays in completion of the library affect student and resident education. Some faculty expressed concern about the lack of full text access to important scientific journals.

The lack of the digitalization of radiological examinations and electronic medical records in the Hospital reduces productivity and detracts residents from their learning activities.

#### **Collaboration with social, cultural and production organizations**

The Medical School has the strong support of the local society and has made significant contributions to the health care of Thessaly and other areas of central Greece.

Many community projects and outreach programs (for example anti-smoking education, diabetes education, and women's issues) have been spearheaded by

faculty members and student organizations of the Medical Students.

A successful international student exchange program has been operating lead by the student associations.

The Medical School has successfully organized many national and international scientific conferences.

The Medical School of the University of Thessaly has contributed significantly to the cultural and economic development of Central Greece.

### ***E. Strategic Planning, Perspectives for Improvement and Dealing with Potential Inhibiting Factors***

#### **a) Inhibiting Factors at State level:**

The Committee believes that a significant factor that negatively affects the fulfilment of both the educational and research missions of the Medical School is the chronic underfunding provided by the Greek State. There is no consistent policy of State funding for competitive research.

A significant drawback is that the number of medical student admitted annually exceeds the capacity of the School to adequately train them. The Committee feels that this also results in a large number of students dropping out or delaying completion of training.

The Committee strongly recommends the implementation of national standardized examinations that will allow the objective evaluation of Medical Student education, the assessment of the quality of education provided by the Medical Schools of the country, and for the admission of graduates into

residency programs based on merit. This view was widely shared by both faculty and students.

The Committee is gravely concerned that there is an excessively long delay of the Medical School graduates in finding a placement for specialty training. As a matter of rule, most graduates must await anywhere from one to even ten years before they can start specialty training. This is unacceptable. The reasons behind this phenomenon are multi-faceted and include admissions of students to the nation's medical schools in numbers disproportionate to the actual need for physicians and unavailability of specialty training positions. The problem is compounded by the lack of merit-based selection of candidates for specialty training. This issue can be partially rectified by the introduction of both a merit system of selection for training and a matching program.

b) **Inhibiting Factors at Medical School level:**

The Committee expresses a serious concern about the selection process of new faculty and promotions. It was apparent that a high number of faculty positions are filled by internal candidates. The Committee believes this can be rectified by separating faculty promotions from the recruitment of new faculty. The failure to recruit new faculty impacts negatively on the introduction of new research projects and programs.

The committee noted the gender imbalance at higher faculty ranks of the University where no female full professors are employed.

A major concern for the Committee is the poor working relationship between the Medical School leadership and the University Hospital Administration. This may negatively affect the clinical training of students and residents. Regardless of the causes that precipitated this unfortunate development, the Committee believes that the situation can be improved if the parties would agree to establish and implement regular and open communication channels.

A conflict of Interest disclosure policy is currently absent in the Medical School. This is essential to bring transparency to relationships with outside entities and funding bodies.

A further concern is that University Hospital functions only at 80% capacity according to the internal review. This negatively affects the clinical training of residents and students. One recommendation is that The University Hospital and Medical School Administration jointly address the problem and explore realistic ways to increase the census. The nursing staff shortage will have to be addressed at least in some areas visited by the Committee including the psychiatric unit

#### ***F. Final Conclusions and recommendations of the EEC***

The External Review Committee, after having reviewed the Internal Review report and other documents, after having extensive discussions with members of the Medical School and after having visited the research and clinical facilities, has reached the following conclusions and recommendations:

- 1) The curricula at the undergraduate, graduate and resident levels need to be continuously updated and improved to keep current with changing educational needs and incorporate the recommendations of students and members of the faculty.
- 2) There is a need to introduce modern teaching methods for medical students that include small group problem-based approaches, e-learning, better integration of preclinical and clinical subjects and a focus on clinical skills. Students should keep logs of their clinical training and skill acquisition. All students should be trained on a required number of basic clinical skills and

surgical procedures important to general practice and learning progress should be monitored

3) The number of Medical students admitted should not exceed the capacity of the School to adequately train them.

4) The maximum time allowed for medical students to graduate should be revised and shortened significantly.

5) The Committee strongly recommends the implementation of national standardized examinations that will allow the objective evaluation of medical students and the quality of the education provided. Scores from these examinations could be used to evaluate applicants for admission into residency programs based on merit. The committee was impressed that several students expressed support for the introduction of national standardized medical tests.

6) The Committee is concerned that there is an excessively long delay of Medical School graduates to find placement for specialty training. A national merit based system for admission to residency programs should be implemented (see above).

7) Better structured residency programs and improved monitoring of resident education need to be established. Specific requirements for completion of residency studies need to be introduced such as training in skill laboratories, a minimum of specific clinical cases seen and a minimum of specific procedures performed.

8) A well-structured doctoral program needs to be implemented with clear curricula, required courses, qualifying examinations and committees for approval of thesis proposals. More stringent grading of doctoral theses will enhance the credibility of the program.

9) The Doctoral program suffers from lack of student funding and excessive



enrollment.

10) Basic research at the Medical School is inadequate and needs strengthening. Both competitive funding and productivity are at low levels. The Committee recommends revision of the faculty recruitment and promotion process to encourage recruitment of new talent especially in basic research.

11) The underlying research infrastructure needs to be improved to augment the potential to attract competitive funding. An animal facility is essential and needs to be created. In addition, the committee recommends the creation of a process to ensure regulatory compliance with Institutional Review Board (IRB), Animal Welfare, Biosafety, and Radiation Safety.

12) The Medical School should develop a strategic research plan that focuses on areas of existing strength and local and national needs. This will help the faculty to attract state and international competitive funding.

13) Consistent competitive State funding is essential for the continuous improvement of research at the Medical School.

14) The Committee is seriously concerned about the “brain drain” from Greek universities and medical schools. One factor that contributes to the exodus abroad of highly qualified medical school graduates is the very long delay in finding placement in a residency training program.

The Members of the Committee

UNIVERSITY OF THESSALY  
MEDICAL SCHOOL

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Signature

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