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HELLENIC REPUBLIC
H.Q.A.
HELLENIC QUALITY ASSURANCE AND
ACCREDITATION AGENCY

EXTERNAL EVALUATION REPORT

DEPARTMENT: University of Ioannina Medical School

UNIVERSITY /TEI: University of Ioannina

Version 2.0

March 2010



External Evaluation Committee

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

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Introduction

The External Evaluation Committee (EEC) visited the Medical School of the University of Ioannina (MS-UoI) at Ioannina from Tuesday 25th June to Thursday 27th June 2013. The members of the EEC had been provided with the Internal Evaluation report (March 2011, covering the 2005-2010 Academic Year period) and several other documents of the MS-UoI including a list of publications, the "Guide of Postgraduate Studies", amongst others, prior to the visit and had the opportunity to consider them. The members of the EEC were also briefed in Athens in ADIP by Professor K. Economou prior to the visit.

On arrival, the EEC met with the Dean the President of the Medical School, Professor Margarita Tzaphlidou and Professor Efsthios Frilingos, who oversaw the process of internal evaluation of the Medical School.

During the visit, the EEC met with members of the OMEA; members of the Faculty; undergraduate, Master's and Doctoral Degree students; residents in clinical training in several specialties (including surgery, medicine, general practice, obstetrics and gynaecology, anaesthetics and others); research, technical and administrative staff at the MS-UoI and the University Hospital. The EEC as a whole or in smaller teams also visited multiple clinical units, laboratory and other facilities at the University and the Hospital, including: the Departments of Anatomy, Histology-Embryology, Biochemistry, Biology, Physiology, Pharmacology, Pathology, Internal Medicine, General Surgery, Paediatrics, Obstetrics and Gynecology, Medical Physics/Radiology, Neurology, Neurosurgery, ENT, Ophthalmology, Orthopaedics, Rheumatology, Forensic Medicine, Biobanking, Biomechanics and central University facilities. For several issues, the EEC requested additional information and the MS - UoI was able to provide this in most cases.

Specifically:

On Tuesday 25th June the EEC attended an informative presentation session by Professor Triantafyllos Albanis, Rector of the University of Ioannina, members of the OMEA and members of the Faculty.

On Wednesday 26th June the EEC visited various teaching, clinical and research laboratories as well as clinical departments and met with several teaching and research members of the Faculty. In particular, members of the EEC met with:

- a) A group of postgraduate students in an open meeting
- b) Members of the doctorate programme in an open meeting
- c) The senior management team of the University Hospital.

On Thursday 27th June members of the EEC visited several facilities of the University Campus including the library, the conference centre Karolos Papoulias, the students' restaurant, the office of the secretariat and the internet facilities.

In addition the EEC met (again in open meetings) with:

- a) Undergraduate students
- b) Residents of many specialties, in clinical training currently

- c) Members of the support, technical and administrative staff of IDAX, EEDIP and ETEP
- d) Members of DEP

All the above meetings were open and were well attended.

Additional Facilities visited included:

a. MS - UoI: teaching theatres, classes, teaching and research laboratories (including Biology, Anatomy, Physiology, Histology-Embryology, Biochemistry, Pharmacology, Pathology, Epidemiology, Medical Physics, Medical Genetics and Human Reproduction), Biosystems and Synthetic Genomic Network Medicine centre, Biobanking, Biomechanics, administration and other areas

b. University Hospital: several inpatient wards and clinics in clinical departments.

In general, the EEC feels that the external evaluation was very well organised and that the leadership and faculty of MS-UoI did their best to facilitate the whole process. It was felt that most faculty members fully endorsed the significance and need for external evaluation, a general fact showing openness and desire for improvement and excellence. There were outstanding presentations to committee members and unusual frankness in bringing to the front problems and discrepancies, as well as an atmosphere of willingness to look into ways for improvement.

During this external evaluation, the EEC saw evidence of multiple areas of excellence for which congratulations are due. It also identified areas where improvements can occur. Due to the space constraints of the report, we have concentrated more in the problem areas – this should not detract from the considerable achievements. For the same reasons, this report focuses more on issues that apply across a large number or the whole of the School's activities; it is not intended to provide a detailed evaluation for each individual activity in each one of the Departments and Laboratories.

Many of the important issues raised in this report are systemic, that is they are caused by factors operating at the national level or beyond the control of the School and its leadership. Yet, we feel compelled to raise them all the same, as they are of crucial importance in many (if not most) cases.

The EEC expresses its gratitude to the President of the MS - UoI Professor Margarita Tzaphlidou and Associate Professor Efstathios Friligos and all other members of OMEA for putting together the documents and presentations, and organizing such an efficient site visit.

The Internal Evaluation Procedure:

The EEC found the internal evaluation report and associated relevant documentation very informative and essential for understanding the functions and components of the School. Though the internal evaluation report was produced in 2011 the EEC received additional update information and felt that, overall, the objectives of the internal evaluation process were met. However, there are areas where data quality and interpretation can be improved: specific examples are provided in this report. In addition, it should be understood that the process of

evaluation is continuous and iterative: this includes periodic checks as to whether actions agreed upon as a result of the process have been taken, and whether they had the planned / desired impact.

A. Curriculum

To be filled separately for each undergraduate, graduate and doctoral programme.

APPROACH

a) **Undergraduate:** Although the current curriculum is only ~5 years old the School of Medicine is already revising it. The MS - UoI has established a Curriculum Committee led by Professor Theodoros Xenakis. The proposed revised curriculum was presented to the EEC and was discussed. The idea behind the new curriculum is a more logical order in the sequence of courses and a more facile integration between preclinical and clinical subjects. Overall, basic sciences are taught in years 1 and 2, preclinical subjects in years 3 and 4, and clinical subjects in years 5 and 6. Both current and proposed curricula are appropriately structured to train students in preclinical and clinical sciences and they reflect the aims and objectives of the MS - UoI.

b) **Residency training:** The close proximity of the University hospital to Medical School and the fact that clinical workload has increased substantially in recent years, provides great opportunities for top-quality clinical training of residents in virtually all specialties. In general, there is no uniform approach to resident training in Greece with developed curricula by National Boards. The MS-UoI has developed training curricula and protocols in several clinical departments, including pathology, nephrology, hematology, neonatology, and pediatrics/pediatric nephrology. It is necessary, however, that there are benchmarks for requisite experience in clinical cases and procedures (for example a minimum number of appendectomies, minimum number of lumbar punctures or recommended numbers of patients in different diagnostic categories) before a young doctor takes a Board examination.

There are pockets of excellence on this front within MS-UoI, including well-laid out clinical training plans with annual deliverables accompanied by relevant web-based information and facilities, well-organised, easy to access teaching curriculum and enthusiastic faculty. Communicating and sharing such experiences and practices could facilitate their use as examples / templates for the development of training curricula in MS-UoI, while a national strategy is worked out.

c) **Graduate and Doctoral Programs:** There is an obvious enthusiasm and ability to provide good quality Master's and Doctoral training programmes in many subjects in MS-UoI. Several Master's Degrees are offered and their quality appears to be good. Doctoral programs have no defined curricula; in fact, it is unclear if a Curriculum Committee exists for the Master's and Doctoral Programs. The existence of such Committees is not evident from the Internal evaluation document and was not clarified during the site visit. There is no clear strategy for the overall goals, "market" relevance and funding or sustainability of graduate and doctoral programmes; no clear plans for optimization of available relevant resources not only within MS-UoI but across the University campus and region-wide health facilities; no clear ways of assessing the success of these programmes (in terms of quality, success/failure rates, productivity (e.g. publications, discoveries, patents, policy changes etc.), absorption of graduates in academia and industry, etc

IMPLEMENTATION

- a) Undergraduate studies (medical students):** During the meeting of the EEC with medical students, the students reported a number of issues with the curriculum and the teaching of certain courses. Some of these include:
- The perception by some students that they were not sufficiently engaged in the development of the new curriculum: it was felt that the recommendations of the elected medical student representatives may not reflect the views of the wider base.
 - Lack of clear syllabi in certain subjects or poor implementation of existing syllabi in others.
 - Shortage of teaching staff relative to the excessive number of students that sometimes necessitates in excessive reliance on video-based or other non- interactive modes of teaching.
 - Some students feel understimulated or overburdened by the basic and preclinical curriculum and demand a better integration with the clinical subjects.
 - During clinical training the students reported frequent cancellations of lectures, the absence of a structured training program including defined hands-on clinical training and, in some cases, the limited acquisition of clinical skills.

Other important relevant issues that transpired during the EEC's visit and meetings, as well as from the information provided in the Internal evaluation report include:

- The continuing uncontrolled high number of undergraduate medical students as the School is forced to take year on year, without any real increase in the available human resource or other infrastructure; this is further compounded by alternative ways of entry to the School (other than through the National Examinations), which reflect almost a quarter of the students each year.
 - The lack of an overall plan for optimizing the utilization of the existing physical infrastructure (e.g. teaching rooms are often empty although there are perceptions of shortage of space).
 - The lack of an overall plan for utilization of other resources particularly for clinical training, e.g. clinics at the neighbouring State General Hospital, Health Centres (particularly pertinent to general practice training), or even more distant hospitals in major towns in Epirus (e.g., Arta, Preveza)
 - The lack of a clear, implementable and adhered to policy on pre-requisites in order to advance through subsequent years of training. Without this in place, much of the effort in designing curricula and investment in implementing them become meaningless.
 - It is not clear why there is so much emphasis on structural aspects of the teaching curriculum for medical students. Specifically, it is unclear whether such deliberations have in mind strategic directions, for example special emphases in the unique features or comparative advantages of the MS-Uol or focus on cutting costs.
- b) Residents:** On the surface, it is difficult to see major deficits in at least the opportunity for top quality clinical training, given the facilities available at the University (but also possibly other) hospitals, the extensive range of cases treated, the scope of practice and catchment area of MS of UOI, and the already existing experienced leadership. Yet, several of the issues raised by the residents echo those raised by medical students

above and will not be repeated here. Issues particularly pertinent to the training of residents are as follows:

- There is virtually no secretarial or other managerial support and as a result, residents spend an enormous amount of time in medically meaningless tasks, e.g. transferring specimens, transcribing results etc. The recent development of several “electronic” services at the University Hospital is strongly applauded and further development should be a priority for support, but remains insufficient on its own to allow clinical trainees to concentrate exclusively on medical tasks.
- There is room for improvement of existing electronic infrastructure: it has been mentioned that in most cases, 12 residents have access to a single computer terminal.
- There is a lack of established or easily accessible protocols and guidelines that could help on occasions guide the residents in the timely management of some cases, particularly if senior support happens to be absent at the time.
- There is no curriculum in most cases that has to be followed, in order to ensure that each trainee will have sufficient exposure to a minimum number of cases / pathology, and through which progress during the training can be judged.
- Even more of a problem appears to be training in practical procedures in medicine, and several surgical procedures in surgery, to the extent that some trainees feel insufficiently trained, even though they are approaching the end of the specialization. There may be several reasons for this, all of which need to be carefully considered and addressed by the School.
- Residents felt that the existence of Tutors and Mentors for each trainee, with a clear agenda to guide the trainee throughout their specialization, would be helpful. Similarly, formal evaluation of the clinical trainers by the trainees would be supported.
- There is no identifiable mechanism matching the ability, capacity, patient volume and track record of a clinic to train in a specific specialty, to the number of residents this clinic can have.
- There could be opportunities for training in hospitals other than the University Hospital. Carefully constructed rotations between clinics within the University Hospital and in other Hospitals in Ioannina and the Region may enhance the training opportunities and experience.

In addition to the issues above, this EEC feels strongly that the very method of entry into specialty training, which remains based to the antiquated waiting list system, operates as a gross disincentive for the most promising medical graduates to stay in Greece and is counterintuitive to striving for excellence, either on an individual or institutional basis. It looks like residents are asking for opportunities to obtain additional formal qualifications, mostly in the form of “doctoral” titles, although such qualifications do not equate formal research training in the form of Ph.D. and it is unclear to what extent they add additional research or academic capabilities in many cases. If such credentials are used primarily so that young doctors get ahead of their colleagues in an increasingly cluttered system of practice or to buffer major time gaps in their careers as they are stuck on waiting lists, then one should look at alternative and more meaningful ways to use the ten-plus years of training to

promote (and reveal) excellence instead of adding extra layers of questionable distinction.

RESULTS

a) Undergraduate studies: The present undergraduate curriculum and its implementation were deemed satisfactory. The planned curriculum revision may improve integration of preclinical-clinical subjects. It is not evident that medical students are educated on the status of medical professional market, specialty and subspecialty markets, research markets etc, in Greece and abroad. It is unclear how medical students choose career paths and make further career decision, especially in view of the apparent separation between Universities and job markets in Greece.

b) Residency training: The absence of formal curricula and a pre-requisite minimum set of clinical skills in the majority of specialties is a serious issue that has to be addressed at national level. In the meantime, based on the pockets of excellence and several individual enthusiasts, steps can be taken by the School to fully engage with all specialty leads as well as current trainees, and if necessary import experience from abroad, to develop School and locality-specific training curricula.

c) Graduate and Doctoral Programs: The curriculum of the Masters Programs is satisfactory. The Masters Programs are programs of 2-year duration with 1 year dedicated to research and thesis preparation. It became, however, evident during the meeting with the Master's students that this time frame is not usually held resulting with the research project phase extending well beyond the scheduled one year.

The lack of a structured and well-defined curriculum for the Doctoral program should be addressed. Another critical issue is the lack of financial support for many doctoral candidates. There might be excessive numbers of doctoral candidates in the MS - UoI that cannot be justified by faculty and plant capacity. This may be only a nominal issue, for example we were told of several never-starting or never-ending doctoral thesis projects due to residency training waiting schedules and other technicalities.

It is not clear how graduate programs of MS-UoI are integrated with other graduate programs in UoI in foods, agriculture, public health, material science etc. There were a couple of examples of such interdisciplinary initiatives in the initial presentation and this is a very important matter especially in the current era of austerity (such programs share resources and add value).

IMPROVEMENT

Undergraduate studies: More than simply optimizing the order of courses and suggested problems of integration between basic and clinical sciences based on internal feedback, the curriculum committee could initiate useful discussions and exchange of ideas with such committees in other Medical Schools in Greece and abroad and develop strategic vision, for example leverage some unique

opportunities for collaboration with other hospitals in the wider Epirus Region. As in other functions of MS-UoI, a key challenge is to exploit the unique features of the Medical School within its geographical area (for example, major opportunities in primary care) and coordinate plans of action with other disciplines within the University.

b) **Residency training:** Development of specialty-specific curricula is a long overdue priority that needs to be developed on a national basis by collaboration of all relevant agencies (Universities, Ministries, and Specialty Societies etc). In the meantime, work could be undertaken at a local level by the MS-UoI towards this. All comments made about the undergraduate curriculum above also apply to this section.

c) **Graduate and Doctoral Programs:** The existence of a Curriculum is not evident from the Internal evaluation document and the information provided during the on site visit. It is further recommended that provisions are made and checkpoints established ensuring that the Master's students obtain projects which can be completed within the specified one-year period.

The Doctoral Programs have no structured curricula, courses, qualifying exams and committees for approval of thesis proposals. There are also no consistent entry criteria. The faculty that participates in Doctoral education is aware of these issues and have long term plans to address them. The EEC recommends the establishment of Doctoral Program Oversight Committee, a well-defined Training Curriculum in the respective subject area and a unified framework for admissions, course requirements, progress evaluation, proposal approval and graduation requirements.

In general, provisions should be made that both undergraduate and graduate curricula are regularly reviewed, revised and updated to adapt to advances of knowledge in covered subject areas.

B. Teaching

THIS SECTION SHOULD BE READ IN CONJUNCTION WITH THE SECTION ON THE CURRICULUM, ABOVE, AS THERE IS SIGNIFICANT OVERLAP BETWEEN THE TWO.

APPROACH

- a) Undergraduate studies:** In several places, member of the EEC had the opportunity to see the substantial effort by faculty to leverage whatever resources they have in order to stay up to date with advances in their field and, especially, to maximize the educational experience for medical students. Several good examples were noticed. A major challenge is the teacher/student ratio. The ratio of Medical students to Faculty is too high due mainly to the large numbers of students – this problem is likely to worsen with the current inability to replace retiring staff due to the financial difficulties in the country, and represents possibly the highest risk for deterioration of the quality of teaching and training offered to undergraduates. Teacher/student collaboration appears to be variable between years and subjects. Whereas involvement of “senior” students in the teaching of more “junior” students was commented upon negatively, the EEC feels that this is a good example of effective teacher/student collaboration, on the proviso that teaching standards are not compromised as a result. This raises the wider issue of the continuing evaluation of teaching as a whole and individuals as teachers. The School has made great advances (from a virtual zero evaluation to a more systematic evaluation of teaching) in recent years; the committee feels that this effort should be sustained, improved further and move towards evaluation of individuals as well. There is little utilization of information technology by teachers or undergraduate students. The examination system appears to be highly variable: whereas it is appreciated that flexibility is necessary and welcome. The EEC thinks that there is some room for some standardisation and more uniformity of examination approach. Comments by the students regarding limited or no option for feedback on examination performance in some subjects, if true, should be addressed seriously by the School: such practices are indefensible certainly in educational terms.
- b) Residency training:** Many of these aspects have been covered in the previous section on the curriculum. Without mentioning specific examples, some of the clinical Departments visited created an excellent impression on EEC members. The University Hospital is the home of extremely busy clinical practices with excellent training opportunities, particularly if a more strategic approach incorporating all available facilities is taken by the government and the School. These could include other hospitals and units in the health district, health centres and wider rotational programmes, maximizing exposure to different case-loads, infrastructures and practices. Particular attention should be paid to the further development of the General Practice Department and the training it can provide, again as part of an overall strategic development of health services for Epirus and the wider area. A system of continuing annual appraisal/assessment of trainees’ progress could be considered, once relevant curricula, syllabi and portfolio of clinical skills have been developed, but in the current environment this would be impossible.

As mentioned elsewhere, clinical leadership complained about lack of

administrative support, often using residents to cover that need. It was not always clear whether the number of beds allocated to different clinical disciplines were determined by clinical need or teaching priority. Also, the social role played by a large regional hospital often creates significant distractions, for example the delivery of expensive end-stage or even hospice care in general hospital wards. The logic of allocation of precious few clinical and administrative resources is not always clear. Clinical teaching may suffer because of conflicting and misaligned priorities.

c) Graduate and Doctoral Programs:

The faculty have developed structured Master's programs that are primarily lecture-based during the first year. During the second year Master's students complete a research project and write a thesis. Doctoral students have no structured training program. In addition, in many cases, there is, in practical terms, no obvious lines of supervision or mentorship and the ratio of doctoral students / supervisor (somewhere between 10:1 and 5:1) is quite excessive to allow a truly productive interaction. The caveat here is what is the true number of engaged graduate students at each point in time.

IMPLEMENTATION

The following comments apply equally to all 3 areas (undergraduates, residents and graduate / doctoral programmes):

The EEC felt that the majority of Academic Staff (and many non-academic clinicians who are involved in teaching and training) are highly committed and enthusiastic for their role as educators. The majority are also (justifiably) extremely worried for the continuous trend of very high student/teacher ratios and cite this as the major threat to quality teaching: the EEC fully agrees with them, particularly in the light of projected reductions in numbers of academic staff without replacements in the next few years.

Teaching is in many instances linked with research and there is anecdotal evidence that this has worked well in many instances. Again this forms part of the required wider strategy of the Medical School about how best to utilize all existing resources to achieve its objectives, the main one of which should be top-quality education. Whereas the EEC had a clear sense that there is a lot of relevant human resource and physical infrastructure that could be utilized to optimize each of the School's objectives (including teaching quality and research productivity), we were unable to find evidence of concerted thinking and documented planning about how to best utilize them. We feel this is particularly important at this time of possible reduction in available resource due to financial realities of the country.

Mobility and renewal of academic staff is limited and is likely to become even more limited in the future. This suggests that a strategy to sustain and improve the teaching skills of existing staff is imperative (for example running "teaching the teachers" courses) – similarly to sustain their commitment and enthusiasm for their educational role. Such roles should be clearly assessed and be taken seriously into consideration when deciding within post career development (i.e. there should be a more balanced reliance on research / teaching achievement).

Mobility of students is greatly facilitated by the School with its established networking and involvement in programmes such as ERASMUS and others.

Mobility of residents is much more constrained, in our view unnecessarily, although they still have the opportunity to complete part of their training in units abroad. These are very highly laudable initiatives.

RESULTS

The following comments apply equally to all 3 areas (undergraduates, residents and graduate / doctoral programmes) unless otherwise specified:

There is no established benchmark against which the efficacy / success of teaching can be judged: again this issue is not specific to MS-UoI. There are anecdotal reports of good success of x-students abroad, and whereas this is widely used as an argument for success of Greek Universities and Medical Schools, it is also a failure of and loss for the Medical School and Greek society (brain drain). The latter is a huge challenge for the Greek University and Greece at this time.

There appears to be some discrepancy in the success rates between some of the Masters. However, there appears to be a massive percentage of non-completers of doctoral theses and with few, obvious exceptions, little productivity (e.g. in terms of publications) arising from doctoral work. The reasons for this need to be considered carefully by the School and corrective measures need to be taken.

The School is obviously aware of most of these issues and includes in its internal evaluation proposals and actions that address a lot of them. It is unclear whether all of these proposals (from March 2011) have been taken forward, but it is obvious that some have (e.g. the review of the curriculum).

There is currently no obvious facility for educating / informing / supporting medical students and residents on the status of the medical professional market, specialty and subspecialty markets, biomedical research markets and opportunities in Greece and abroad. Establishment of such a facility would go a long way towards helping graduates choose an appropriate career path and would be a competitive advantage of MS-UoI over other medical schools in Greece and many abroad.

IMPROVEMENT

a) Undergraduate studies:

A teaching oversight committee needs to be established for monitoring the quality of teaching. A teaching evaluation process needs to be implemented for medical student training. The evaluation should examine both methods and teacher performance, and should include feedback from student questionnaires. Such a process will identify weaknesses and areas in need of improvement at the level of content and faculty performance. The quantity and quality of teaching by faculty needs to be recorded annually. The allocation of equipment should take into account teaching needs and priorities and subject relevance.

b) **Residency training:** Many of these aspects have been covered in the previous section on the curriculum and those regarding undergraduates. The training opportunities are truly excellent, particularly if a more strategic approach incorporating all available facilities is taken by the government and the School. These could include other hospitals and units in the health district, health centres and wider rotational programmes, maximizing exposure to different case-loads,

infrastructures and practices. Particular attention should be paid to the further development of the General Practice department and the training it can provide, again as part of an overall strategic development of health services for Epirus and the wider area. A system of continuing annual appraisal/assessment of trainees' progress could be considered, once relevant curricula, syllabi and portfolio of clinical skills have been developed, but in the current environment this would be impossible.

c) Graduate and Doctoral Programs:

The Master's student training often exceeds the scheduled 2-year period. This is primarily because Master's students undertake research projects that exceed one year. More supervision is needed to ensure that students undertake projects that can be completed within the allocated period of time to allow students to obtain their degrees in a timely fashion. An oversight committee would be very helpful in unifying this process and ensure that the processes are abided.

A number of serious issues are associated with the Doctoral program and require immediate attention:

- There is a lack of a uniform framework for Doctoral student education.
- There is no uniform and well-defined selection process for Doctoral students.
- Student stipends differ widely while many students are receiving no financial support.
- Several students are required to pay Value-added Tax (VAT) on their stipends. Since students reported that this is not a universal policy and other Universities do not apply this tax, the University of Ioannina should examine the legal basis for this taxation and if possible rescind this taxation. Graduate Doctoral students are trainees and should not perform fee-for-service work.

The recently implemented policy to limit doctoral students to 5 per faculty member is a step in the right direction as it avoids inflation in the number of graduate doctoral students and ensures quality of training. The EEC feels that even this number is beyond the training capacity of the faculty given the available resource and scientific manpower, and recommends further limiting this number while allowing case-by-case exceptions when resources are available.

Doctoral student education suffers from the lack of research resources including both access to reagents and equipment.

The lack of library subscriptions and electronic access to key scientific journals should be ratified. This is a major impediment to all research activities and affects research project completion.

It is recommended that a Doctoral Program Oversight Committee establishes guidelines for student stipends and uniform policies for admission of doctoral students and placement in laboratories on the basis of available resources.

The Committee recommends that the doctoral programs introduce structured graduate courses in addition to the thesis.

C. Research

For each particular matter, please distinguish between under- and post-graduate level, if necessary.

APPROACH

The MS - UoI promotes basic and clinical research. The EEC recognizes some areas of research strength, as evidenced by publications in peer-reviewed journals despite limited resources. Indeed some basic science and clinical departments are performing well, as shown by success in attracting funding and in publishing. However it is also evident that there is unusually great variation in research productivity as determined by competitive funding and publications among the different departments. In addition, there is no clear MS - UoI policy promoting research and a strategic plan for its further development. The MS - UoI has not set internal standards for regularly assessing research activity. Most research projects are based primarily on individual efforts rather than being the result of a strategic research plan by the School. There is no clearly thought-out plan for attracting funding through non-traditional (for example philanthropic or business venues) sources and there are concerns about sustainability of existing research efforts. Talking about intellectual property in the form of patents, research contracts and business collaborations may be met with resistance and suspiciousness by some sectors within the University.

IMPLEMENTATION AND RESULTS

The MS-UoI provides little research support to the basic science departments. Although staff salary is covered, additional budgets are very limited.

The research infrastructure is very good in terms of available space; however equipment in some areas is often outdated and cannot be properly maintained. There is no funding for equipment maintenance and renewal. It appears that no major equipment has been purchased in recent years by the University. Researchers, however, do have access to some excellent facilities and equipment at collaborating non-University Research Institute IMBB-BE that is located on campus.

Although some areas of particular strength were noted, some of them with international appeal, the scientific output in terms of publications is modest with some islands of exceptional strength.

Research-active members of the faculty maintain interactions and collaborations with other researchers in Greek Universities and abroad. In particular, strength of the University is the on campus presence of dedicated research centers such as ITE and the intensive interactions the faculty maintain with them.

IMPROVEMENT

The MS - UoI needs to develop a strategic plan for research that focuses on areas of existing strength and considers local and national society needs. It might be helpful to convene a task force to deal with issues of equipment, fund raising, seed support and research-related matters. A separate grants management function should focus on grants administration. The lack of a central structure serving these functions was evident. This is especially crucial for a Medical School that, while facing major funding challenges and has no clinical or tuition revenue, it does not appear to be particularly capable to generate and leverage intellectual property.

Despite the surge in funding that occurred in 2012, the faculty of the MS - UoI has a rather poor record in attracting competitive research funding. Although there are a few exceptions, the vast majority of the Faculty are not externally funded. This important issue needs to be addressed by the leadership and Faculty of the School. A mechanism to monitor grant submission and awards needs to be implemented that allows the annual evaluation of research efforts of individual faculty and Departments. The university should consider implementing incentives that reward, encourage and accelerate such research activities.

The EEC found that the research infrastructure in terms of available buildings and space was very good. However, there is a need for equipment renewal and maintenance. Mechanisms for equipment renewal and maintenance should be established. There is a need for core facilities equipped with state-of-the-art research equipment. As part of a Research Strategy, the MS - UoI and the UoI should develop a strategy to attract funds with the purpose of improving the research infrastructure. The absence of adequate research facilities reduces the competitiveness of faculty to attract external funding.

A serious impediment for all research activities is the lack of library subscriptions and electronic access to essential scientific journals.

The EEC noticed lapses of staff in observing safety rules and regulations, as well as requirements for human subjects and animal research. Although the MS - UoI has established Regulatory processes that oversee research activities in this regard, there is a need for improvement in the full implementation of these rules and regulations and the training of researchers and students. This applies to Human Subjects research, Animal Welfare, Biosafety, and Radiation Safety Committees. The relevant Committees must ensure that all research protocols are approved, and they should regularly monitor research compliance and training. All those who engage in research activities should be required to first complete a mandatory training program in the respective regulatory topics. Such courses should be completed periodically and a certificate of successful completion should be a prerequisite for being able to conduct research, whether basic or clinical. Chemical and Biohazard waste disposal needs to be tightly regulated and appropriate procedures be established and monitored.

The EEC found that the number of technical support staff for research at MS - UoI was very low. These numbers have been shrinking in recent years due to staff retirement and a hiring freeze that has impaired staff replacement and expansion.

Of particular concern is also the recent lack of funds to support such basic needs as heating during the winter and air-conditioning during the summer of laboratory

spaces and animal facilities. Such problems jeopardize experiments and impact animal welfare and investigators.

The EEC noted inflexibility in grants management and particularly in the re-budgeting of research funds. This generates unnecessary complications and impedes the optimal use of scarce research funds. It is recommended that the process of re-budgeting be simplified following rules already available in Europe and USA. For example, unused salary funds could be used to purchase supplies or equipment. Also reallocation of funds from one reagent to another should be easily possible.

The EEC noticed the overpricing of research reagents and equipment in Greece. The solution of this problem will require the coordinated efforts of many Universities and several Greek ministries.

As emphasized in the first paragraph, the EEC felt very strongly that there is an urgent need for the development of a coherent financial strategy for research. Some (certainly not all) of the issues that this needs to consider are as follows:

- all existing resources (within the Medical School and the University as a whole, and including the University Hospital and other health-related facilities) and their best, efficient utilisation
- the identification and commercial exploitation of intellectual property generated by MS-UoI research activity
- maximization of commercial contracts and business collaborations aiming to enhance the financial resources that could be invested in research
- a strategy to attract bequests and approach potential donors to support key research programmes – with a clear mechanism for their recognition
- integration with the Science and Technology Park, and a strategy for some translational R&D transfer for further development / exploitation

D. All Other Services

For each particular matter, please distinguish between under- and post-graduate level, if necessary.

It was evident that the administrative infrastructure of the MD-Uoi is not adequate. There appears to be a lack of core support staff as in academic organisations in other countries (e.g. central support for human resource management, updates for grant opportunities, provision of financial expertise for grant writing). The existing Secretariat (Γραμματεία) is struggling to cope with increasing demands and reduced staff. The EEC was told that the Academic staff of the MS-Uoi comprises of 33% of the University while the allocation of the secretarial staff amounts to only 9% of the University secretarial staff.

Students are housed in purpose built buildings in campus by paying a nominal rent well below the market prices. There are purpose build well functioning restaurants facilities for students and staff. Students enjoy free 3 meals daily.

The EEC was not made aware of mechanism for individual student counselling and “coaching” by faculty members. This should be considered though might create further pressures on faculty time and may need to be accompanied by increasing numbers of faculty specifically trained in supervising, mentoring, and counselling.

The MS-Uoi enjoys a large modern built University Hospital within the campus. There are several academic clinical units in the University Hospital. The University hospital has been an excellent asset of health care not only for the city of Ioannina but also for the whole region and beyond. The University Hospital has well developed IT facilities that are also used for clinical tests. There is also a strong nursing department. The University Hospital accommodates also the National Health Service (ESY) clinical and health provisions. This coexistence of two parallel clinical and health service systems run by different organisations in the same premises creates certain challenges. The fact that the Deputy University Hospital CEO is a member of the Faculty of the MS-Uoi facilitates the function of the two coexisting organisations. The University hospital has been under increasing pressure because of the endemic problems in the Greek Health System having to provide primary, secondary and tertiary care. There appears to be very little if at all interaction with other hospitals in the area and this should become an important strategic consideration for development.

In particular, the EEC feels that there is a unique opportunity for the MS-Uoi to redefine its original vision and ambition (largely limited to Ioannina and the University Hospital) and provide leadership for an overall re-evaluation and planning of healthcare provision in the wider area (Northwest Greece), fully integrated with relevant education and research (in Medicine, Nursing and other biomedically related disciplines). This could include:

- Integrated working for secondary and tertiary care provision, undergraduate and postgraduate/specialty clinical training, clinical and epidemiological research with other hospitals in the region (e.g. in Ioannina, Arta, Preveza, Kerkyra)

- Focus in the development of primary care services, with full support to the newly formed academic department and integrated working with health centres and even private practitioners – interacting appropriately with public health authorities and other administrative authorities in the region
- Accurate identification of needs and rational allocation of resources (e.g. hospital beds) according to this rather than historical allocations
- Interaction, leadership, technology exchange (in the wider sense) with other emerging health markets in the vicinity, particularly Albania and some of the former Yugoslavian Republics

Collaboration with social, cultural and production organizations

There is significant integration of the MS-UoI with the local society and there are several initiatives by most of the Academic departments in terms of health prevention, awareness of current treatment methods etc. The local population and authorities of the city are very supportive of the MS-UoI and the University. Several joint activities with the local society have been developed and are taking place regularly. Members of the MS-UoI hold also frequent meetings, seminars and other relevant events open to the public.

It would not be an overstatement to say that the University as a whole and the Medical School have contributed significantly to the transformation of Ioannina from a small provincial town post-war, to a thriving cultural and financial centre in Greece in the 80s and 90s. This legacy, together with the changing geopolitical situation in the wider area may provide a step for yet another more ambitious transformation, in this age of uncertainty but also opportunity.

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

For each particular matter, please distinguish between under- and post-graduate level, if necessary.

There are some issues endemic in Greek University system that certainly acts as inhibitors beyond the control of the MS-UoI. Nevertheless there are some areas that the MS - UoI should continue exercising pressure for positive resolutions.

It is important to appreciate that there is significant reduction of financial resources,

under the current financial crisis in Greece. This is a particularly acute problem in organisations expected to deliver education, research and health service, such as the MS - UoI. A major additional problem outside the remit of the MS-UoI is the excessive number of medical students that is well beyond the capacity of the School. In addition, we note as endemic problems the lack of promoting “excellence” for Faculty members and trainee residents, lack of securing copyright and patents on School’s inventions, and complete failure in applying the universally accepted concept of pre-requisite subjects, without which medical education, indeed any kind of education, is extremely ineffective.

Whereas this EEC believes that such factors beyond the control of the School are extremely important and need to be addressed with utmost urgency and priority, it also believes that they do not absolve the MS - UoI from its responsibility to look critically through all of its resources and processes, and see how it can achieve the best possible results within existing constraints.

The MS – UoI appears to be lacking an overall vision and strategic plan with identifiable objectives and priorities that will guide their development within specified milestones and deadlines. The MS – UoI needs to develop an overall strategy and evaluate its objectives on a frequent basis, due to the continuing changes occurring around and within it. It should then develop a clear plan for addressing each and every one of these objectives, in a constructive way, that does not constitute either a “wish-list” expected to be funded in its entirety by central government, or result in internal antagonism for a piece of its admittedly limited resources. Some of the issues, in addition to recommendations made in other sections of this report, that the MS - UoI needs to assess accurately (but not an exhaustive list) include:

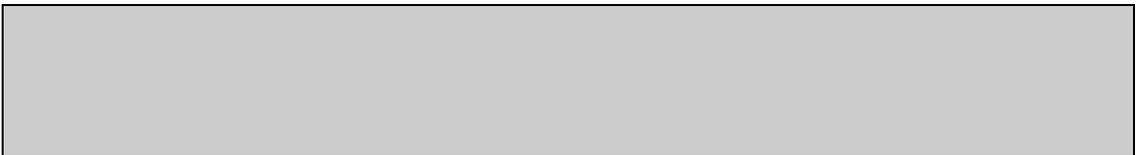
Teaching

- More emphasis should be given increasingly to the development of skills-based rather than only knowledge-based teaching and examinations, particularly towards the 5th and 6th years of study of undergraduate students.
- Link curriculum content to outcome-based objectives.
- Empower the curriculum committee to make sure that changes are implemented based on objective and reliable data collection.
- Establish a logbook of clinical case, skills and procedures that should be mandatory for graduation.
- There is no systematic assessment of the quality of teaching that might lead to redesign of teaching approaches. Systems need to be developed and adhered to, that will guarantee at least an evaluable minimum quality of teaching and training across the board.
- Systematic training of trainers in novel and effective teaching approaches.
- A doctorate - awarding program that will comply with the Bologna reforms and international standards.

Research:

- Consolidation of a number of Doctoral Degrees and improvement of quality through the new regulations and the function of a special committee.
- Increase of number of applications for European and International Research programs.
- Increase of applications for national research programs as well as inter-state co-operation programs.

- Establishment of a process to monitor grant submissions and awards and annually evaluate research efforts and achievements of individual faculty and Departments.



F. Final Conclusions and recommendations of the EEC

For each particular matter, please distinguish between under- and post-graduate level, if necessary.

The EEC is fully aware of some of the systemic problems that impact Universities in Greece and these have been mentioned throughout this report. Many of these problems have been further aggravated by the current economic crisis. A major chronic problem is underfunding of Universities and the lack of a stable long-term research funding policy by the Greek Government. A new problem that has arisen in recent years is the reduction of Academic salaries to levels that jeopardize the future of Academia in Greece.

The development of the MS – UoI has been an important major milestone in Greek Medical Academic Strategy as well as for the local community and the region as a whole. The momentum provided by the MS - UoI has enormously changed the landscape of clinical care provision in the whole Region from grossly underdeveloped services to advanced tertiary facilities and pockets of clinical innovation. Teaching and training medical students is adequate and is supported by very strong modern innovative information technology. MS – UoI should address the recruitment nationally and internationally of young promising faculty if offered appropriate support and opportunities to enable them to establish themselves. This EEC is fully aware of the remuneration restrictions applied currently in Greece that might not only be unattractive to young scientist but even alienate them. The size of the MS -UoI offers a major opportunity for close collaboration among the different Departments. The lack of research strategy might lead in the near future to limited outputs and even a fragmentation within faculty to utilise all potential opportunities. There is a lack of systematic evaluation and assessment of teaching methods. There is also a lack of modern, efficient approach to robust administration systems.

The MS-UoI is faced with the following main challenges, which are stated in order of significance according to EEC's opinion:

- (a) Develop an overall vision and strategic plan for the improvement of the educational mission with identifiable objectives and priorities that will be evaluated regularly within an agreed time frame work.
- (b) Develop and implement a clear research strategy with focus on certain areas that reflect the skills of the faculty and some MS-UoI resources and is closely linked to the realities and priorities of Greek society, including Greek job markets and enterprises. This development, in order to be sustainable, should take place in phases of realistic time schedules.
- (c) Continue to facilitate the process of evaluation by having an interim evaluation of progress in approximately 2 years from now, and sharing its experience with other Medical Schools in Greece and abroad. The development of an overall culture of quality assurance, with effective and transparent mechanisms to support it, and a strategy of dissemination of its positive effects to faculty and students is necessary and will be a great achievement.
- (d) Address the recruitment of new faculty nationally and internationally.

The EEC felt that it was very welcomed and was very impressed by the commitment of all Faculties and other staff. The EEC noted that a number of students were opposed to the evaluation process and made their views known loudly. The EEC regrets that some students were not willing to engage in a constructive dialogue. The EEC feels the urgent need to bring to the attention of both the Governmental

authorities and the University the underfunding and the excessive number of students enrolled outside the normal examination process that also assures high quality of students.

The EEC was very pleased with the very warm welcome by the leadership and faculty of MS – UoI and the University. The EEC recognizes that several of the deficiencies and problems mentioned in this report are not unique to this School but represent practices and realities that are spread throughout the academic institutions in Greece. The EEC felt that they had to mention what they perceived as problematic, regardless of whether they represented systemic issues or local deficiencies. This report is presented, thus, in the spirit of constructive criticism and with the hope that it will spearhead changes that will not improve only this School but will be useful for tackling the Greek academia systemic problems.

The EEC welcomes with great satisfaction the introduction of the evaluation process in Greek Medical Schools, in accordance with well established international practices and standards. It is believed that the evaluation process will become an important contributing factor in monitoring Quality Assurance and leading to considerable improvements in teaching, training, research and developments as well as clinical practice.

The EEC would also like to mention some shortcomings of the current process including: the limited time for site visit particularly as several clinical services have to be evaluated; inability to contact local team for clarifications prior to the visit; internal evaluation reports that are temporally far removed from the external evaluation (this one was 3 years ago); and, more importantly, the lack of feedback mechanism about whether any of the internal / external recommendations were implemented and what was their effect.

The Members of the Committee

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MEDICAL SCHOOL**

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