1. INTRODUCTION

1.1 In the process of continuing to set up the School of Health Sciences (ECS), one of the most prominent features in 2004 was the successful beginning of education and training in the area of clinical sciences and the consequent systematic presence of the students in Hospitals and Health Centres. The links with the Health Services proved to be adequate, which was an important element of consolidation for the medical degree. Indeed, this was a key step to enter the phase III of the curriculum with a greater confidence on the curricular design and the learning methodologies that had been envisaged.

The formal recognition of the Life and Health Sciences Research Institute (ICVS) by the FCT was also of great importance. Research continued to proceed on a firm basis, involving not only the academic staff but also a growing number of young researchers on fellowships and a few medical doctors from the affiliated hospitals.

In connection to the facilities, the additional provisional spaces and laboratories were made fully operational and a reinforcement of the pedagogical equipments was achieved. The progress on the construction of the new buildings was not as good as expected, since the central administration at the Ministry proved again to be too slow and bureaucratic, but the formal approval for the consignment of the works was finally obtained and the constructions can now start soon.

The present report endeavours to give an overall view of the School's main progresses and activities in 2004 and the underlying strategies. The detailed information on the scientific and pedagogical activities is presented in the reports concerning the Medical Degree Programme and the ICVS.

1.2 The year 2004 was again a period of political instability, due to the change of Government last July and the call for general elections next February, which creates great difficulties for projects on a launching phase, particularly those that are developing under a contractual basis. However, some important developments took place in dossiers relating to the Ministry for Health, namely the opening for tenders for the construction and operation of the new Hospital in Braga and the new legislation concerning the postgraduate training of medical doctors and the University Hospitals, which are of great relevance to the ECS. The frequent contacts maintained with the Ministry for Science and Higher Education have been positive and overcame, in part, the negative effects of the political instability. The visit of the Minister of Science and Higher Education to the School on the 17th of February 2004 was a good signal of the Government's interest in the innovative aspects of the School operation.

2. PLANS AND STRATEGIES FOR 2004

2.1 Objectives and Policies

The main objectives established for 2004 were to consolidate the first three curricular years of the medical programme, to launch phase III in the best possible conditions, to continue the preparation of the necessary infrastructures, in terms of human resources, proper facilities and equipments, and to keep the School's dynamics, allowing for the reinforcement of projects and the admission of a new batch of students.

The principal aims and strategies for the effect, as stated in the previous report, were:

- to finish the preparations of the courseware for the fourth curricular year of the undergraduate programme and to complete the curricular development of the third phase (years 4 and 5);

- to proceed with and reinforce the post-graduation activities;

- to continue to provide the conditions for a steady participation of the academic staff in research projects and to attract new researchers on fellowship schemes; for this effect, to establish contracts with the Foundation for Science and Technology to finance the ICVS;

- to strengthen the human resources, by recruiting and training new staff members and supporting the development of the staff, taking into consideration not only the admission of a new group of students but also the preparation of the subsequent years, with a special emphasis on the academic staff for the clinical themes;

- to promote the process for the construction of the new buildings and to make the extra provisional spaces fully operational;

- to continue and deepen the contacts and dialogue with the national health system (Ministry, Regional and Sub-Regional Administration, Hospitals, Health Centres) and to formalize the links and cooperation with health services within the new legal framework;

- to support the operation of the governing bodies, paying special attention to the monitoring and improvement of quality.

2.2 Organisation and Management

A proper model and effective mechanisms of governance are essential for the fulfilment of the envisaged objectives. The composition and main duties of the School's bodies are presented next.

2.2.1 The Steering Committee

The composition of the Steering Committee is the following:

- *Sérgio Machado dos Santos*, **Dean** (Honorary Rector, UM);
- *Joaquim Pinto Machado*, **Vice-Dean** (Professor Emeritus, ECS);
- *Maria Cecília Lemos Pinto Estrela Leão*, **Vice-Dean** (Director of ICVS, ECS)
- *Maria Irene Magalhães Assunção Montenegro* (Pro-Rector for Quality Assurance, UM);
- *José Fernando Gomes Mendes* (Vice-Rector, UM);
- *Jorge Manuel Rolo Pedrosa* (Assistant Professor, ECS);
- *Américo dos Santos Afonso* (Director of Hospital de São Marcos);
- *Carlos Carvalho Moreira* (Coordinator of the Braga Sub-Regional Health Administration).

The Steering Committee met on a monthly basis, concentrating its activities on the planning of the School's development in all its dimensions, on monitoring the on-going activities and on reinforcing the links with the health services and authorities.

Following a special permission from the Rector, all the administrative affairs were delegated to the Vice-Dean Cecília Leão.

An *ad-hoc* Directive Board was set up for the everyday management of the School's activities. This Board is coordinated by the Vice-Dean Cecília Leão and integrates Jorge Pedrosa (for planning), Nuno Sousa (for pedagogical affairs) and Joana Palha (for post-graduation).

2.2.2 The Scientific Council

The Scientific Council integrates all the School academic staff with a doctoral degree. Its present composition is the following:

- *Joaquim Germano Pinto Machado*, President
- *Maria Cecília Lemos Pinto Estrela Leão*, Vice-President
- *António Gil Pereira de Castro*
- *Armando Alberto Pinto de Almeida*
- *Fernando José dos Santos Rodrigues*
- *Isabel Maria Mestre Palmeirim Esteves*
- *Joana de Almeida Santos Pacheco Palha*
- *Jorge Manuel Correia Pinto*
- *Jorge Manuel Rolo Pedrosa*
- *Manuel João Mendes da Costa*
- *Maria de Fátima Monginho Baltazar*
- *Nuno Jorge Carvalho de Sousa*
- *Patrícia Espinheira Sá Maciel*
- *Paula Cristina Monteiro Ludovico*
- *Rui Manuel Vieira Reis*

Additionally, participate in the meetings, as invited members:

- *António Carlos Megre Eugénio Sarmento*

- *António José Alegre Sarmento*
- *Carlos Alberto de Almeida Valério*
- *Clara Costa Oliveira*
- *Fernando Carlos Lander Schmitt*

The Scientific Council meets regularly every month, and deals with the scientific policy for the School, namely in what concerns the decisions on the general guidelines for the planning and development of research, teaching and extension activities and on matters concerning the recruitment and promotion of academic staff. These regular meetings, that usually take place at lunch time, contribute in a substantial way to the cohesion and wide and effective participation within the School.

2.2.3 The Medical Course Committee (Curriculum Committee)

The regulations concerning the Course Committees at University of Minho were adapted to apply to the medical undergraduate programme, due to specificities of the curricular organization in relation to the horizontal and vertical integration of the curriculum and also to the concept of curricular organization by phases and their role in both dimensions of integration.

Indeed, as specified in the conception of the degree programme [1], the curriculum is designed as an ongoing educational process and "although this process has periods with specific characteristics, its sequence has no boundaries that may affect its essential unit. Such periods are called *phases*, transmitting the idea of continuous stages in a path that is from the very beginning designed to arrive to a precise final destination. Each phase is not only firmly interconnect with the following one but it also covers, although in a different proportion, the major science fields of life, health, anthropology and medical practice".

The coordination of each phase is, therefore, of vital importance, as well as the coordination between phases, which points out the convenience of the phase coordinators' participation in the Medical Course Committee.

According to the Regulations adopted for the Medical Course Committee, it will integrate, on a steady-state basis, the Course Director, the Coordinators of Phases I to IV, the Coordinator of the Vertical Themes, the Scientific Director of the Medical Education Unit

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1 *Medical Degree Course*, Health Sciences School, Universidade do Minho, September, 2001, p.23.

and six students elected by and among the students of each of the six curricular years of the course. During the installation period the composition of the Committee will be established, each year, by the Steering Committee, on a proposal from the Dean, guaranteeing parity between students and academic staff apart from the Course Director.

The Medical Course Committee for the academic year 2004/05 is the following:

- *Joaquim Germano Pinto Machado*, Course Director (and Coordinator of the Vertical Themes);
- *Jorge Manuel Rolo Pedrosa*, Coordinator of Phase I (1st and 2nd years)
- *Maria Cecília Lemos Pinto Estrela Leão*, Coordinator of Phase II (3rd year)
- *Nuno Jorge Carvalho de Sousa*, Coordinator of Phase III (4th and 5th years)
- *Manuel João Mendes da Costa* (Coordinator of the Medical Education Unit)
- *Pedro Ricardo Luís Morgado* (Student, 4th year)
- *Carla Marina Mendonça Gonçalves* (Student,3rd year)
- *Pedro Miguel Oliveira Azevedo* (Student, 2nd year)
- *Fábio André Eleutério Amaral* (Student, 1st year)

The main competences of the Medical Course Committee are to watch over the normal operation of the degree programme and the continuing review of the curricula, to propose changes in the curricula and to adopt the course annual report prepared by the Director. It will also observe the actions taken as a result of the recommendations from the External Advisory Committee and on the organization and updating of the course dossier under responsibility of the Medical Education Unit.

2.2.4 The Phase, Curricular Area and Module Coordinators

As said before, each phase has a Phase Coordinator, who is responsible for the articulation of the curricular areas in each phase and for the articulation between the phases, in order to guarantee the overall coherence of the curriculum, highlight any omissions and avoid repetition. To facilitate and strengthen this role and make it more independent, the Phase Coordinator for each phase was chosen from the academic staff teaching at a different phase. The nominated coordinators are, as already indicated in point 2.2.3:

- Phase I - *Jorge Manuel Rolo Pedrosa*
- Phase II - *Maria Cecília Lemos Pinto Estrela Leão*
- Phase III - *Nuno Jorge Carvalho de Sousa*

The Area and Module Coordinators are responsible for the dynamization and coordination of the curricular development and teaching in the corresponding area or module, in order to assure the accomplishment of the educational strategies and pedagogical methods.

The present coordinators are listed in Tables 1-a, 1-b and 1-c.

Table 1.a — Area and Module Coordinators of Phase I

Curricular Area **Module**	**Coordinator**	**Status**
Introduction to the Degree Programme	MANUEL JOÃO COSTA	Assistant Professor (ECS, UM)
Molecules and Cells	CECÍLIA LEÃO	Full Professor (ECS, UM)
From Anatomy to Cellular Phisiology	Paula Ludovico	Assistant Professor (ECS, UM)
Molecular Genetics Foundations	Fernando Rodrigues	Assistant Professor (ECS, UM)
Cells and Cellular Proliferation	Isabel Palmeirim	Assistant Professor (ECS, UM)
Organic and Functional Systems	NUNO SOUSA	Assistant Professor (ECS, UM)
Gen. Introd. and Musculoskeletal System	Armando Almeida	Assistant Professor (ECS, UM)
Digestive System	Jorge Correia Pinto	Assistant Professor (ECS, UM)
Circulatory and Respiratory Systems	Jorge Correia Pinto	Assistant Professor (ECS, UM)
Urinary System	Armando Almeida	Assistant Professor (ECS, UM)
Reproductive System and Development, Postnatal Growth and Ageing	Armando Almeida	Assistant Professor (ECS, UM)
Nervous System	Nuno Sousa	Assistant Professor (ECS, UM)
Endocrine System	Joana Palha	Assistant Professor (ECS, UM)
Synopsis of SOFs	Nuno Sousa	Assistant Professor (ECS, UM)
First Aid	FERNANDO RODRIGUES	Assistant Professor (ECS, UM)
Optional Project - I	ISABEL PALMEIRIM	Assistant Professor (ECS, UM)
Optional Project - II	ARMANDO ALMEIDA	Assistant Professor (ECS, UM)
Training in a Health Centre	ANTÓNIO ALEGRE SARMENTO MARGARIDA LIMA	MD (ECS, UM) MD(Centro de Saúde de Gualtar)

Table 1.a — Area and Module Coordinators of Phase I (cont.)

Curricular Area Module	Coordinator	Status
Family, Society and Health	CARLOS VALÉRIO	MD (ECS, UM)
Family and Health	Teresa McIntyre	Associate Professor (IEP, UM)
Family Life	Teresa McIntyre	Associate Professor (IEP, UM)
Family and Society	Engrácia Leandro	Full Professor (ICS, UM)
Follow up of a Family I	CARLOS VALÉRIO	MD (ECS, UM)
Workshops	Teresa McIntyre	Associate Professor (IEP, UM)
Follow up of the Family	Teresa Macedo	MD(Centro de Saúde de Gualtar)
Vertical Themes ("To Feel the Pulse to Life")	JOAQUIM PINTO MACHADO	Full Professor (ECS, UM)

Table 1.b — Area and Module Coordinators - Phase II

Curricular Area	Coordinator	Status
Biopathology and Introduction to Therapeutics	JORGE PEDROSA	Assistant Professor (ECS, UM)
General Pathology and Introd. to Pharmacology	Fernanda Milanezi	MD, Assistant (ECS, UM)
Genetics and Environm	Rui Reis	Assistant Professor (ECS, UM)
Immunopathology	Jorge Pedrosa	Assistant Professor (ECS, UM)
Infectious Pathology	António Gil Castro	Assistant Professor (ECS, UM)
Neoplasies	Fernando Schmitt	Assistant Professor (FM, UP)
Introduction to Clinical Medicine	NUNO SOUSA	Assistant Professor (ECS, UM)
Introduction to Community Health	CARLOS VALÉRIO	MD (ECS, UM)
Optional Project III	ANTÓNIO GIL CASTRO	Assistant Professor (ECS, UM)
Follow-up of a Family II	CARLOS VALÉRIO	MD (ECS, UM)
Vertical Themes	JOAQUIM PINTO MACHADO	Professor (ECS, UM)

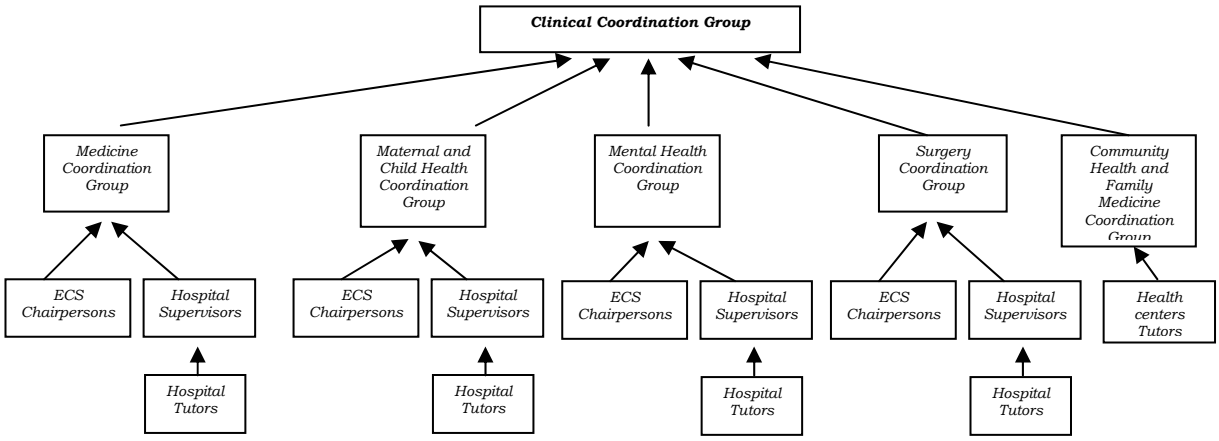
Table 1.c — Area and Module Coordinators - Phase III

Curricular Area	Coordinator	Status
Hospital Internships	Nuno Sousa	(a)
Health Centre Internship	António Jaime Sousa	(a)
Seminars *From Clinic to Molecular Biology*	Cecília Leão	Full Professor (ECS, UM)
Optional Project IV	Patrícia Maciel Paula Ludovico	Assistant Prof. (ECS, UM) Assistant Prof. (ECS, UM)

(a) **The Clinical Coordination Group has the responsibility for the overall coordination of the clinical training programme.**

2.2.5 Organization of clinical education and training – Coordination Strategies

The learning settings for the Phase III of the Medical Degree Course are extremely complex. Such complexity demands a coordinating network that ensures integration of the learning processes throughout this period, as shown in the diagram.



The overall coordination of the network of clinical residences is the mission of the **Clinical Coordination Group,** which is composed by six members of the faculty of the ECS. The main role of this group is to define the global strategy of the School for clinical teaching and to approve the proposals emanating from the groups assigned to coordinate each clinical residence (Medicine, Maternal-Child Health, Mental Health, Surgery and Family Medicine), assuring that they fit within that overall strategy. The Group also approves the designation of Chairpersons, Clinical Supervisors and Clinical Tutors. The analysis of the global assessment of the Residences is also a task of this Group, as well as the delineation of general plans designed to improve the learning processes.

The Clinical Coordination Group includes the following elements:

- *Joaquim Germano Pinto Machado*, MD, PhD, Full Professor/ ECS
- *Mário José Cerqueira Gomes*, MD, PhD, Full Professor (Cardiology)/ ECS
- *Óscar Ferreira Rolão Candeias*, MD, Hospital Director of Internal Medicine/ ECS
- *Damião José Lourenço da Cunha*, MD, PhD, Hospital Director of Internal Medicine-Cardiology/ ECS
- *Nuno Jorge Carvalho de Sousa*, MD, PhD, Assistant Professor/ ECS
- *António Jaime Correia de Sousa*, MD, MPH/ ECS

For each of the five Residences, a **Residence Coordination Group** is set up. The composition of the Coordinating Groups reflects the multi-centric approach envisaged by the School for Phase III of the Medical Degree. Therefore, it includes members appointed by the School, and members selected by the affiliated Hospitals; the latter being the **Hospital** (Residence) **Supervisors** within their Hospital. The Residence Coordination Groups have the responsibility of defining learning objectives and clinical duties (skills and tasks) for the students during that Residence; they will also delineate the assessment process. In addition, the Groups will recommend the most suitable rotations within each Hospital. Furthermore, they designate the **Chairpersons** responsible for the cognitive teaching modules within each Residence. The Chairperson invites the participants to lecture the cognitive seminars and prepares course materials (including suggested bibliography) that are made available for students.

The Coordination Group of Family Medicine does not include staff from Hospitals, but rather includes physicians working in Health Centers.

The Residence Coordination Groups already established are:

a) ***The Medicine Coordination Group***

- *Joaquim Pinto Machado* (Full Prof./ ECS)
- *Mário Cerqueira Gomes* (Full Prof./ ECS)
- *Óscar Rolão Candeias* (Hospital Director-Internal Medicine/ ECS)
- *Damião Cunha* (Hospital Director-Cardiology/ ECS)
- *Abel Rua* (Head of Internal Medicine Service/ Hospital S. Marcos-Braga)
- *Jorge Cotter* (Head of Internal Medicine Service/ Hospital da Senhora da Oliveira-Guimarães)
- *Nuno Sousa* (Assist. Prof./ ECS)

b) ***The Maternal and Child Health Coordination Group***

- *Jorge Correia Pinto* (Assist Prof./ ECS)
- *Helena Jardim* (Assist Prof./ FMUP)
- *Lucinda Antunes* (Head of Obstetrics Service/ Hospital S. Marcos-Braga)
- *Pedro Vieira de Castro* (Obstetrics Service/ Hospital da Senhora da Oliveira-Guimarães)
- *Almerinda Pereira* (Head of Pediatrics Service/ Hospital S. Marcos-Braga)

- *Pedro Freitas* (Head of Pediatrics Service/ Hospital da Senhora da Oliveira-Guimarães)

- *Nuno Sousa* (Assist. Prof./ ECS)

c) *The Mental Health Coordination Group*

- *Rui Mota Cardoso* (Full Prof./ FMUP)

- *Alberto Bessa-Peixoto* (MD)

- *João Guerra* (Head of Psychiatry Service/ Hospital S. Marcos-Braga)

- *Mário Lourenço* (Head of Psychiatry Service/ Hospital da Senhora da Oliveira-Guimarães)

d) *Community Health and Family Medicine Coordination Group*

- *Carlos Valério* (MD/ ECS)

- *António Jaime Correia Sousa* (MD, MPH/ ECS)

- *António Sarmento* (MD/ ECS

- *Ana Mateus* (MD/ ECS)

- *Luís Laranjeiro* (MD/ ECS)

- *Margarida Lima* (MD/ ECS)

- *Mário Freitas* (MD/ ECS)

In what concerns the **Hospital Supervisors**, their task is to oversee all clinical teaching activities within their Residences in the Hospital. The Supervisors ensure the adequate functioning of learning activities in every setting enrolled for the Residence. They also ensure the involvement of all clinical staff (physicians, nurses) belonging to the clinical specialities assigned to the Residence, select Tutors amongst the clinical staff, which will directly supervise each group of students, and conduct the final clinical exam in each Hospital.

On the other hand, the **Clinical Tutors** have the responsibility to supervise the student's activities, including the acquisition and training of the clinical skills assigned to the Residence. Tutors assure the integration of the students in Services' activities, as "Residents". Clinical tutors assess student's professionalism and clinical performance.

In the current academic year, the following **Hospital Supervisors** were appointed for the on-going Residences and Sub-Specialities:

	HSM-Braga	HSO-Guimarães
Medicine I	Abel Rua	Jorge Cotter
Internal Medicine	Abel Rua	Jorge Cotter
Pneumology	Mariano Machado	Maria Manuel
Cardiology	Adelino Correia	João Almeida
Gastroenterology	Mário Marcelino	José Cotter
Endocrinology	Olinda Cruz	---
Maternal-Child Health		
Obstetrics	Lucinda Antunes	Pedro Vieira de Castro
Paediatrics	Almerinda Pereira	Pedro Freitas
Mental Health		
Psychiatry	João Guerra	Mário Lourenço

In what concerns the **cognitive learning plans** for the Clinical Residences and the corresponding modules, the following Chairpersons were appointed:

Residence	***Chairpersons***
Medicine I	
Respiratory System	Óscar Candeias
Cardiovascular System	Mário Cerqueira Gomes
Digestive System	José Cotter & Nuno Sousa
Endocrine System	Nuno Sousa
Maternal and Child Health	
Maternal Health	Pedro Vieira Castro, Lucinda Antunes & Nuno Sousa
Paediatrics	Jorge Correia Pinto & Helena Jardim
Mental Health	
Mental Health	Rui Mota Cardoso

2.2.6 Coordination of Postgraduate Programmes and Research

The Coordinator of the postgraduate programmes on health sciences oversees the whole postgraduate activities within the School. Each post-graduation programme has its own Programme Coordinator.

The ICVS has its own governing bodies, according to the rules applying to the research units integrated in the national system of Science and Technology. The Director of the Institute liaises with the Scientific Council.

The Director of the ICVS is Prof. *Cecília Leão* and the Coordinator of the Postgraduate Programmes is Prof. *Joana Palha*. The coordinators of the different post-graduation programmes are listed in Table 2, under point 3.2.

2.2.7 The External Advisory Committee

The External Advisory Committee (EAC), in 2004, included the following external members:

- *Arsélio Pato de Carvalho* (University of Coimbra)
- *Joseph S. Gonnella* (Thomas Jefferson University)
- *Eduardo Marçal Grilo* (Calouste Gulbenkian Foundation)
- *Miguel Leão* (North Regional Council of *Ordem dos Médicos*)
- *José Avides Moreira* (North Regional Health Administration)
- *Walter Friedrich Osswald* (University of Porto)
- *Fernando Lopes da Silva* (University of Amsterdam)
- *Henry Walton* (University of Edinburgh)
- *Alistair Warren* (University of Sheffield)
- *Jean Claude Yernault* (Université Libre de Bruxelles)

A new member has accepted to integrate the EAC:

- *David Macfadyen* (World Health Organisation)

The Rector and the Dean are also formal members of the Committee.

The external members have designated Prof. *Fernando Lopes da Silva* as the EAC Coordinator.

The EAC visited the School on the period of 19-21 February 2004. The report from the visit is fully transcribed next:

"**Committee Members present":**
Professor Joseph Gonnella
Professor Fernando Lopes da Silva
Professor Eduardo Marçal Grilo
Professor Walter Osswald
Professor Arsélio Pato de Carvalho
Dr. Alistair Warren

In attendance:
Dr. Ângelo Azenha (North Regional Council of Ordem dos Médicos)

Absent:

Professor Henry Walton: inadvertently not informed of meeting arrangements. Professor Jean Claude Yernault: due to personal reasons.

Introduction:
The EAC received the *Annual Reports* (2003) of:

(i) the *Medical Degree Course* and of
(ii) the *School of Health Sciences*, and
(iii) the *Annual Report (2003) of the Life and Health Sciences Research Institute (ICVS).*

As in previous years the EAC wishes to express its appreciation for these comprehensive and very readable reports. They give not only detailed information about the activities of 2003, but also an account of the plans for the future. The three *Reports* also demonstrate that the recommendations of the EAC set out in its February 2003 *Report* were considered and acted upon by the Medical Faculty of Minho. The EAC also received a copy of the Report sent by the FCT regarding the evaluation of the Research Unit (ICVS) and was pleased to read that the panel of the FCT rated the 'overall Research Unit quality' as Excellent.

At its introductory meeting the EAC produced an agenda of the points to be discussed with the Administration and the Faculty. These included:

- the future role and composition of the EAC
- the clinical dimension of the Medical Course
- FCT funding
- plans for the new buildings
- the role of the Nursing School

These issues and related ones were discussed with the Rector (Prof. Guimarães Rodrigues), Vice-Rector (Prof. José Mendes), Pro-Rector (Prof. Irene Montenegro), the Director of the Hospital of S. Marcos (Prof. Américo Afonso) and the other members of the Steering Committee. A summary of the discussion of these and related points follows.

1. ***The role and composition of the EAC***.

It was agreed that the members of the EAC will be appointed for a period of 3 years, that may be renewed. The Steering Committee expressed its wish that the present members of the EAC should stay in office at least until the time that the first students graduate (in 2007). The EAC recommended that one or two new members should be appointed as soon as possible to assure a satisfactory degree of continuity. In order to provide a representative gender balance it was suggested that the EAC would benefit in particular from the addition of distinguished women with experience in medical education in European countries.

2. ***The clinical dimension of the medical curriculum***.

This issue was discussed at several meetings not only with members of the Steering Committee but also with the coordinators of curricular areas/modules and with representatives of the School-Hospital Articulation Committees. The information that the EAC received in these meetings removed most doubts about how the clinical part of the curriculum will be implemented in the near future. Specific points that deserve emphasis include:

(i) The EAC understood that the School has chosen a **multi-center approach** and is setting up contracts with two Hospitals (Braga and Guimarães) and possibly a third one (Viana do Castelo), as well as several Community Health Centres. An **accreditation scheme** is to be applied to a number of selected Hospital departments and Health Centres and we understand that this has already been completed in several departments. The EAC emphasis that to monitor the Clinical Cycle within the framework of a multi-center approach for educational quality will be a complex task, and administratively demanding. Furthermore it is difficult to introduce and maintain innovation in a multi-center system.

(ii) The faculty has appointed a **General Coordination Committee** that will be responsible for the development of the **Clinical Cycle.** The members of this Committee are experienced, senior staff: the EAC is confident that they are fit and appropriate people to accomplish their difficult task.

(iii) The Coordination Committee will be responsible for the selection of the clinical teaching staff. ***The EAC notes that this is a most important and delicate task that has to be planned very carefully since the success of the Medical Degree Course depends to a great extent on the School being able to recruit a clinical teaching staff with high levels of expertise, enthusiasm and responsibility and who are aware and support the innovative aspects of the curriculum at the University of Minho.***

(iv) Several questions were raised about how the clinical teaching staff will be appointed including: the kind of appointment they will hold; the financial compensation to the hospitals for clinical staff time spent teaching and for staff doing the teaching; and the pedagogic support from the School. Regarding the first point the EAC is satisfied with the proposal that the clinical teaching staff will have titles of tutors, supervisors, coordinators and such like, and not those of professors, except when the latter are justified according to the general rules and standards of the School. With regard to financial compensation of the clinical teaching staff the EAC understood that this issue is not yet settled, but it ***advises that the School should develop a concrete plan in the near future.*** The EAC is

confident that the School will provide adequate training and pedagogic support to the clinical teaching staff.

(v) ***The EAC emphasizes that the School should consider the possibility of appointing clinicians with a dual career track, partly in the Hospital/Health Centre and partly at the University/Medical School.***

(vi) The EAC is grateful for the opportunity to visit the S. Marcos Hospital and to discuss with the directors and senior staff members the plans to start the Clinical Cycle. It is clear that staff is genuinely committed to participate actively and effectively in clinical teaching. Nevertheless the EAC emphasizes that an effort should be made to create, within the Hospital, an atmosphere favourable for tutorial teaching.

3. ***The Basic Medical curriculum*** – In discussions with the co-ordinators and academic staff on the one hand, and with the students on the other the EAC received a good impression of how the Curriculum is being implemented and of the changes introduced in the last year. It was particularly rewarding to hear from the students of the early years that some shortcomings they experienced at the start of the course have now been rectified for the current first-year students. With respect to the Biopathology module the EAC noted the difficulties in integrating all the different sub-disciplines and the need to make adaptations to the original plan. Some subjects could still be better integrated into modules, such as statistics and scientific methodology.

The EAC recommends, once more, that the School should keep the Option Projects as a high priority and even reinforce this part of the Curriculum. Furthermore the emphasis on the acquisition of skills, rather than factual knowledge, and on personal and professional development should continue to occupy a prominent place.

4. ***Students –***

The meeting with the representatives of the students was most pleasant. This meeting took place in an informal way where spontaneously the pros and cons of different aspects of the Curriculum and of the life in the School were discussed openly. This allowed the EAC to appreciate, as in the past, the high degree of motivation and engagement of the students. It became clear that the interest of a large majority of students lies in a clinical career and not in research. Even so the EAC noted that in the last year more students expressed an interest to carry out an Option project in a research laboratory than in previous years.

5. MD/PhD program –

The EAC was happy to hear that a MD/PhD programme is being developed in collaboration with the Thomas Jefferson Medical School of Philadelphia and Columbia University Medical School of New York. ***The EAC recommends that the School disseminates this information widely as it could become an important asset of the School.***

6. Research Unit – Life and Health Sciences Research Institute (ICVS) -.

(i) The EAC was most pleased to hear that the FCT (Fundação para a Ciência e Tecnologia) has rated the overall ICVS Research Unit as Excellent, and will award the corresponding funding to support a number of PhD studentships and several fellowships. This recognition was based on an evaluation carried out by an international panel. It represents an important boost to the confidence and reputation of the School and opens wider perspectives in terms of research and consequently in teaching capacities. This is most welcome. ***The EAC compliments the staff of the Research Unit with this important achievement.***

(ii) It is now important to negotiate with the FCT the funds necessary for some large items of equipment. The EAC advises that the School and ICVS Research Unit should actively pursue a ***campaign of fundraising*** to target not only governmental organizations such as the FCT, but also more generally, alumni, philanthropists, private foundations and industry.

(iii) With respect to the organization of scientific research, although this issue is not its primary task, the EAC points out that the present research programme appears too diverse and that several staff members are in danger of having too many PhD students to supervise effectively considering their already large commitment to teaching and administration. ***The EAC advises consolidation in the most promising and strategically important areas of research.*** *Furthermore the EAC recommends focussing research groups to ensure that they reach the critical mass necessary to compete at the highest level.* Special emphasis should be placed on stimulating some limited innovative, albeit risky, ventures.

(iv) According to the general rules of the FCT, an External Advisory Board will be nominated for the ICVS. The EAC is of the opinion that the ***School should promote informal contacts with this Board, since these are necessary for good planning of the articulation between research and teaching.***

7. Medical Education Unit –

The EAC was favourably impressed by a presentation of the activities of the Unit. The need to create a database with respect to the longitudinal educational development of each student was again emphasized by the EAC. ***The EAC recommends that the MEU should now pay special attention to the pedagogic support and monitoring of the clinical teaching.***

8. ***Nursing School*** -

That the Nursing School will be incorporated in the University in the near future provides an excellent opportunity to realize collaborations between the two Schools regarding teaching programmes. Whether the Nursing School should become part of the Health Sciences School was discussed. The ***EAC is of the opinion that teaching in Nursing skills will be a welcome addition to the medical curriculum and that nursing staff maybe able to participate in teaching some clinical skills to junior medical students.*** In addition the School could promote the participation of its staff in post-graduate courses for nurses.

9. ***Facilities*** –

The EAC was most impressed by the improvements, both in area and in quality, of the facilities that had been made over the past year. The prospect of having a new building for the Medical School and Research Laboratory in the near future is most welcome. The EAC understands that negotiations are being carried out with the Ministry of Health to formalize the plans for building a new teaching hospital. However it remains uncertain, at this time, when the matter will finally be resolved.

10. ***Conclusion*** –

The EAC is very satisfied with the progress being made and with the self-monitoring and correcting measures that the School has put in place. The EAC's main concern now regards the implementation of the Clinical Cycle and its challenges. The planning and monitoring of this difficult process should receive the highest priority from all levels of management of the School and, in particular, the Clinical Coordination Group, the Articulation Committee (Comissão Mista Permanente) and the Medical Education Unit. We look forward to seeing the progress on these matters in the next 12 months".

The action taken by the School in connection with the EAC recommendations is detailed in point 5.2.

2.3 Articulation with the National Health System

The strategy concerning the articulation with the health services is being developed on the following lines and different levels:

- Within the legal framework concerning the articulation between the Medical Faculties and the Health Services, a legal document (*Portaria* 36/2002) establishes that the School of Health Sciences is institutionally articulated, under the terms established by law, with *Hospital de São Marcos* - Braga, *Hospital da Senhora da Oliveira* – Guimarães, other Hospitals in the Northern Region subject to the establishment of a protocol, and with Health Centres in the Northern and Central Regions under the scope of protocols to be signed with the Regional Health Administration authorities.

- A protocol with the Regional Health Administration – North, endorsed in January 2002, sets an innovative scheme for the cooperation between the School and the Health Centre close to the Campus (*Unidade de Saúde de Gualtar*). It establishes that the allocation of medical doctors to the Centre will take into consideration the specificities of the required profile, due to the double function to be fulfilled (health care and medical education).

  New legislation concerning the Health Centres that was meanwhile approved by the Government may allow for a greater specificity for the *Unidade de Saúde de Gualtar,* and eventually its integration, by contract, in the School of Health Sciences. Contacts are already proceeding.

- Frequent contacts have been established with Hospitals in the Region and all the necessary cooperation has been readily available. A formal protocol was signed with *Hospital de Viana do Castelo* (in the northern part of Minho, 50 Km from Braga).

- The cooperation with the key Hospitals of *São Marcos* – Braga and *Senhora da Oliveira* – Guimarães has been increasing, as a stronger involvement of health professionals in the degree programme takes place. The formal protocols that were agreed with both Hospitals and signed in 2003 were reviewed taking into consideration the new legal framework applying to Hospitals with university teaching (Decree Law 206/2004). The two protocols are identical and are presented in Appendix I.

- The cooperation with Sub-Região de Saúde de Braga and the Health Centres under its supervision is progressing very well in all the relevant dimensions, including: (i) the practical training (*estágio*) of students in the health units; (ii) the preparation and implementation of the curricular area *Attaching of a Student to a Family*, which attracted a great enthusiasm from the cooperating medical doctors; and (iii) the clinical area *Residence in Health Centres*, starting this academic year.

The political process for the approval of the special statute for the University Hospitals, in which the Medical Schools have cooperated with the Minister of Health, was successfully concluded last August, with the publication of Decree-Law 206/2004. This is a very positive move that clarifies the concept and the statute of a University Hospital and of a Hospital or Health Unit with university teaching, and the requirements to be met. The concept is extended to all health units involved in teaching and research activities, *i.e.*, it

applies also to the Health Centres that cooperate with the medical programme. The new legislation also creates a National Coordination Body (*Órgão de Coordenação Nacional do Ensino Médico Pré-Graduado, Investigação Biomédica e Clínica*), in which all Hospitals with university teaching and all the Medical Schools are represented, aiming at assuring the planning and coordination regarding the guidelines for the participation of the health units in clinical training of the students and in biomedical and clinical research.

A new legal framework for the postgraduate training of medical doctors (*Internato Médico*) was also approved last August, by the Decree-Law 203/2004. However, very little innovation is introduced by this new legislation. Indeed, crucial aspects, relating: (*i*) to the development of the education of medical doctors as a *continuum*, not only in the undergraduate programme but also in the transition to the postgraduate training: (*ii*) to a smaller duration of the internship period as consequence of the reorganisation of the 6th year of the medical curriculum as a certification year: (*iii*) and also to the access to Internship, which stays wrongly based on one single entrance examination, were all of them ignored, notwithstanding the positions from the Medical Schools.

A step that could have positive effects is the decision from the Ministry of Health to set up a working group to define the programme and the access conditions to the examination to enter the Internship, integrating one representative from each Medical School. However, the outcome from this working group, so far, seems to show that tradition is prevailing and the opportunity to update old fashioned practices can be lost.

2.3.1 University-Hospital Articulation

Under the scope of the protocols with the affiliated Hospitals, a School-Hospital Articulation Committee (*Comissão Mista Permanente*) was established with each of the Hospitals, including two members from the School and two from the Hospital, with the aim to coordinate and facilitate the cooperation between both institutions.

In accordance with the multi-centre approach adopted for the clinical training of the students, the Hospitals of São Marcos and Senhora da Oliveira qualify both as *Hospitals with University Teaching*. The Articulation Committees with these Hospitals have been operating on a regular basis, with the following composition:

Articulation Committee	Members From ECS	Members from the Hospital
ECS – Hospital de São Marcos	*Joaquim Pinto Machado* MD, PhD, Course Director *Nuno Sousa*	*Américo dos Santos Afonso* PhD, President of Administration Council *Maria Emília Duarte Oliveira*

	MD, PhD, Clinical Area Coordinator	MD, Clinical Director
ECS – Hospital Senhora da Oliveira	*Joaquim Pinto Machado* MD, PhD Course Director	*Fausto Manuel V. Santos Fernandes* MD, Clinical Director
	Nuno Sousa MD, PhD, Clinical Area Coordinator	*Joaquim Manuel Araújo Barbosa* by delegation of the President of the Administration Council

One of the competences of the Articulation Committees is to decide on matters of relevance for the articulation between the School and the Hospitals. The two established Committees, working together, have adopted an Articulation Regime which defines the model of cooperation in what concerns the clinical training of the medical students. These regulations, covering the basic guidelines for the participation of the health services in the clinical training of the students, the competences and responsibility of each of the participating institutions, and the status of the clinical supervisors and of the clinical tutors, are documented in Appendix I.

3. ACTIVITIES IN 2004

3.1 Medical Degree Programme

An autonomous annual report was prepared for the undergraduate programme, detailing the pedagogical activities undertaken in the academic year 2003/04, the objectives, contents, methodologies and bibliography adopted for each curricular area, the teaching teams, the assessment of students and the evaluation of the staff and of the programme. It also includes a review of the curriculum based on the experience of the first three years, particularly in the last academic year, and the pedagogical planning for the academic year 2004/05.

The student centred learning methodologies are leading to good success rates, as expected. Indeed, in the academic year 2003/04, only five first year students (9%) and two second year students (4%) failed and one hundred per cent success was registered for third year students. One of the first year failures was a drop out.

For the year 2004/05, sixty new students were admitted into the medical programme, via the national competition system (54 under the general regime, 4 under the special regime for students from the Azores and Madeira Autonomous Regions and 2 under the special regime for handicapped students). The number of admitted students that selected this course as their first choice increased again, reaching 88% (97% for first and

second choices). The average entrance marks for the new students was 185.3 out of 200 (if only the students under the general admission regime are considered, this value raises to 188.9).

The gender balance is 68% female and 32% male students. Regarding the provenance of students, 68% come from the District of Braga, 83% from the Northern districts and 95% from the littoral zones of the country.

The global number of undergraduate students registered in the medical programme in the current academic year is of 64 in the first year, 51 in the second year, 46 in the third year and 50 in the fourth year, amounting to a total of 211.

Two more points deserve a special reference in this report. One relates to the essential role of the Medical Education Unit, in its multiple function of supporting the pedagogical activities, training staff and students on the new learning methodologies, and counselling, as well as of promoting research in medical education. The staff of this Unit was reinforced with two new elements, counting now with the collaboration of a highly qualified expert on medical education, with two members qualified with university degrees on psychology and educational sciences, a specialist on informatics and an administrative element.

The second point concerns the participation of the undergraduate students in research and the definition of alternative learning paths for students who are more motivated towards research. The School wishes to develop a MD/PhD optional programme, whose terms are presented in Appendix II. For this effect, a cooperation agreement is being established with two Universities in the United States that are willing to cooperate in the launching of this programme and also to accept a few of our best students in their MD/PhD programmes.

3.1.1 Association of Medical Students (NEMUM)

The undergraduate medical students have created a very dynamic association (NEMUM – *Núcleo de Estudantes de Medicina da Universidade do Minho*), which is carrying out an ambitious programme of activities within and outside the School.

NEMUM has been accepted as member of the National Association of Medical Students (ANEM), which acts as a federation of the medical students' associations in the country and is affiliated with the International Association of Medical Students Associations (IFMSA).

To give an idea of the multiple activities developed in 2004, a brief summary is transcribed from the NEMUM's report of activities, as follows:

The year of 2004 will be remembered for the 1st "Pinto Machado's Cultural Week", which occurred in Porto and Braga from the 17th to the 24th November. This action intended to pay tribute to the great inspirer of our association through cultural, sportive and scientific initiatives. Several activities were organized, such as a football tournament between the universities of Porto and Braga, a musical evening with the performance of cultural groups of both universities, a workshop on sexuality, a conference about Forensic Medicine led by Professor José Pinto da Costa, a free session of poetry and a modern music party.

This year, NEMUM also accomplished several programs of communitarian intervention that had been proposed. Thus, in April 2004, in cooperation with the international humanitarian association "Habitat", NEMUM put in practice a health promoting action, preventing diseases such as "Diabetes mellitus" and hypertension.

This initiative had a big impact in media, being the headline of the RTP's news programme "Jornal da Tarde". It was repeated in June, September and October. The 1st of these actions took place in the centre of Braga. Since it occurred on the same day as a EURO 2004 football match and in the eve of "S.João" festival, this initiative was very successful.

In September, with the cooperation of the National Medical Students Association (ANEM), our students went to Alcochete, near Lisbon, to participate in a similar activity. Finally, in October, this activity was repeated in the campi of Braga and Guimarães of University of Minho.

The organization of a Sign Language course for medical students was another of NEMUM's activities. Thirty two students participated, making this initiative a success that will be repeated.

With the collaboration of the Academic Association, the Nursing Students' Association and Braga's Fireman, NEMUM also built a support program to the students who participated in the celebration of "Enterro da Gata", an academic party. A total of 288 people were received in the support tent built in the field.

As a contribution to avoid the excessive consume of alcoholic drinks among students, NEMUM distributed over 1000 bottles of water free of charge during the academic parade.

In December 2004, NEMUM and the Association of Law students promoted a free theatre play, open to all the academic community.

Other initiatives must be remembered, such as the monthly editing of the journal "Haja Saúde" and the organization of many other cultural and sporting activities, many of them in cooperation with other associations, regarding protocols signed between NEMUM and the Association of Law Students, Nursing Students and University of Porto Medical Students.

The School is proud of its students' capacity of initiative, which deserve all possible support.

3.2 Post-graduation

For the fourth consecutive year, high priority was given to the offer of highly specialised training for medical doctors and researchers in health and life sciences. It should be emphasised that one of the post-graduation courses (*Genes and Neurons*) was sponsored by the European Science Foundation. Also, a course on animal sciences, providing international certification for the participants to perform and direct projects that use animals as models, was organised as a joint initiative with the IBMC (Porto); the ICVS and the IBMC plan to alternate in providing this course yearly.

The post-graduation programme in 2004 included eight intensive courses, with high level of international collaboration, listed in Table 2, targeting medical doctors as well as academic staff, researchers and health professionals. Two workshops were also organised, addressed to high school teachers and medical doctors.

The ICVS annual report includes detailed information on the post-graduation courses and their evaluation. It is worth mentioning that the programme was attended by 300 participants and the results from the questionnaire passed to all the participants showed a very high degree of satisfaction (54 % excellent, 44 % good, 2 % adequate) and many appeals were made for the School to proceed with the programme and repeat some of the courses.

Detailed information on the courses and workshops is available at the internet address http://ecs2002.ecsaude.uminho.pt/postgrad/2004/cartaz.2004.pdf.

3.3 Research

The research activities are organised and carried out at the ICVS, which acts as a fully incorporated research structure within the School. A detailed report of the activities of ICVS is available separately, but some essential points are summarised here.

As mentioned in former reports, a proposal was formally submitted to FCT, in early 2002, for the regular financing (basal and programmatic) of ICVS as a research unit integrated in the national system of science and technology. However, the FCT international panel of experts visited ICVS only on the 10th of December 2003 and the formal decision to recognise the ICVS was taken in February 2004. The report from the panel was very positive and supportive of the programmatic funding needed for laboratory equipment.

The ICVS was rated as Excellent. Nevertheless, although the panel considered that "*the funding needs of the unit are large and acute; adequate library facilities are not yet in place; funding support is required to obtain adequate access to electronic journals, a critical need; several core types of equipment have not yet been purchased, including confocal and electron microscopes, cell sorter, beta and gamma counters, HPLC, and an automated DNA sequencer; these will be required for the centre to become fully competitive with laboratories in the US and Europe*", the programmatic financing of the ICVS was disappointingly negligible (90 000 Euros) as a consequence of the under financing of research in Portugal.

Table 2 — Post-graduation Programmes in 2004

Course Title and Dates	Coordinator(s)	Invited Tutor(s)
Microarrays: principles and applications in medicine **24-27 May, 2004**	**Patrícia Maciel** **Rui Reis** **Bauke Ylstra**	**Andrew McDonald,** Genomic Solutions **Beatriz Carvalho**, VU Univ. Med. Center, Amesterdam **Cristina Teves**, Clontech (EnziFarma), Lisbon **Daniel Geschwind**, Univ. of Califórnia, L.A. **Francisco R. Pinto**, ITQB-UNL, Lisbon **Joerg Becker,** IGC**,** Lisbon **Joseph Costello**, Univ. of Califórnia, San Francisco **Marianne Tijssen**, VY Univ., Med. Centre, Amsterdam **Miguel Santos**, STABVIDA, Lisbon **Massimo Cocchia**, Bio-Rad **Serge Scherrer**, Affymetrix **Steve Hawkins**, PerkinElmer
Photodynamic Therapy **(2nd Edition)** **28-29 May,2004**	**Filipe Sansonetty** **João Moura** **Artur Sousa Basto**	**Stephen Bown**, Univ. of London, UK **Lasse Braathen**, Hôpital de Berne, Berne **José Cavaleiro**, Univ. of Aveiro **Faria de Abreu**, Hosp. of the Univ. of Coimbra **João Abel Amaro**, IPO, Lisbon **Celeste Brito**, Hospital of São Marcos, Braga **João Maia Silva**, Hospital of Santa Maria, Lisbon **Paulo Coutinho**, Univ. of Minho, Braga
Genes and Neurons **19-23 July, 2004**	**Joana Palha** **Patrícia Maciel**	**Sabrina Davis**, Univ. Paris Sud, France **Catarina Oliveira**, Univ. of Coimbra **Patrícia Maciel**, Univ. of Minho **Henrik Oster**, Max-Planck-Gesellschaft, Germany **Joana Almeida Palha**, Univ. of Minho **David Self**, Univ. of Texas, USA **Mara Dierssen Sotos**, Barcelona, Spain **Oliver Stork**, Otto-von-Guericke Univ., Germany **Astrid Vicente**, IGC, Lisbon **Larry Young**, Emory Univ., USA
Animal Experimentation **30 August – 10 September, 2004**	**Patrícia Maciel** **Magda Carlos** **Jorge Pedrosa**	**Anna Olsson**, IBMC, Porto, **Esmeralda Delgado**, Technical Univ. of Lisbon **Fátima Gartner**, ICBAS and IPATIMUP, Porto **Harry Blom**, Utrecht Univ., The Netherlands **Luís Antunes**, UTAD, Vila Real **Luís Ferreira**, Technical Univ. of Lisbon **Luís Tavares**, Technical Univ. of Lisbon **Luís Telo da Gama,** Zootechnic Station, Santarém **Magda Carlos**, Univ. of Minho **Moisés Mallo**, IGC, Lisbon **Pim Rooymans**, Utrecht Univ., The Netherlands **Vera Baumans**, Utrecht Univ., The Netherlands **Selene Veiga**, Ministry of Agriculture, Portugal

Table 2 — Post-graduation Programmes in 2004 (cont.)

Course Title and Dates	Coordinator(s)	Invited Tutor(s)
Fungi relevant in clinical practice: from biology to pathology and treatment **6-11 September, 2004**	**Cecília Leão** **Paula Ludovico** **Fernando Rodrigues**	**Alexandre Salvador,** Enzifarma, Portugal **Ângela Restrepo**, Medellin, Colômbia **Ângela Tobón**, Medellin, Colômbia **Artur Sousa Basto,** Hospital of São Marcos, Braga **Christopher Kibbler**, Royal Free Hospital, London **Cidália Pina-Vaz**, Hospital of S. João, Porto **Luz Elena Cano,** Medellin, Colômbia **Sofia Oliveira**, Hospital of S. João, Porto
Biostatistics in Health Sciences **13-17 September, 2004**	**Joana Palha** **Pedro Oliveira**	**Ana Cristina Braga**, Univ. of Minho, Braga **Pedro Oliveira**, Univ. of Minho, Braga
Cerebral Sulci and Gyri: Neuroanatomy **6-9 October, 2004**	**Nuno Sousa** **Carlos Alegria**	**Albert L. Rhoton, Jr,** USA **Antonio Cesar Mussi**, Brasil **Guilherme Carvalho Ribas**, Brasil **Ugur Ture**, Turkey **Evandro de Oliveira,** Brasil
Cytokines in clinical practice **14-16 October, 2004**	**Jorge Pedrosa** **Margarida Lima** **Carlos Vasconcelos**	**Anne Cook,** Univ. of Cambridge, UK **Anne E. Goldfeld**, Harvard Medical School, USA **Anne O'Garra**, Nat. Inst. for Med. Research, London **António Bandeira,** Institute Pasteur, Paris **Brigitta Askonas**, Imperial College, London **Douglas Robinson**, Imperial College, London **Michael Parkhouse**, IGC, Lisbon **Paulo Vieira**, Institute Pasteur, Paris
Workshosp: ***c.elegans*as a model in teaching and research** **25-27 February, 2004**	**Patrícia Maciel**	**Michael Ailion**
Workshop: **Training in pediatrics: acid-base and electrolytic equilibrium** **11-12 October, 2004**	**Jorge Correia Pinto** **Almerinda Pereira** **Pedro Freitas**	**Libério Ribeiro –** Portuguese Pedriatics Society **Videira do Amaral –** Univ. of Lisboa **Carmona da Mota** –Univ. of Coimbra **Hercília Guimarães** – Univ. of Porto **Tojal Monteiro** – ICBAS, Univ. of Porto **Álvaro Aguiar** – Univ. of Porto **Gomes Pedro** –Univ. of Lisbon **Maria do Céu Machado** – National Commission for Childhood and Adolescence

The School, in order to complement the contract signed with the Government in 2000, as was then foreseen, has proposed in 2003 a special contract to the Ministry of Science and Higher Education for the infrastructural financing of ICVS, involving a total amount of 4.2 million Euros over a period of tree years, with 20% co-partnership from the School. The proposal was approved and the contract was signed in March 2004, but with a financing of only about 20% of the proposed value, although with an indication that the remaining should be considered for co-financing from the POCTI programme. Contacts are proceeding with the Ministry and FCT for the effect.

In spite of the difficulties with the financing of infrastructures, the School continued its efforts to allocate as much of its resources as possible to the reinforcement of laboratories and the support of research projects. It was therefore possible not only to keep all members of the academic staff active in research, including part-time staff, but also to attract a meaningful number of research students into the research projects. In this way, 85 researchers are actively involved in the ICVS activities [17 PhD researchers (14 PhD faculty members of ECS and 3 post-doc$_s$); 68 Post-graduation students (33 PhD students, 4 Master students, 7 Assistants and 6 Monitors at ECS, 17 research scholarships and 1 research volunteer)], supported by 23 members of the non-academic staff (9 in administration, 10 in the laboratories and 4 in the Medical Education Unit) shared with the School.

Although the work load on the academic staff is still high, due to the planning and setting-up of the undergraduate and post-graduation programmes and the new laboratories facilities, the results from the scientific work are already meaningful. In 2004, the international publications from ICVS included 43 papers, 3 book chapters and 58 abstracts in Congresses, and the national publications comprised 5 papers, 2 book chapters and 11 abstracts. One PhD and one Master thesis were concluded. Ten prizes were awarded to researchers of the ICVS.

3.4 Human Resources

Academic staff

As already stated in former reports, the School is paying careful attention to the recruitment of academic staff. The number of potential candidates with relevant scientific qualifications is high, but it is necessary to be aware that scientists/professors used to more traditional methods must be integrated into the innovative conditions of the medical degree programme at University of Minho.

So, it is important to make sure that the selected candidates understand well how the project is expected to develop and accept its specificities, namely in what concerns five essential aspects: (i) the perspective of the programme, as a project to be constructed and developed in a participated way within the School; (ii) the student-centred learning process, in which the traditional formal lecturing looses most of its significance; (iii) the horizontal integration of the curricular contents and the modular organisation of the curriculum, meaning that the coordination competences traditionally associated with individual subjects are transferred to the coordinators of the curricular areas and modules; (iv) the role of the Medical Education Unit, in terms of support, coordination and monitoring in connection with the pursuit of the educational objectives; (v) the role of research, as a crucial element for a research-based learning process, and the submission of the research projects to the strategic guidelines and priority areas defined for the Research Institute.

In quantitative terms, there are severe administrative limitations imposed by the Government on the maximum number of FTE teaching staff that can be hired, as a function of the number of students enrolled (ratio 1:6). Thus, the standard number of FTE for the current academic year is 35. Considering the admission of 60 new students next September, the maximum number of FTE for 2005/2006 will be 45.

At present the School has a faculty of 42 members (24,5 FTE) and counts in addition with 16 regular collaborators and many others collaborators, particularly related to the Clinical Residences. The full composition of the regular teaching staff is listed in Table 3, together with their qualifications, rank and scientific area (for a matter of precision, the rank is indicated in Portuguese). The clinical tutors, who support the clinical training of the students in the Hospitals, are indicated in Tables 4-a and 4-b.

In terms of the faculty profile, it is interesting to notice that 72% (42 out of 58) of the regular staff members and collaborators are MDs. Regarding academic qualifications, 21 have a doctoral degree.

Table 3 — Academic Staff

Name	**Qualifications**	***Categoria* (Rank)**	**Research**	**Area**
Joaquim G. Pinto Machado C. Silva	MD, PhD, *Agregação*	*Prof. Catedrático Eméritos*		CSH,SC, C
Maria Cecília L.P. Estrela Leão	PhD, *Agregação*	*Prof. Catedrático* Exc.	Infectious Diseases	MC
António Gil Pereira de Castro	PhD	*Prof. Auxiliar Exc.*	Infectious Diseases	BP
Armando A.N. Pinto de Almeida	PhD	*Prof. Auxiliar Exc.*	Neurosciences	SOF
Fernando J. dos Santos Rodrigues	PhD	*Prof. Auxiliar Exc.*	Infectious Diseases	MC
Isabel M.M.M. Palmeirim A. Esteves	MD, PHD	*Prof. Auxiliar Exc.*	Development and Neoplasia	MC
Joana Almeida S. Pacheco Palha	PhD	*Prof. Auxiliar Exc.*	Neurosciences	SOF
Jorge Manuel Rolo Pedrosa	PhD	*Prof. Auxiliar Exc.*	Infectious Diseases	BP
Nuno Jorge Carvalho de Sousa	MD, PhD	*Prof. Auxiliar*	Neurosciences	SOF, C
Patrícia Espinheira Sá Maciel	PhD	*Prof. Auxiliar Exc.*	Neurosciences	SOF
Paula Cristina C.A.M. Ludovico	PhD	*Prof. Auxiliar. Exc.*	Infectious Diseases	MC
Manuel João T. Mendes Costa	PhD	*Prof. Auxiliar Exc (Requisitado)*	Medical Education	CSH
Maria de Fátima M. Baltazar	PhD	*Prof. Auxiliar Conv. Exc.*	Development and Neoplasia	BP
Rui Manuel Vieira Reis	PhD	*Prof. Auxiliar Conv. Exc.*	Development and Neoplasia	BP
Jorge Manuel Correia Pinto	MD, PhD	*Prof. Auxiliar Conv. 50%*	Development and Neoplasia	SOF
António José Alegre Sarmento	MD	*Chefe Serviço Clínica Geral (Requisição 50%)*		SC
Filipa Santos Costa Pinto Ribeiro	Licª Biology	*Assistente Conv. 50%*	Neurosciences	SOF
Manuel José L. Costa Rodrigues	MD	*Assistente Conv. 50%*	Neurosciences	SOF
André Filipe Couto Carvalho	MD	*Assistente Conv. 40%*	Neurosciences	SOF
Carla Rolanda Rocha Gonçalves	MD	*Assistente Conv. 40%*	Development and Neoplasia	SOF
Isabel Maria S.S. Ribeiro Oliveira	MD	*Assistente Conv. 40%*	Development and Neoplasia	SOF
Luís Miguel Gonçalves Torrão	MD	*Assistente Conv. 40%*	Development and Neoplasia	SOF
Maria Fernanda Grillo Milanezi	MD	*Assistente Conv. 40%*	Development and Neoplasia	BP
Maria João R. Leite Baptista	MD	*Assistente Conv. 40%*	Development and Neoplasia	SOF
Hugo Miguel B. Almeida Tavares	MD	*Assistente Conv. 40%*	Neurosciences	SOF
João José F.C. Araújo Cerqueira	MD	*Assistente Conv. 40%*	Neurosciences	SOF
João Miguel S. Bessa Peixoto	MD	*Assistente Conv. 40%*	Neurosciences	SOF
José Miguel G. Moreira Pêgo	MD	*Assistente Conv. 40%*	Neurosciences	SOF
Sónia M. Rodrigues Magalhães	MD	*Assistente Conv. 40%*	Development and Neoplasia	SOF
Ana Maria Lacerda A. Horta	MD	*Assistente Conv 30%*		BP
Elisabete Guimarães de Sousa	MD	*Assistente Conv. 20%*		BP
Fernando Pardal de Oliveira	MD	*Assistente Conv. 20%*		BP
Gustavo Filipe M. Alves Rocha	MD	*Monitor*	Development and Neoplasia	SOF

Isabel Margarida M. Mesquita	MD	*Monitor*		SOF

Table 3 — Academic Staff (cont.)

Name	**Qualifications**	***Categoria* (Rank)**	**Research**	**Area**
João Carlos Cruz Sousa	MD	*Monitor*	Neurosciences	SOF
João Paulo Soares Fernandes	MD	*Monitor*	Development and Neoplasia	SOF
José Mário Coutinho Roriz	MD	*Monitor*	Development and Neoplasia	SOF
Maria Leonor Barbosa Gonçalves	Licª Biology	*Monitor*	Neurosciences	SOF
Mário Jorge Alves Oliveira	MD	*Monitor*	Neurosciences	SOF
Pedro Alexandre L.A.G. Teixeira	MD	*Monitor*	Neurosciences	SOF
Rui Pedro da Rocha Bastos	MD	*Monitor*	Development and Neoplasia	SOF
Tiago da Silva Pinto Teixeira	MD	*Monitor*		SOF
Permanent Collaborators:				
Ana Maria Resende Morais Mateus	MD	*Centro de Saúde de Matosinhos*		SC
António C. Megre Eugénio Sarmento	MD, PhD, *Agregação*	*Prof. Auxiliar/FM-UP*		BP
António Jaime B. Correia Sousa	MD, MPH	*Unidade Local de Saúde de Matosinhos*		SC
Carlos Alberto Almeida Valério	MD	*Chefe Serviço Clínica Geral (Aposentado)*		SC
Clara Costa Oliveira	PhD	*Prof. Aux./IEP-UM Sabática na ECS*		CSH
Claudio H. Sunkel Cariola	PhD, *Agregação*	*Prof. Assoc../ICBAS-UP*		MC
Damião Lourenço da Cunha	MD, PhD	*Chefe Serviço Cardiologia (Aposentado)*		C
Fernando Carlos L. Schmitt	MD, PhD	*Prof. Aux./FM-UP*		BP
Luís Filipe F. Lima Laranjeiro	MD	*Chefe de Serviços/Centro de Saúde de Guimarães*		SC
Margarida Conceição Lima	MD	*Centro de Saúde de Gualtar, Braga*		SC
Maria Amélia Ferreira Duarte	MD, PhD, *Agregação*	*Prof. Catedrático/FM-UP*		SOF
Mário José Cerqueira Gomes	MD, PhD, *Agregação*	*Prof. Cat. Cardiologia (Jubilado – FM-UP)*		C
Mário Nelson Morais Freitas	MD	*Unidade Operativa de Saúde Pública, Braga*		SC
Óscar Ferreira Rolão Candeias	MD	*Chefe Serviço Medicina Interna (Aposentado)*		C
Roger Thomas	MD, PhD	*Universidade de Calgary-Canadá (Sabática na ECS)*		UEM
Maria Teresa Alfonso Roca	PhD	*Prof. Cat.*/Univ. Castilla de la Mancha (Assessoria)		UEM

Table 4-a – Clinical Tutors at Hospital de São Marcos (2004/05)

Residence/Sub-Speciality	**Tutors** (MD_s)
Introduction to Clinical Medicine	
Internal Medicine	*Maria Adelina Ferreira* *Sameiro Ferreira* *Narciso Oliveira* *Juan Rafael G. Sanchez-Reyes Garcia* *Sameiro Neves* *Maria João Nogueira Costa*
Medicine I	
Internal Medicine	*Maria Adelina Ferreira* *Narciso Oliveira* *Juan Rafael G. Sanchez-Reyes Garcia* *Sameiro Neves* *Maria João Nogueira Costa*
Pneumology	*João Cunha* *Manuel Macedo Gonçalves* *Lurdes Ferreira* *José Eduardo Oliveira*
Cardiology	*Jorge Marques* *Alberto Salgado* *Márcia Torres* *Sérgio Rocha* *Rui André Rodrigues*
Gastrenterology	*José Barata* *Raquel Gonçalves* *Vera Dias*
Endocrinology	*Olinda Amélia Pinho Marques* *Cástor G. Pereira* *Maria Lopes Pereira*
Maternal-Child Health	
Obstetrics	*Maria Luísa Cardoso* *Domingos Ribeiro* *Luís Carvalho* *Manuela Araújo* *Paula Pinheiro* *Pedro Cabrita*

Table 4-b – Clinical Tutors at Hospital Senhora da Oliveira (2004/05)

Residence/Sub-Speciality	**Tutors** (MD_s)
Introduction to Clinical Medicine	
Internal Medicine	*Maria Helena Jacinto Sarmento Pereira* *Maria da Glória Sousa Alves* *Maria Elisa Barroso Torres* *Maria Emília Castro Lopes* *Pedro Miguel Guimarães Cunha* *Lurdes Natália Mendes Oliveira*
Medicine I	
Internal Medicine	*Maria Helena Jacinto Sarmento Pereira* *Maria da Glória Sousa Alves* *Maria Elisa Barroso Torres* *Maria Emília Castro Lopes* *Pedro Miguel Guimarães Cunha* *Lurdes Natália Mendes Oliveira*
Cardiology	*António Rodrigo Miranda Lourenço*
Gastrenterology	*Salomé Bruno Costa Gonçalves Lima*
Maternal-Child Health	
Obstetrics	*Isabel Maria Dória Reis Buhier* *José Manuel Mira Mendes Furtado* *Maria Sofia Dantas Pinto Xavier* *Maria José Gonçalves Pires Costa* *Rosa Maria Freitas Fernandes* *Maria Odosinda Rosmaninho Lopes Sousa*
Paediatrics	*Fernando Eduardo Meireles Maio Graça* *Maria José Teixeira Costeira Paulo* *Clara Sofia Domingues Paz Dias* *Ana Cláudia de Castro Tavares* *Susana Noites de Brito Peres* *Cristina Maria Gonçalves Ferreira*

Non-academic staff

Five new staff members were recruited, three of them with a higher education degree. Table 5 indicates the staff members, in a total of 23, and their qualifications, rank and allocation. The academic profile of the staff is above the average situation in the Portuguese higher education system (52% of the staff have a higher education degree).

Table 5 — Non-academic Staff

Name	**Qualifications**	***Categoria* (Rank)**	**Service**
José Carlos F. Henriques	*Licenciatura*	*Assessor Principal*	Head Office
Ana Cristina Ferraz Freitas	*Licenciatura*	*Técnico Superior*	UEM
Ana Cristina M.R. Taboada	*Licenciatura*	*Técnico Superior Laboratório*	Laboratories
Ana Paula Salgueira Rodrigues	*Licenciatura*	*Técnico Superior*	UEM
Cláudia M. Borges Barreira	*Licenciatura*	*Técnico Superior Administrativo*	Financial Office
Isabel Alexandra M. Dias	*Licenciatura*	*Técnico Superior Laboratório*	Laboratories
Lucília G. Ribeiro Pinto	*Licenciatura*	*Técnico de Diagnóstico e Terapêutica*	Laboratories
Magda João Castelhano Carlos	*Licenciatura*	*Técnico Superior Laboratório*	Laboratories
Maria Paulina D.M. Santos	*Licenciatura*	*Técnico Superior Administrativo*	Project Support Office
Paula C.F. Gomes Pereira	*Licenciatura*	*Técnico Superior Administrativo*	Human Resources
Jorge Manuel S.G. Freitas	Bachelor	*Especialista de Informática Estagiário*	UEM
Luís Filipe F. Oliveira Martins	Bachelor	Técnico	Laboratories
Domingos Ferreira Dias	Secondary Education	*Técnico de Informática Adjunto*	Informatics Office
Catarina N. Sousa Freitas	Secondary Education	*Assistente Administrativo*	Secretariat
Helena Maria A. Nascimento	Secondary Education	*Assistente Administrativo*	Secretariat
Isabel Maria V. Barbosa	Secondary Education	*Assistente Administrativo*	UEM
Maria Manuela M. Mendes	Secondary Education	*Assistente Administrativo*	Academic Office
Olga Maria S. Miranda Abreu	Secondary Education	*Assistente Administrativo*	Secretariat
Susana Isabel Vaz Santos	Secondary Education	*Auxiliar Técnico*	Laboratories
João Filipe A. Malheiro	Basic Education	*Auxiliar Técnico*	Laboratories
Jorge Manuel S.G. Paula	Basic Education	*Auxiliar Técnico*	Laboratories
Maria Celina F. Barros	Basic Education	*Auxiliar de Manutenção*	Laboratories
Maria Manuela S. Carneiro	Basic Education	*Auxiliar de Manutenção*	Laboratories

Staff development

The training of the staff is essential for the integration of new members and for the normal development of the project.

The Medical Education Unit organized training activities for newly admitted academic staff members, concerning the learning methodologies. The students are also specifically trained to adapt to the learning methodologies. Two sessions were organised to introduce the clinical tutors to the School's organisation and to the learning methodologies in use.

Regarding staff development, the School has a total of 13 places for tenure positions available (4 places for Full Professors and 9 places for Associate Professors - the rank of Assistant Professor is not a tenure position). There are, therefore, conditions for the promotion of staff members with high standard CVs. Competition on three places for Associate Professor are presently opened, following a proposal submitted to the Rector by the Scientific Council.

The integration of staff in the national and international scientific community is also important. In 2004 a total of 26 leaves of absence to travel abroad, comprehending 255 days of absence, were provided to staff members, including some financial support.

3.5 Infrastructures

The infrastructures for the School activities continued to be developed in three concomitant lines: the process for the construction of the new buildings, the provisional academic area and the provisional laboratory spaces.

After another long delay, the Ministry for Science and Higher Education authorised, in November 2004, the contract for the construction of the buildings. The final bureaucracy is under way and hopefully the works will start very soon.

As the provisional spaces will have to hold for two more years, additional space was found in 2003 to expand both the academic and research areas and detailed contingency planning was made to allow for the operation of the full programme (six curricular years), keeping the *numerus clausus* at a maximum of 60 places.

In 2004, the clinical seminar rooms were made fully operational and the pedagogical equipments, including simulators, were reinforced.

A brief account of the provisional facilities is presented next.

Pedagogic Complex II

In the Pedagogic Complex II of the Gualtar Campus, a growing part of the third floor is occupied by the Health Sciences School. This area, with a floor space of about 1 250 m^2, comprises six self-learning and tutorial classrooms (**1**), seminar rooms (**2**), the medical education unit (**3**) and three large rooms for the use of the teaching staff (**4**), in a collective "open-space" concept.

All the administrative offices and facilities that were located in this area were transferred to the new spaces in the laboratory facilities (upper floor), in order to avoid the splitting of the teaching staff rooms into two different buildings.

Each of the six tutorial classrooms presently available has a capacity for up to 30 students, with one computer per student connected to the Internet and the Intranet. However, in the current academic year two of the tutorial classrooms are shared by the first and fourth year students. Each classroom is also equipped with a multimedia projection system, three worktables to accommodate groups of up to ten students and one bookcase per group where the pedagogical materials for the academic year are permanently available.

Laboratory facilities

The laboratory facilities of the ECS/ICVS occupy an area of 1 750m^2 and are located about 100 meters from the classrooms of Pedagogic Complex II. The School will use these facilities for a few years (before and during the construction of the Medical School Building). In the future they will be used as a Post-graduation Centre, servicing several Schools of the University.

The laboratory facilities are divided in two different areas: the academic area and the area dedicated to research and postgraduate activities.

Academic area

The academic area comprises five distinct laboratories and two rooms for training of clinical skills, as well as central support facilities. Based on the concept of the integrated learning system, the five distinct laboratorial areas are: Anatomy (**1**), Biochemistry and Molecular Biology (**2**), Physiology (**8**), Histology and Cytology (**10**) and Biopathology (**11**), with an accommodation for 30 students each. The area for clinical skills training comprises a room for clinical simulation (**3**) and medical consultation offices (**4**).

The central support facilities include a decontamination and material cleaning room (**5**), a sterilization room (**7**), and a room for stock reagents and preparation of solutions (**6**). All rooms and corridors of the academic area provide access to Internet and Intranet using cable/wireless network

Area for research, postgraduate studies and specialised services

The medical students may have access to the research area to perform specific techniques or to carry on the "Optional Project" under the supervision of the project instructor.

The area for research and postgraduate studies is organised into different, functionally specific laboratories. This network of shared facilities was established to support, in a multidisciplinary way, the different research groups and concern the following laboratorial areas: Immunology (**12**), Molecular Biology (**13**), Tissue and Cell Culture (**14**), Immunochemistry (**15**), Histology an Tissue Processing (**17a** and **17b**), Development Studies (**18a** and **18b**), biosafety level two Molecular Microbiology (**19**) and Microscopy (**20**). Both researchers and postgraduate students of the Life and Health Sciences Research Institute share these laboratories. Each research group has a 'home base' in the laboratory most closely related to its specialisation.

Furthermore, there are four offices and several support rooms: a technicians' office (**16**), an informatics office (**24**), a room for postgraduation students (**9a**), a room for medical students (**9b**), a room for computer terminals (**21**), a centrifuge and ultra freezer room (**22**), an anatomy cadaver preparation room (**23**), a storage room (**25**), a dark room (**26**), a 4º C temperature controlled room (**27**), and an area for animal experimentation. This animal facility has presently a capacity for 1 000 mice and 300 rats and is divided into three distinct areas: an external quarantine (**28**), a biosafety level three negative pressure area for animal models of infection (**30**) and a positive pressure clean area (**29**) which includes rooms for surgery in animal models as well as for behavioural studies in animal models.

Administration and clinical facilities

The administrative headquarters, including the secretariat (**1**), the Direction board offices (**3**) and the Scientific Council boardroom (**2**), are located in the upper floor of the laboratory facilities.

Three 'open space' locations for researchers (**4-6**) and two seminar rooms with a capacity of 60 seats each (**7** and **8**) are available at the same floor. The seminar rooms are used for the clinical seminars of the undergraduate programme, as well as for internal meetings and for postgraduate seminars.

3.6 Financial Resources

Since 2000, an annual lump sum has been allocated to the School of Health Sciences to cover current expenses, including salaries and small equipments. As mentioned before, all the possible saves were made in order to shift as many resources as possible to pedagogical and research equipments.

The income and expenses in 2004 related to the lump sum are indicated in Table 6. The expenses are categorized as "salaries", "other current expenses" and "capital investments" (equipment), to show their relative weight. Although the amount for salaries has increase 12% when compared with the previous year, it was still possible to invest around 15% of the income in equipment.

Table 6 – Financial resources (2004)

Income			**Expenses**				**Surplus**
Surplus 2003	Annual allocation	Total	Salaries	Other current expenses	Capital investment	Total	
- 65.0	2 400.0	2 335.0	1 243.4	730.0 (a)	358.9	2 332.3	2.7

Unit: 10^3 Euro

(a) Includes 149.0 kept at central administration, for general expenses and maintenance.

In the scope of the contract with the Government regarding the new infrastructures, the School was allocated at the end of 2003 a sum of half a million Euros for computers and pedagogical equipment concerning the new tutorial rooms and the laboratories for the clinical subjects. This earmarked income allowed in early 2004 an investment of 170 000 Euros in computers and related equipment, as well as the acquisition of laboratorial equipment and clinical simulators worth 330 000 Euros.

Some of the research projects run at ICVS also had external financing from FCT (4 projects), Calouste Gulbenkian Foundation (2 projects), GRICES/DAAD (1 project) and

Agência de Inovação (1 project), in a total amount of about 599 000 Euros over three years, of which 99 470 were actual income in 2004. The FCT has provided in 2004 an amount of 84 000 Euros as basal financing for ICVS and around 5 000 Euros as part of the programmatic funding.

In conclusion, in the year 2004 the School had a total income of around 3.0 million Euro.

4. PLANS FOR 2005

The dynamics of the School operation is now well established and the experience of the first three academic years permitted a consolidated overall view of the medical programme curriculum. The main problems to be addressed in the coming year relate to the reinforcement of the human resources available, the completion of the detailed curricular development for the full undergraduate programme and the consolidation of the links and cooperation with the health services. Specific objectives for 2005 are, therefore:

- to finish the preparation of courseware for the fifth curricular year of the undergraduate programme and to prepare the curricular development of the fourth phase (year 6);
- to admit a new group of 60 of students;
- to proceed with the post-graduation programmes and to have the Master and Doctoral programmes formally approved by the Academic Council and the University Senate;
- to continue to promote the conditions for a steady participation of the academic staff in research projects and for attracting new researchers on fellowship schemes;
- for this effect, and as a complement to the contract established with the Foundation for Science and Technology for the basic financing of ICVS, other sources of income will be actively pursued;
- to start offering some specialized services to the health system and the local community, as soon as the appropriate facilities are ready;
- to start the construction of the new buildings and to make some extra provisional spaces available for academic activities;
- to recruit and train new staff members, with a special emphasis on the academic staff for the clinical themes;
- to review the protocol with ARS-N concerning the *Unidade de Saúde de Gualtar*, aiming at a stronger interaction between the School of Health Sciences and the Health Centre in order to create a role-model “pedagogical laboratory” for the practical training of students on community health;

- to continue and strengthen the cooperation with other Health Centres;

- to proceed with the cooperation with the Hospitals in Braga and Guimarães, continuing the movement to shift their profiles towards University Hospitals, complying with the requirements for the accreditation of health services regarding the participation in teaching and research activities, in order to guarantee the education and training of the undergraduate students on the clinical subjects accordingly to adequate standards;

- to continue to devote special attention to the monitoring and improvement of quality.

As mentioned in earlier reports, some of the problems to be addressed are common to all the other Medical Faculties in Portugal and must be dealt with in cooperation. This is particularly the case of three important issues:

- the establishment of the requirements for the accreditation of health services as teaching units, which will act as an essential incentive for some Hospitals and Health Centres to redefine and focus their specific mission in relation to the opportunity and ambition to participate in the medical training of students;

- the (re)organization of the sixth curricular year, taking into consideration the Directive from the European Parliament and the European Council concerning the recognition of professional qualifications;

- the adoption of a specific entrance examination for the courses in the area of Health Sciences.

The School of Health Sciences will continue to actively participate in the initiatives that the *Grupo de Missão* is taking in this regard, viz. the meetings of the Medical Faculties. However, it must be said that the progress in these issues is slower than expected.

5. CONCLUSIONS

5.1 Analytical Summary

The most prominent features that emerge from the critical analysis of the School's operation are the progresses registered in regard to the core strategies set up for 2004 and the continuing enthusiasm, commitment, permanent availability and competence of all School members, which constitute a great asset for the School.

Other important strengths, on which the School is building up, are:

- the qualification and youth of the staff and the easy recruitment of new qualified members;
- the stability of the faculty;
- the willingness of all staff to adhere to the innovative ways of the School operation, at all levels, and their acceptance and participation in the training activities;
- the recognition of the ICVS by the FCT, graded as excellent, and the commitment to research, involving the students;
- the quality of the students and their capability for action;
- the standards of the working spaces and equipment, in spite of their provisional status, and the function-oriented organisation of the facilities;
- the innovative and flexible coordination and management procedures;
- the cooperation and enthusiastic support from the Health Services;
- the multi-centre approach in the clinical training of the students, bringing a wider spectrum of Services and professionals into the clinical teaching;
- the continuous support from the Rector and from all University of Minho;
- the good relations with *Ordem dos Médicos* and other outside partners;
- in summary, the favourable teaching and research environments.

On the other hand, the successive delays in the construction of the new School buildings and the new Hospital are particularly bothersome. The heavy bureaucratic process for the construction of the new School building is finally coming to an end and it is essential that the works start very soon and proceed efficiently. Concerning the new Hospital, the contest for the public-private partnership is open and the deadline for proposals is next July. The decision process will be complex and slow, meaning that the construction works will probably start only in the first semester of 2006 and the Hospital will be operational in 2009.

The recognition and financing of ICVS by the Foundation for Science and Technology will hopefully have a strong impact on the working conditions and in improving critical mass for research, opening opportunities to attract new sources of financing.

A latent threat is the danger to drift into just one more traditional project. The watchful look and systematic monitoring kept on the project by a strong and informed leadership at all levels within the School, the commitment of staff and students to the project identity and the support and counselling from the External Advisory Committee are, however, good safeguards to keep the medical programme on the right track.

The continuing negative financial conjuncture in Portugal may raise additional threats. The financing of higher education is decreasing in real terms and money for research is scarce. Portugal ranks very poorly in the international innovation scoreboards, namely in the percentage of the GDP spent in R&D (0.85%, as compared with the European average of 1.92%). A big effort must be done to overcome this handicap, bearing in mind that in a situation of crisis the establishment of priorities and the support to innovation are more important than ever. The goal established by the Lisbon Strategy, to reach 3% of the GDP for investment in R&D by 2015, in the scope of the ambitious objective to make the European Union the knowledge based economy more dynamic and competitive in the world, raises expectations for a better support to innovative projects and opens a window of hope and opportunity for the School and for the ICVS.

5.2 The Recommendations from the External Advisory Committee

The School of Health Sciences is committed to address and take into consideration the opinions and recommendations from the External Advisory Committee and to make explicit on the annual report what was done (or could not be done) in relation to each of them. Thus, the recommendations included in the last report of the EAC, as expressed in section 2.2.6, are addressed next, point by point.

1. The Clinical Dimension of the Medical Curriculum

The EAC notes that (the selection of the clinical staff) is a most important and delicate task that has to be planned very carefully since the success of the Medical Degree Course depends to a great extent on the School being able to recruit a clinical teaching staff with high levels of expertise, enthusiasm and responsibility and who are aware and support the innovative aspects of the curriculum at the University of Minho.

The School fully agrees with this statement from the EAC and has been proceeding accordingly, not only by placing all the care in the selection of the clinical staff but also by using flexible hiring mechanisms that allow for a period of probation in this important transition phase of the project. The basic criteria is to select qualified and experienced professionals who also are good communicators and enjoy teaching, *i.e.*, with appropriate clinical and pedagogic competences.

The organisational structure for the coordination of the Hospital and Health Centre Residences, presented in section 2.2.5, assures that the mechanisms for the selection of the clinical supervisors and tutors are sound, based on a good knowledge of the expertise level of the professionals involved and including validation procedures assured by the coordination committees.

Regarding the cognitive teaching modules within the Residences, it is the responsibility of the Chairpersons, who are highly qualified academics, to select the teachers for the interactive cognitive seminars. In the current academic year, most of these are either academics with similar functions at other Medical Faculties or professionals of recognised merit working in the Hospitals of Braga, Guimarães and other Hospitals in the Country.

The degree of satisfaction of the students is an important, although not the only, element to assess the fitness of the procedures to select the tutors. At the end of the first Residence, a report from the Medical Education Unit shows that the tutors are considered Excellent by a vast majority of the students (87%). The mastery of concepts and phenomena by the tutors was recognised by all the students (100%) and almost all (98%) considered that their tutors have promoted pertinent discussions, showing interest in the learning process of the students.

With regard to financial compensation of the clinical teaching staff, the EAC* (...) *advises that the School should develop a concrete plan in the near future.

The plan for the compensation of the clinical teaching staff is already defined and in operation. The School is very glad that all the cooperating Health Services have agreed on an institutional approach to this issue, as expressed in the Articulation Agreement exemplified in Appendix I. Under this agreement, the School pays to the Hospital (or to the Regional Health Administration authority, in the case of the Health Centres) a compensation based on a fixed agreed sum per tutor, per week of involvement in teaching. It is up to the Health Service to decide on the ways to use the income to compensate the health units and/or the professionals involved.

The amount paid is calculated with basis on the money that the School gets per student and the FTE teaching units assigned to the clinical teaching.

The EAC emphasizes that the School should consider the possibility of appointing clinicians with a dual career track, partly in the Hospital/Health Centre and partly at the University/Medical School.

The protocols and the consequent articulation agreements established with the Health Services (example in Appendix I) assure that the supervisors and tutors involved in the clinical teaching have an official status within the School, including the access to facilities and equipments, as well as the access, free of charge, to specialised training programmes and to research. They are integrated in the pedagogical system of the School, under the coordination structure already mentioned, and are subject to regular assessment similarly to all the other academic staff.

Although the contractual bond of supervisors and tutors is established with the Hospital or Health Centre, they are encouraged to assume an academic differentiation by involving themselves in postgraduate and research activities. The fact that the new legislation applying to Health Units with university teaching strongly increases the weight of the academic and scientific curriculum of the medical doctors, for progression in the medical careers, brings a new incentive for the envisaged academic differentiation (the new legislation establishes that the experience in pre-graduate or postgraduate teaching and in research must have a weight of at least 20% in the overall appreciation of the curriculum, as compared with a weight of 2.5% before). As a consequence, some hospital clinicians have already started to register as PhD students.

Concerning the cognitive levels of teaching, the School is hiring a pool of young medical doctors integrated in the medical career, but with a contract also with the School, who are pursuing doctoral studies, within the concept of a dual (professional and academic) career track expressed by the EAC. Indeed, 29 out of the 42 faculty members are MDs, as shown in Table 3.

2. The Basic Medical Curriculum

The EAC recommends, once more, that the School should keep the Option Projects as a high priority and even reinforce this part of the Curriculum. Furthermore the emphasis on the acquisition of skills, rather than factual knowledge, and on personal and professional development should continue to occupy a prominent place.

The Option Projects are undoubtedly an element of success in the curriculum of the medical programme, enthusiastically sought by the students. The School is happy to have reached a level of elective subjects not common in the Portuguese medical curricula, implying a tremendous but worthy effort (210 projects to be coordinated in the present academic year!).

The new possibility opened by the laboratorial traineeship programme, within the scope of the requirements to enter the MD/PhD programme, which will allow for up to 20% of the medical students to do laboratory practice for one month in Summer time, as explained in Appendix II, expands the offer of skilled-oriented elective subjects.

As to the priority to skills development, a detailed explanation of the care put on the learning environment and on the students' assessment mechanisms to enhance the acquisition of skills, attitudes and values was presented in the previous report[2]. As the students proceed along the curriculum, the emphasis on skills development keeps growing. The use of case-based learning and the application of OSCE type of exams in the assessment of students, as well as the training of basic clinical procedures and the use of simulation technology in the scope of the clinical seminars, are examples of the attention given to this crucial question.

3. MD/PhD Programme

The EAC recommends that the School disseminates (the) information (about the MD/PhD programme) widely as it could become an important asset of the School.

The planning of the MD/PhD programme is progressing well, with the cooperation of the Thomas Jefferson and the Columbia Universities, as shown in Appendix II.

The idea of a MD/PhD integrated programme is raising public interest and was the subject of two articles in one of the main daily newspapers (*Público*) last September[3].

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2 - *School of Health Sciences – Annual Report 2003*, University of Minho, January 2004. pp.41-42.

3 - "*Minho Propõe Doutoramento a Meio da Licenciatura*" and "*Nove Anos Depois para Curso Dois em Um"*, Jornal Público, 20.September.2004

4. Research Unit – Life and Health Sciences Research Institute (ICVS)

The EAC advises consolidation in the most promising and strategically important areas of research.

The integrative policy suggested by the EAC has the full agreement from the School. Indeed, in the initial planning of the ICVS, six strategic research areas were defined, taking into account prevalent health problems in the region and synergetic complementarities with other research units in the northern region of Portugal. However, a more aggregated organisation was meanwhile adopted, joining knowledge and expertise in three wider areas of strategic interest in relation to the scientific foundations for the medical degree: infectious diseases, neurosciences, and development and neoplasia. This inter-disciplinary approach has also been reinforced by the function-oriented organisation of the laboratories.

This integrative policy had a positive and structural effect in strengthening the critical mass of the research groups and was highly praised by the international panel that assessed the ICVS.

The EAC is of the opinion that the School should promote informal contacts with (the Advisory Board for the ICVS), since these are necessary for good planning of the articulation between research and teaching.

Research is an essential constitutional element of the School of Health Sciences and therefore the policies for the ICVS will always be strongly articulated with the School, as envisaged in the statutes of both institutions. Consequently, the Advisory Board for the ICVS will, indeed, articulate not only with the ICVS but also with the School.

5. Medical Education Unit

The EAC recommends that the (Medical Education Unit) should now pay special attention to the pedagogic support and monitoring of the clinical teaching.

The Medical Education Unit was reinforced with two new staff members, one of them specifically to provide monitoring and pedagogic support to the clinical teaching, in the scope of the network established with the Hospital Services and the Health Centres. This support includes, for example, the preparation of multimedia presentations, the insertion of learning materials in the Intranet, the preparation of the students' assessment, the preparation and application of the students' questionnaires and the interaction with the

Health Services. The Unit is also installing the software package PELS, under the protocol with the Thomas Jefferson University.

6. Nursing School

***The EAC is of the opinion that teaching in Nursing skills will be a welcome addition to the medical curriculum and that nursing staff maybe able to participate in teaching some clinical skills to junior medical students*.**

A special committee was set up to deal with the scientific and pedagogical integration the Nursing School within the University of Minho, in terms of its articulation with the School of Health Sciences.

The committee was coordinated by Profª Cecília Leão and integrated two elements from both Schools. The final report from the committee presents a well-thought proposal to explore scientific and pedagogic synergies between the Nursing and the Health Sciences Schools. Due to its interest, the report is included as an annex (Appendix III).

Nursing skills are specifically included in the clinical competences envisaged for the Residences, namely in what concerns patient mobilization, patient care (daily hygiene and clothe changing), venipuncture, drug administration, bladder catheterization and dressing wounds. The tutorial support concerning these skills is provided by the nursing staff in the hospitals and health centres, including staff from the Nursing School.

5.3 A Final Comment

Step by step, the School of Health Sciences proceeds its way to put into practice the ambitious ideas and goals formulated in its mission statement. Very positive results have been achieved with quite scarce human and financial resources, which reveal an enthusiastic commitment of all staff members and students. To all of them, I wish to address a sincere word of praise and thanks.

The unfailing institutional support from the University and the interest from many university sectors and politicians in our project is reassuring and encouraging. We are aware that a lot still remains to be done. But we are equally convinced that all the School members and also the many persons and entities that cooperate with us will pursue with the same willingness the efforts to keep the dynamics of the project in order to achieve the ambitions goals set up for 2005.

Sérgio Machado dos Santos
President of the Steering Committee
January. 2005

List of Acronyms

ANEM	**-**	National Association of Medical Students
ARS-N	-	Northern Regional Health Administration
BP	-	Biopathology
C	-	Clinics
CHS	-	Social and Human Sciences
EAC	-	External Advisory Committee
EC	-	School of Sciences
ECS	-	School of Health Sciences
ENG	-	School of Engineering
FCT	-	Foundation for Science and Technology
FM	-	Faculty of Medicine
FTE	-	Full time equivalent
GRICES	-	International Relations Office - MCIES
IBMC	-	Institute for Molecular and Cellular Biology, University of Porto
ICBAS	-	Institute of Biomedical Sciences *Abel Salazar*
ICVS	-	Life and Health Sciences Research Institute
IEP	-	Education and Psychology Institute
IFMSA	-	International Association of Medical Students Association
IGC	–	Gulbenkian Institute of Science
IPATIMUP	-	Institute of Pathology and Immunology of the University of Porto
IPO	-	Portuguese Institute for Oncology
Lic	**-**	*Licenciatura* (university 1st cycle degree)
MC	-	Molecules and Cells
MCIES	-	Ministry for Science, Innovation and Higher Education
MD	-	Medical doctor
NEMUM	-	Association of Medical Students of University of Minho
SC	-	Community Health
SOF	-	Organic and Functional Systems
UEM	-	Medical Education Unit
UM	-	University of Minho
UNL	-	New University of Lisbon
UP	-	University of Porto
UTAD	-	University of Trás-os Montes e Alto Douro

A P P E N D I C E S

A P P E N D I X I

ARTICULATION WITH THE

HOSPITALS WITH UNIVERSITY TEACHING

ARTICULATION WITH THE *HOSPITALS WITH UNIVERSITY TEACHING*

Summary

The Decree-Law 206/2004 (19 August) established the legal framework for the hospitals with university teaching and scientific research activities, defining the basic principles for the interconnection between the clinical practice and the training and research activities associated to the teaching of medical students.

This new legislation introduces the concept of "health units with university teaching", applying to medical units or health centres that participate in the teaching of medical students, and the concept of "hospital with university teaching" for the hospitals where all or most of its services and departments qualify as health units with university teaching. These hospitals can be awarded the denomination of "university hospital" if, simultaneously with the participation in the university teaching, they meet two additional requirements: to have a significant number of members of the medical staff with a doctoral degree and to provide outstanding health care services, clearly shown in terms of vanguard performance, techniques and technologies, as well as the capacity for scientific research.

The legislation also establishes the guidelines for the protocols to be instituted between the medical schools and the hospitals or health services with university teaching.

A very positive element of the new legislation refers to the concept of "integrated governance" in the affiliated hospitals. In fact, the Hospital Administration Council may now integrate a non-executive member – The Scientific and Pedagogic Director – appointed by the Ministry of Health from a list of three university professors proposed by the Medical School. The role of this new member is to participate in all the decisions of the Administration Council relating to the execution of the articulation protocols, in order to conciliate the health care services with the scientific and pedagogic objectives, within the tripartite mission of an University Hospital to deliver world-class research, education and health care services.

Another important point, already mentioned in section 5.2, is the valorisation of the scientific and pedagogic dimension in the curriculum vitae of the hospital medical staff. The legislation establishes that in the affiliated hospitals, for the progression in the medical careers the experience in teaching and in research must have a weight of at least 20%.

In what concerns the School of Health Sciences, under the multi-centre approach for the clinical training of its students both the Hospitals of São Marcos (Braga) and Senhora da Oliveira (Guimarães) are *Hospitals with University Teaching*. The protocols signed in 2003 with these two Hospitals, which already complied with most of the new regulations, were consequently subjected to minor adjustments.

Moreover, the Articulation Committees between the School and the two Hospitals, working together, have agreed on the basic terms for the articulation regime to be established, aiming at an adequate clinical training of the medical students. The document adopted by the two committees delineates the principles underlying the cooperation model between the School and the Hospitals, specifies how the clinical teaching is organised, defines the responsibilities and competences of each participating institution and establishes the status of the Clinical Supervisors and of the Clinical Tutors.

The protocol and the articulation regime referring to the Hospital Senhora da Oliveira are presented in this appendix, to exemplify the operational aspects of the articulation model. The corresponding documents for the Hospital de São Marcos are identical in all aspects.

PROTOCOLO DE ARTICULAÇÃO INSTITUCIONAL

ENTRE A UNIVERSIDADE DO MINHO

E O HOSPITAL DA SENHORA DA OLIVEIRA – GUIMARÃES, SA

Para a execução do disposto na Portaria n° 36/2002 dos Ministérios da Educação e da Saúde, de 10 de Janeiro, é estabelecido entre a Universidade do Minho (UM) e o Hospital da Senhora da Oliveira – Guimarães, SA (HSO-G-G, SA), um protocolo que articula institucionalmente a Escola de Ciências da Saúde (ECS) da UM com o Hospital da Senhora da Oliveira – Guimarães, SA, protocolo que se regerá pelo D.L. nº 206/2004, de 19 de Agosto, e pelas disposições aplicáveis do Decreto-Lei n.o 94/91, de 26 de Fevereiro e, em tudo o que não estiver previsto nestes diplomas, pelas cláusulas adiante indicadas:

Cláusula 1ª

A ECS da UM e o HSO-G, SA consideram-se articulados institucionalmente para efeitos de leccionação no HSO-G, SA, das matérias constantes dos planos de estudo da ECS e de protocolos de investigação que vierem a ser estabelecidos.
O modo de articulação e coordenação detalhado, dada a sua especificidade, consta do Regime de Articulação a elaborar e a aprovar pela Comissão Mista.

Cláusula 2ª

1. Para o controlo e acompanhamento da execução do presente protocolo, é constituída uma Comissão Mista Permanente com a seguinte composição:

a) o Presidente do Conselho de Administração do HSO-G, SA, ou um seu delegado;

b) o Presidente da ECS, ou um seu delegado;

c) o Presidente do Conselho Cientifico da ECS ou um docente da ECS por si indicado.

d) o Director Clínico do HSO-G, SA ou um seu delegado;

e) o vogal não executivo, previsto no nº 2 do artº 7º do D.L. nº 206/2004, de 19 de

Agosto, quando exista.

2. Os membros da Comissão escolherão, de entre si, o respectivo Presidente, por um período de 2 anos.

3. Sem prejuízo do disposto no artigo 10° do Decreto-Lei n° 206/2004, de 19 de Agosto, compete especialmente à Comissão:

a) deliberar sobre as matérias relativas ao Regime de Articulação;

b) definir a correspondência entre as unidades curriculares a leccionar no HSO-G, SA e os departamentos ou serviços hospitalares existentes ou a criar onde deverá decorrer a leccionação;

c) propor planos de desenvolvimento do HSO-G, SA tendo em vista a sua adequação às necessidades da Escola em termos de meios humanos e materiais.

4. O apoio administrativo à Comissão será assegurado pela UM ou pelo HSO-G, SA, em condições a definir entre ambas as partes.

Cláusula 3ª

1. Os médicos do HSO-G, SA, mesmo que em regime de dedicação exclusiva, podem ser contratados como docentes da ECS, sob proposta da Comissão prevista na cláusula anterior.

2. Os contratos com os médicos do HSO-G, SA como docentes da ECS serão autorizados pelo Reitor da Universidade, precedendo a anuência do Presidente do Conselho de Administração do HSO-G, SA, e regulam-se pelas disposições aplicáveis do Decreto-Lei n° 312/84, de 26 de Setembro, podendo igualmente haver contratos celebrados ao abrigo do Estatuto da Carreira Docente Universitária.

3. Os encargos resultantes dos contratos relativos à docência serão suportados pela UM.

4. Por despacho do Reitor da UM e com a concordância do Presidente do Conselho de Administração do HSO-G, SA o pagamento das remunerações resultante dos contratos poderá ser feito por esta através de transferência mensal de verbas da UM para o HSO-G,

SA até ao montante global dos encargos correspondentes.

5. O montante global das verbas a transferir, no âmbito das actividades de formação clínicas, será definido no acordo constante do "Regime de Articulação entre a Escola de Ciências da Saúde da Universidade do Minho e o Hospital da Senhora da Oliveira – Guimarães, S.A., para a Formação Clínica dos Alunos do Curso de Medicina".

6. Aos médicos do HSO-G, SA contratados como docentes será dado tratamento preferencial no acesso a acções de formação pós-graduada, bem como facilidade no acesso às instalações e equipamentos da UM, segundo regras a definir.

Cláusula 4ª

1. Os docentes da ECS podem ser contratados para o exercício de actividades assistenciais dos departamentos ou serviços do HSO-G, SA.

2. Os contratados terão direito, pelo desempenho das actividades assistenciais, à remuneração prevista no artigo 9° do Decreto-Lei n° 312/84, de 26 de Setembro.

3. O exercício dessas actividades e a percepção das remunerações correspondentes não prejudicam o regime de dedicação exclusiva na ECS.

Cláusula 5ª

1. A Comissão Mista Permanente definirá e proporá à Direcção do HSO-G, SA o conjunto das instalações e equipamentos deste que deverão ser afectados à leccionação das matérias dos planos de estudo da ECS.

2. Sob proposta da Comissão, poderá ser autorizada pelo Reitor a comparticipação nos encargos resultantes da conservação e manutenção das instalações e equipamentos a que se refere o número anterior.

3. Compete à UM suportar os encargos resultantes das aquisições dos bens de consumo corrente destinados exclusivamente às actividades docentes e de investigação desenvolvidas no HSO-G, SA pela ECS, desde que incluídos nos planos de actividades propostos pela Comissão e aprovados pelo HSO-G, SA e pela ECS.

Cláusula 6ª

As dúvidas surgidas na execução do presente protocolo serão resolvidas por despacho conjunto do Reitor da UM e do Presidente do Conselho de Administração do HSO-G, SA.

Cláusula 7ª

1. O presente protocolo é válido pelo período de um ano, automaticamente renovável, podendo ser denunciado por qualquer das partes com a antecedência mínima de três meses.

2. O presente protocolo entra em vigor no dia imediato ao da sua celebração e poderá ser revisto, por comum acordo, a qualquer momento.

Braga, 23 de Novembro de 2004

Pela Universidade do Minho

O Reitor

Pelo Hospital da Senhora da Oliveira SA

O Presidente do Conselho de Administração

Regime de Articulação entre a Escola de Ciências da Saúde da Universidade do Minho e o Hospital da Senhora da Oliveira – Guimarães, SA, para a Formação Clínica dos Alunos do Curso de Medicina

Preâmbulo

Com vista à leccionação no Hospital da Senhora da Oliveira – Guimarães, SA (HSO-G, SA), das matérias constantes dos Planos de Estudo da Escola de Ciências da Saúde (ECS) da Universidade do Minho (UM), foi rubricado um Protocolo de Articulação Institucional, o qual prevê, no n.º 1 da Cláusula 2ª, a constituição de uma Comissão Mista Permanente destinada ao seu controlo e acompanhamento.

Nos termos do nº 3 da mesma Cláusula, entre as competências da Comissão Mista Permanente, encontra-se a de deliberar sobre matérias relativas ao regime de articulação entre ambas as instituições.

Nesse sentido, assume particular importância a definição do modelo de cooperação entre a ECS e o HSO-G, SA nomeadamente no que diz respeito à formação clínica dos alunos do curso de licenciatura em medicina.

Clausula 1ª

Princípios Orientadores

1 – A ECS preconiza uma alteração significativa dos modelos de formação clínica pré-graduada vigentes em outras escolas médicas, designadamente, a coexistência no mesmo hospital de médicos da carreira docente e da carreira hospitalar. Urge pois encontrar novos modelos para a formação clínica dos alunos de medicina, assegurando o princípio de que pertence à ECS a responsabilidade por todo o processo formativo e pela escolha dos responsáveis pela formação cognitiva.

2 – Também no que se relaciona com a colaboração dos médicos dos serviços hospitalares onde irá decorrer a formação clínica dos alunos de medicina, importa proceder à alteração desse modelo. Considera-se essencial a aposta no contrato institucional em detrimento do contrato individual, dadas as debilidades por este demonstradas nos modelos de ensino médico tradicionais. Torna-se necessário introduzir maior operacionalidade e flexibilidade, acabar com a distinção entre médicos docentes pagos, sem horas de serviço previstas, e médicos não pagos, com eventual sobrecarga de actividades assistenciais, conferindo assim maior responsabilidade aos serviços onde ocorra a formação.

Clausula 2ª

Da Organização do Ensino Médico

1 – A responsabilidade superior pelo planeamento, supervisão e avaliação da formação, quer a nível global, quer por área clínica, pertence à ECS.

2 - Os órgãos responsáveis pelas actividades referidas no número anterior incluirão, entre outros, médicos do HSO-G, SA.

3 – Para efeitos da aplicação do presente Regime de Articulação, define-se, relativamente às características do ensino médico, uma vertente mais teórica, designada por formação no domínio cognitivo, a qual decorre essencialmente na ECS, e uma vertente prática, designada formação clínica hospitalar, a decorrer no HSO-G, SA.

4 – No âmbito da formação no domínio cognitivo, poderá ainda haver necessidade de recurso às instalações do HSO-G, SA, sendo necessária a autorização prévia do respectivo Conselho de Administração.

Clausula 3ª

Competências de ambas as instituições

1 – A formação no domínio cognitivo é da responsabilidade da ECS, cabendo-lhe escolher os médicos intervenientes, entre os quais, médicos do HSO-G, SA.

2 – A programação, o acompanhamento, a supervisão e a avaliação das actividades de formação clínica no HSO-G, SA são da responsabilidade do director do departamento ou do serviço, ou médico por ele designado, onde decorrem essas actividades.

3 – A participação dos médicos do HSO-G, SA prevista no n.º 2 da cláusula 2ª e nos números 1 e 2 da presente cláusula necessitam da aprovação prévia do Conselho de Administração do HSO-G, SA.

4 – A UM pagará ao HSO-G, SA, nos termos previstos no nº 4 da cláusula 3ª do "Protocolo de Articulação Institucional entre a Universidade do Minho e o Hospital da Senhora da Oliveira – Guimarães, S.A.", uma verba a acordar, a qual deverá ter em consideração o número de alunos envolvidos em actividades de formação clínica hospitalar bem como os recursos humanos disponibilizados para esse efeito.

5 – A ECS compromete-se ainda a facultar aos médicos do HSO-G, SA o acesso, sem encargos, às actividades de formação e investigação por si promovidas.

Clausula 4ª

Do Estatuto do Supervisor Clínico

1 – O supervisor clínico do serviço onde decorram as actividades de formação clínica é designado pela Comissão Mista Permanente e será, sempre que isso se mostre adequado, o respectivo director de departamento ou de serviço. A escolha de outro profissional deve, no entanto, merecer a anuência daquele.

2 – As actividades docentes do supervisor clínico estão obrigatoriamente incluídas nas suas funções hospitalares, pelo que devem decorrer dentro do seu horário de trabalho.

3 – O supervisor clínico beneficiará de um estatuto idêntico ao do pessoal docente da ECS no âmbito das actividades científico-pedagógicas.

4 – O supervisor clínico terá ainda acesso a todas as actividades de pós-graduação na área biomédica promovidas pela ECS, sem pagamento de taxas de inscrição, estando também isento do pagamento de "bench-fees".

5 – O supervisor clínico terá acesso prioritário às actividades de investigação clínica a decorrer no Instituto de Ciências da Vida e Saúde (ICVS) da ECS, podendo integrar as suas equipas de investigação.

6 – Ao supervisor clínico são atribuídas as seguintes competências e responsabilidades:

a) assumir a responsabilidade por todas as actividades docentes a realizar no seu serviço, designadamente a correcta integração dos alunos, sem prejuízo da realização das restantes actividades;

b) propor à Comissão Mista Permanente a selecção dos tutores clínicos, recrutados de entre os médicos do Serviço;

c) supervisionar as actividades dos alunos ao longo das residências hospitalares;

d) participar, sempre que solicitado, nas actividades do Grupo de Trabalho da Residência Hospitalar respectiva.

Clausula 5ª

Do Estatuto do Tutor Clínico

1 – O tutor clínico é recrutado de entre os médicos do serviço onde decorrem as actividades de formação clínica, sob proposta do supervisor clínico.

2 - As actividades docentes e de investigação do tutor clínico estão obrigatoriamente incluídas nas suas funções hospitalares, pelo que devem decorrer dentro do seu horário de trabalho, sem prejuízo da realização das restantes actividades.

3 - O tutor clínico beneficiará de um estatuto idêntico ao do pessoal docente da ECS no âmbito das actividades científico-pedagógicas.

4 – O tutor clínico terá ainda acesso a todas as actividades de pós-graduação na área biomédica promovidas pela ECS, sem pagamento de taxas de inscrição, estando também isento do pagamento de "bench-fees".

5 – O tutor clínico terá acesso prioritário às actividades de investigação clínica a decorrer no ICVS, podendo integrar as suas equipas de investigação.

Clausula 6ª

Dúvidas na Aplicação do Regime de Articulação

A implementação do presente Regime de Articulação insere-se no conjunto das competências da Comissão Mista Permanente consignadas no artº 10º do D.L. nº 206/2004, de 19 de Agosto, e das atribuições previstas no protocolo celebrado entre a UM e o HSO-G, SA para a leccionação das actividades curriculares da ECS, sendo da sua competência solucionar as dúvidas ou omissões nele contidas.

Clausula 7ª
Revisão do Regime de Articulação

A Comissão Mista verificará a adequação deste Regime de Articulação no decurso do desenvolvimento do Protocolo de colaboração entre as instituições e procederá às alterações que a experiência for aconselhando, sendo este Regime revisto pelo menos de 2 em 2 anos.

A P P E N D I X I I

PROPOSAL FOR A JOINT

MD / PhD PROGRAMME

PROPOSAL FOR A JOINT *MD/PhD PROGRAMME*

1. INTRODUCTION

1.1. Research in health sciences: relevance in clinical practice and legislation

In the last few years Portugal underwent an enormous growth in scientific research, especially in health sciences. As a consequence of increased public investment in Research, Innovation and Development, the number of publications in peered review journals and the number of Masters and PhDs degrees awarded in health sciences increased dramatically. We believe that the next increment in scientific productivity and quality in health sciences will result from a major involvement of the medical community in basic and clinically oriented research projects. It is worth mentioning that the increase in the number of graduate investigators in the Portuguese Research Units mainly derives from undergraduate training in basic sciences; medical doctors still represent a percentage far from desirable. This certainly reflects the lack of valorization of research for progression in the medical career. In addition, the insufficiency of specific projects directly aiming at graduate training for medical doctors greatly contributed to the present scenery of deficient number of medical doctors with a PhD degree.

To stimulate the commitment of medical doctors to research, there was a clear need to change the legislation for career progression within the Hospitals and to increase the offer, by the Universities, of graduate programmes in medicine. This situation has recently changed by the new law ("Decreto-Lei nº 206/2004, de 19 de Agosto") that regulates Hospitals involved in undergraduate medical training. By valuing with a minimum of 20% the competences of undergraduate teaching and research in the selection process for hospital assistants and department directors, the present legislation encourages the enrolment of medical doctors in such activities. In addition, research by medical doctors is

now objectively recognized and valued. It should also be mentioned that the present legislation also promotes a closer relationship between Hospitals in charge of undergraduate medical training and the Universities, since both are now responsible for contractual decisions regarding medical doctors involved in undergraduate teaching in both places. This obliges both Institutions to be formally committed to the research, clinical and teaching duties of those contributing to undergraduate medical training.

It is our conviction that stimulating research in the medical environment will provide a new opportunity to develop science in Portugal.

In accordance, we consider that now is the proper timing to promote and innovate graduate training in medicine, especially by creating programmes of continuous medical education and Master and PhD programmes for medical doctors.

1.2. MD/PhD programme: definition and examples

A few Universities, leaders in medical education, mainly in the USA, offer joint MD/PhD programmes. These programmes allow medical students to obtain, together, the MD degree and the PhD in medicine. For that purpose, students interrupt part of the medical curriculum for a period of time necessary to conduct a PhD research project. After defence of the PhD thesis, students return to the medical school to complete the clinical training necessary to obtain the medical degree.

We will consider, as examples, the Universities of Columbia, New York, and Thomas Jefferson, Philadelphia, USA. Students enrolled in the MD/PhD programme usually share with the other medical students a series of teaching modules, usually during the initial two years, after which they interrupt the medical curriculum to devote themselves for about 3-4 years to a PhD project. Once the thesis is defended, students return to the medical school where, together with the other regular medical students, they complete the clinical training necessary to obtain the degree in medicine. During the years mainly devoted to the PhD research project, students keep contact with the medical school, through planned activities promoted by the medical school. This system allows students to complete both the medical and the PhD degrees in about 6-7 years; which add to the three previous years of academic training, making up a total of 9-10 years of formal academic studies.

These are very competitive and restrictive MD/PhD programmes. The number of vacancies does not exceed 5-10% of the total number of students enrolled in the undergraduate medical degree. It is the intention of such programmes to educate the next

generation of leaders in medical research, taking into consideration both medical and scientific skills.

1.3. MD/PhD programme within the School of Health Sciences at the University of Minho

The School of Health Sciences (ECS) was created to provide and develop teaching, research and services to the community on health sciences fields. From the beginning, the ECS has been committed to teach medical students using alternative teaching methodologies proved successful in countries such as the United States of America, United Kingdom, The Netherlands and Spain. The medical curriculum has been developed in such a way that, from the first year and throughout the course, emphasis is given to the relevance of basic and clinical research in medical practice. It is our intention that students acquire a holistic view of medicine, and the will to develop research. We believe that this approach will have a positive outcome in the quality of the medical services these students will later provide to the community.

Apart from teaching undergraduate students, the ECS, jointly with the Institute for Life and Health Sciences (ICVS), also intends to establish programmes of continuous medical education, at this moment based on a programme of advanced courses in health sciences, and graduate training conducing to the degrees of Master and PhD.

The MD/PhD programme we propose here is, therefore, part of the ECS goal to offer specific research training to future medical doctors.

2. MD/PhD PROGRAMME: DESCRIPTION

2.1. Structure and organization

The MD/PhD programme we propose here is based on those offered by two USA Universities: Columbia University (New York) and Thomas Jefferson University (Philadelphia). These two universities, with a long and successful experience in MD/PhD programmes, will be partners and counsellors of the MD/PhD programme we propose in this document. The MD/PhD programme will allow students enrolled in the medical degree at the ECS to interrupt their medical curriculum for a period of 3-4 years, in order to develop research for a PhD thesis. Once successfully defended the PhD thesis, students return to medical school to conclude the studies necessary to complete the MD degree. When this is finished, students will have been awarded two degrees: MD and PhD.

In the USA, it is common that students enrolling in medical degree have already been awarded a degree in basic sciences. It is also not unusual that students have had previous laboratory training. Contrary to the tradition in USA medical schools, Portuguese medical students enter the medical school directly from high school. Students, therefore, lack previous laboratory training, one of the requisites taken into consideration in the selection process for admission in the USA MD/PhD programmes. The structure and organization proposed here for the ECS MD/PhD programme overcomes such deficiency, by launching a formal programme of summer intensive laboratory short projects to which students can apply during the initial years of their regular medical studies.

There is a strong reason for choosing to interrupt the MD degree, rather than finalizing it, before starting the PhD research project. It is recognized that once students start their professional training, which in Portugal corresponds to the 6th curricular year, it is more difficult for them to make a decision to register in academic activities. This is, certainly, one of the reasons for the shortage of MDs in graduate programmes. For this reason we propose an integrated MD/PhD pathway rather than a sequential, even though possible, MD followed by PhD academic track.

In accordance with the Portuguese medical curriculum, we consider the end of the 5th year to be the best time to interrupt the medical degree. After completing five years of studies, students have the clinical and basic training necessary either to proceed to the professional clinical 6th year or to, together with the training obtained during the intensive summer research projects, enroll in a PhD project.

In summary, the programme we propose here will develop, consecutively, in accordance with the following steps:

- Selection of the students to enroll the intensive laboratory short projects (students from the 1-4th years of the medical curriculum);
- Selection of the students to enroll in the MD/PhD programme (students from the 5th year of the medical curriculum);
- Execution of the PhD project;
- Awarding of the PhD degree;
- Return to the medical school to conclude the 6th medical degree curricular year;
- Awarding of the MD degree.

2.2. Laboratory rotations

The ECS will start in the scholar year 2005/2006, a formal programme of one month summer intensive laboratory short projects in life and health sciences. The research projects to develop during these laboratory rotations should focus on the main selected areas of the research groups at the ICVS, namely, Neurosciences, Genetics, Infection, Immunology, Development and Oncology. If appropriate, these research projects can also take place in other research units of recognized competence and with whom specific collaborations can be established. All medical students can annually apply to the summer laboratory research projects; and the number of vacancies should not exceed 20% of the total number of students of a particular year. Because the number of vacancies in the MD/PhD programme will be, at a maximum, 10% of the total number of students enrolled in the medical course, this will allow the selection of those that prove to be more fit to research. In addition, this will allow students that do not necessarily want to enroll in the MD/PhD programme to have an excellent opportunity to acquire competence in laboratory research; and this we consider important to encourage. With these rotations, students that complete the Phases I, II and III of the medical curriculum, which corresponds to completion of the fifth year of academic studies, must have acquired the technical and scientific skills to make them eligible for a PhD research project.

2.3. Applicants and selection criteria

2.3.1. Applicants

Applicants are medical students of the ECS who have successfully completed Phases I, II and III of the medical degree, which means, the fifth year of academic studies. In addition, applicants must have been successfully enrolled in, at least, two of the summer laboratory research projects in different scientific areas as described above.

The deadline for applications is February of each year.

2.3.2. Selection criteria

Applicants fulfilling the requirements specified in 2.3.1 will be given a test consisting of a theme to propose a research project. This will be prepared at the ECS. Detailed guidelines for the proposal will be given in advance.

Admission will be based on the academic merit, quality of the proposed project and laboratory training. Students accepted on the programme will have an additional, third, laboratory rotation, now on the theme chosen for the PhD Project. This rotation will take place at the ICVS or any other laboratory with whom a specific collaboration is established. If the quality of applicants is not considered sufficient, the number of vacancies does not have to be filled.

The selection jury will be composed of three professors/investigators from the ECS and two professors/investigators from other research or academic institutions.

2.4. PhD project and academic duties

The PhD project should be presented to the scientific council of the ECS by the supervisor/co-supervisor. At least the supervisor or the co-supervisor should be members of the ECS scientific council. All students of the MD/PhD programme will comply to the official PhD regulations of the University of Minho. Any special provisions relating to the specificities of the MD/PhD programme are to be approved by the competent boards of the University. The PhD thesis is expected to be completed within three years; exceptionally this deadline can be extended by an additional year.

Once enrolled in the MD/PhD programme, students must retain some contact with the medical programme. Activities should be planned, within the medical residencies, in a minimum of 50 hours annually.

2.5. Degree awarding

Once successfully defended the PhD thesis, students are awarded the PhD degree. At this point students return to the medical school to complete Phase IV of the medical curriculum. Once successfully completed Phase IV, students will be awarded the degree of medical doctor.

2.6. MD/PhD programme regulations

All students enrolled in the ECS MD/PhD programme must fulfil the requirements established in the programme regulations.

2.7. Chronogram of implementation

- Until December 2005: programme advertisement.
- February 2006: First application and selection for the laboratory rotations.
- July/August/September 2006: first laboratorial rotation.
- July/August/September 2006: second laboratorial rotation.
- February 2007: first application and selection to the MD/PhD programme.
- July/August/September 2007: third laboratorial rotation.
- September/October 2007: beginning of the first formal year of the MD/PhD programme.

Similar chronograms are to be applied annually.

In the first three years of the programme, only two students will be admitted. From the third year onwards, the number of vacancies will increase up to a maximum of 10% of the number of students registered in that scholar year of the medical curriculum.

In the first five years of the programme, and in accordance with the protocols established with the Columbia University and the Thomas Jefferson University, two students will perform the experimental work for the PhD thesis and the corresponding academic duties at these universities (one student in each).

3. LEGAL CONSTRAINTS AND PROPOSAL FOR RESOLUTION

The new model for higher education in Europe, as a consequence of the Bologna Declaration, foresees three cycles awarding the degrees of "licenciatura" (bachelor in other countries), Master and PhD. Each cycle is associated with a certain number of European Credit Transfer units (ECTS). Specifically, in the first cycle are awarded 180-240 ECTS (3 to 4 years), in the second cycle, 60-120 ECTS (2 to 4 semesters) and in the third cycle, a minimum of 180 ECTS (three years). Acceptance to the third cycle implies that students have completed at least 300 ECTS.

Given their nature, some courses do not fit in the Bologna Declaration cycles schedule, and the course of medicine is among those. Considered an exception, the medical

degree will therefore be composed of six years, being the last one already considered of professional training.

The MD/PhD programme we propose here assumes that students will enrol in the programme at the end of their fifth year, by the time students have successfully completed 300 ECTS and should, therefore, be in conditions to enter the third cycle. However, because application to the third cycle implies that an academic degree has been previously awarded, we will register at the Ministry a degree of "licenciatura" in Health Sciences for those medical students that successfully complete the fifth year of the medical degree.

It should be mentioned that, apart from granting access to the MD/PhD programme, the possibility of awarding a "licenciatura" in Health Sciences on completion of the fifth year of the medical course is of outmost importance for the following reasons:

a) It will allow students to have another professional way out, in the case they do not see themselves as medical doctors. In fact, it has happened before in other schools that students, late in their medical degree curriculum, realize they are not fit to the clinical practice.

b) It will allow students enrolled in the MD/PhD programme to receive their PhD degree even if they decide not to return to the medical school and finish the medical degree.

In addition, the award of an intermediate certification fulfils an underlying objective of the Bologna Declaration, in that it allows earlier professional exits for those enrolled in degrees of longer duration.

A P P E N D I X I I I

SCIENTIFIC AND PEDAGOGIC ARTICULATION

WITH THE NURSING SCHOOL

SCIENTIFIC AND PEDAGOGIC ARTICULATION WITH THE NURSING SCHOOL

Summary

The Nursing School of Braga (ESECG – *Escola Superior de Enfermagem Calouste Gulbenkian*) was integrated in the University of Minho by Decree-Law 175/2004 (21 July). Anticipating this decision, the Rector appointed a committee to look into the main aspects raised by this initiative, in order to establish the bases for the creation of adequate conditions for the development of teaching, training and research projects relating to the Nursing School. The committee presented a report in July 2004, organised in four dossiers: statutes, scientific and pedagogic integration, human and financial resources and installations.

The document concerning the scientific and pedagogic integration relates to the articulation between the Schools of Nursing and of Health Sciences and was prepared by a sub-committee including members from both schools. Due to its importance to the ECS, the main text of the dossier is reproduced in this appendix.

The main objectives proposed in the dossier are: to explore scientific and pedagogic synergies between the two Schools; to initiate a trend to shift the polytechnic nature of the nursing education towards the university paradigm; to reorganise the curriculum and the teaching methodologies of the nursing courses, moving to a more integrated and student-centred approach; to establish post-graduation studies of international standards in Health Sciences, covering Medicine and Nursing; to introduce innovative models of scientific and pedagogic coordination and management, allowing for the articulation of the two Schools while preserving their individual nature and specificities; to promote a rational use of the available human and material resources, through mutual cooperation; and to set up an External Advisory Board for the ESECG, in articulation with the EAC of the ECS.

Based on these objectives, a concrete plan for action is proposed, to be implemented step by step in relation to teaching, to research and to the coordination structures. The diagram in page 75 summarises the proposals.

PROJECTO DE INTEGRAÇÃO DA ESCOLA SUPERIOR DE ENFERMAGEM CALOUSTE GULBENKIAN NA UNIVERSIDADE DO MINHO

PROPOSTA DE INTEGRAÇÃO CIENTÍFICO - PEDAGÓGICA DA ESCOLA SUPERIOR DE ENFERMAGEM NA ESCOLA DE CIÊNCIAS DA SAÚDE

Grupo de Trabalho

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Escola Superior Enfermagem Calouste Gulbenkian

Beatriz Araújo

Nazaré Vieira

Braga, Julho de 2004

Escola de Ciências da Saúde da Universidade do Minho

PROPOSTA DE INTEGRAÇÃO CIENTÍFICO – PEDAGÓGICA DA ESCOLA SUPERIOR DE ENFERMAGEM CALOUSTE GULBENKIAN NA ESCOLA DE CIÊNCIAS DA SAÚDE DA UNIVERSIDADE DO MINHO

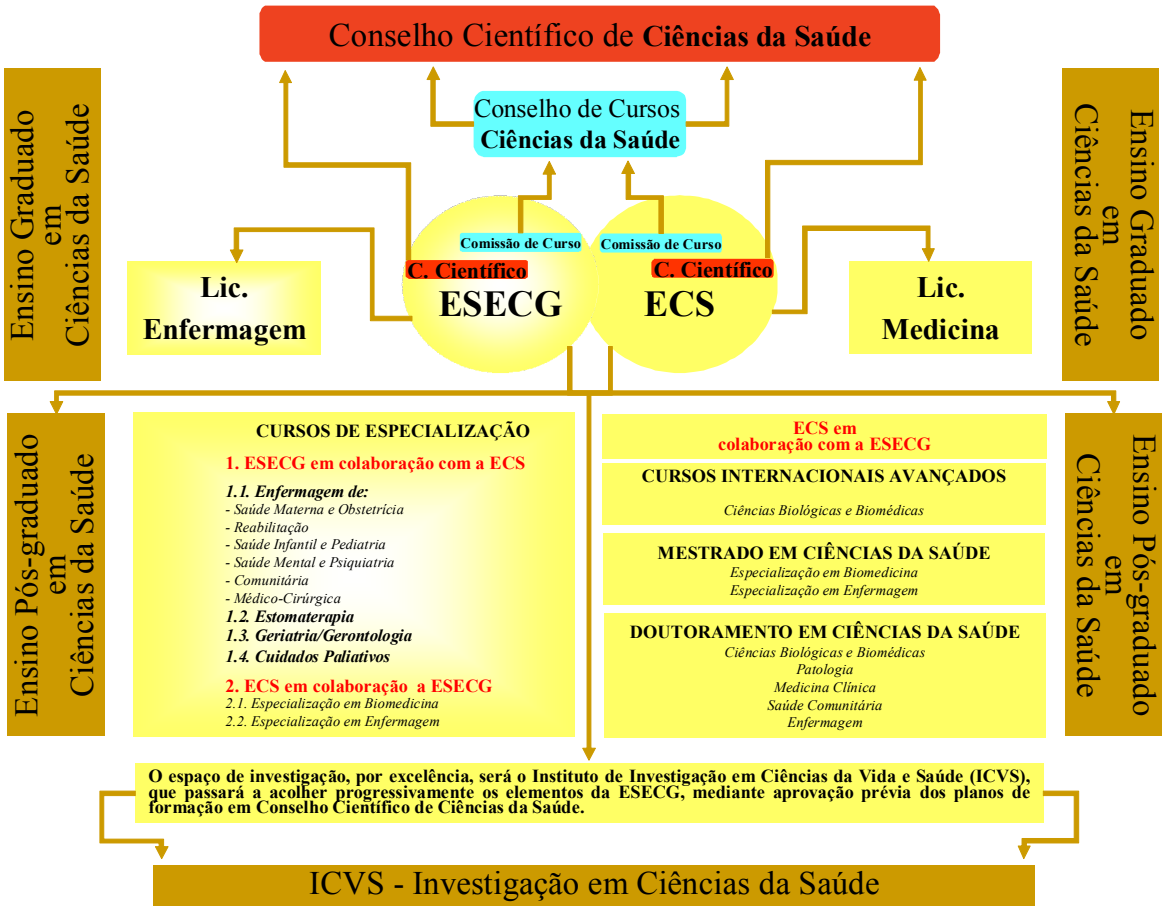
INTRODUÇÃO

No contexto do anteprojecto-lei que prevê a integração da Escola Superior de Enfermagem Calouste Gulbenkian (ESECG) na Universidade do Minho (UM), o presente documento contempla uma proposta de integração da ESECG, ao nível científico-pedagógico, na Escola de Ciências da Saúde (ECS) da UM. Nesta primeira fase e no quadro do ante-projecto lei que postula a integração da ESECG na UM como Escola Politécnica, mantém-se a identidade de cada uma das Escolas e procura-se, essencialmente, tirar partido do modelo matricial da UM, ao nível de projectos de ensino, graduado e pós-graduado, e da investigação com vista a:

- explorar sinergias pedagógicas e científicas de ambas as Escolas;
- convergir para um ensino de Enfermagem de natureza universitária;
- introduzir no plano de estudos da licenciatura de Enfermagem da ESECG o modelo de ensino integrado, organizado por áreas curriculares;
- introduzir no ensino graduado de enfermagem a metodologia de ensino-aprendizagem por módulos de objectivos e centrada no aluno;
- implementar na Universidade do Minho uma estrutura, de referência nacional e internacional, de Ensino Pós-Graduado em Ciências da Saúde nos domínios da Medicina e da Enfermagem;
- introduzir modelos inovadores de coordenação e gestão científico-pedagógicas que salvaguardem a natureza e especificidade de cada uma das Escolas;
- rentabilizar recursos humanos e materiais de ambas as Escolas;
- criar condições para a formação pós-graduada do pessoal docente da ESECG de modo a perspectivar a médio prazo a obtenção de graus académicos;
- perspectivar a criação de uma Comissão Externa de Acompanhamento (EAC) da ESECG em articulação com a actual EAC da ECS.

Para a concretização dos objectivos de integração científico-pedagógicos acima indicados, apresenta-se uma proposta de plano estratégico de actuação (expresso, de uma forma resumida, no Organigrama da página que se segue), nos três níveis de intervenção - ensino, investigação e estruturas de coordenação científico-pedagógicas - a ser concretizado de um modo faseado no curto/médio prazo.

Integração Científico-Pedagógica da ESECG na ECS



A. INTEGRAÇÃO AO NÍVEL DO ENSINO

1. Ensino Graduado

A ECS, face ao seu total empenho na implementação do curso de Licenciatura em Medicina, não poderá, no curto prazo, assumir a liderança de propostas de criação de novos cursos de licenciatura na área das Ciências da Saúde. Por outro lado, no presente contexto do Ensino Superior Politécnico, a ESECG, enquanto Escola Superior de Enfermagem, não dispõe de estatuto institucional para avançar com propostas de criação de cursos de licenciatura de natureza politécnica noutras áreas da Saúde para além da Enfermagem.

Deste modo, no contexto do ensino graduado, a principal aposta é na exploração de sinergias pedagógicas ao nível dos cursos de Licenciatura em Medicina e em Enfermagem, promovendo o alargamento da oferta de ensino graduado de qualidade, através do aumento

significativo dos *numerus clausus* de ambas as licenciaturas. No caso da enfermagem, este princípio aplica-se, quer para o curso de Licenciatura em Enfermagem, quer para o curso de Complemento de Formação em Enfermagem.
Com base nestes princípios, segue-se uma breve apresentação do plano de actuação a este nível para os próximos anos.

1.1. Exploração de sinergias pedagógicas ao nível dos cursos de Licenciatura em Medicina e em Enfermagem

- Criação de um corpo docente de equipas multidisciplinares de Medicina e de Enfermagem que passa pela:
  - identificação de disciplinas do plano de estudos da Licenciatura em Enfermagem para as quais não existem actualmente valências de ensino na ESECG pelo que, para o efeito, recorre a Professores Externos Convidados e para as quais a ECS tem já docentes doutorados com competência instalada;
  - identificação de temas de enfermagem contemplados nas áreas curriculares do plano de estudos da Licenciatura em Medicina que actualmente são assegurados por Serviços de Saúde e que poderão passar a ser assegurados pela ESECG;
  - adaptação do actual plano curricular da Licenciatura em Enfermagem ao modelo pedagógico da ECS que inclui a introdução:
    - do ensino integrado, organizado por áreas curriculares, de um modo faseado, com início previsto no ano lectivo 2007-08, logo que estejam disponíveis as novas instalações de ambas as Escolas;
    - de projectos de opção;
    - da metodologia de ensino-aprendizagem por módulos de objectivos e centrada no aluno.
- Identificação e disponibilização por ambas as partes de espaços pedagógicos.
- Extensão do apoio da actual Unidade de Educação Médica da ECS à implementação das novas metodologias de ensino–aprendizagem na Licenciatura de Enfermagem.

Em **Anexo I** apresenta-se uma proposta de reestruturação do plano curricular da Licenciatura em Enfermagem, essencialmente ao nível dos dois primeiros anos, assente nos princípios de integração acima referidos. Nesta proposta:

- a ESECG continua a assegurar as áreas curriculares que contemplam os temas correspondentes a todas as disciplinas que o seu corpo docente lecciona na actual licenciatura em Enfermagem;

- a ECS passará a assegurar as áreas curriculares correspondentes aos temas das disciplinas de ensino biomédico da actual licenciatura em Enfermagem para as quais a ESECG tem recorrido a Professores Externos Convidados.

Em **Anexo II** procede-se ao levantamento das competências instaladas na ESECG que poderão ser disponibilizadas no futuro para o ensino dos alunos da Licenciatura em Medicina e à apresentação do actual plano de estudos da Licenciatura em Medicina com identificação das áreas curriculares que contemplam temas a serem leccionados pela ESECG. Neste levantamento incluem-se:

- Temas de socorrismo e curso de suporte básico de vida para os quais a ECS recorre à colaboração de Serviços do Exterior, pelo que poderão passar a ser assegurados maioritariamente pela ESECG.
- Temas curriculares de enfermagem que estão essencialmente integrados na fase do ensino clínico do curso de Medicina, o qual se encontra actualmente em fase de programação, e que habitualmente são assegurados por profissionais de enfermagem dos Hospitais onde decorrem as Residências. Neste caso, a cooperação da ESECG constitui uma mais valia importante proporcionando o treino de terapias básicas de Enfermagem em ambientes altamente especializados sendo, no entanto, mais pontual e carecendo do estabelecimento prévio de articulação com os serviços hospitalares.

1.2. Plano estratégico de ensino graduado da ESECG para os próximos anos, no âmbito da cooperação entre as duas Escolas

Com base nos princípios acima assumidos apresenta-se, em **Anexo III**, o plano estratégico de ensino graduado da ESECG para os próximos anos, do qual se destacam as seguintes metas a atingir:

- manter no ano lectivo de 2004-2005 a admissão de 70 alunos, para o curso de Licenciatura em Enfermagem, em dois períodos distintos (35 alunos em Outubro e 35 alunos em Março);
- admitir 70 alunos, para o curso de Licenciatura em Enfermagem, num único período (Outubro) no ano lectivo de 2005-2006;
- propor o aumento do *numerus clausus* para 120 alunos, para o curso de Licenciatura em Enfermagem, numa única admissão, a partir do ano lectivo de 2007-2008;
- manter, em regime transitório, a admissão anual de 100 alunos para o curso Complemento de Formação em Enfermagem até ao ano lectivo de 2006-2007, podendo, no entanto, alargar o período do seu funcionamento para o ano lectivo de 2007-2008, com uma admissão de 50 alunos. Este curso, com a duração de um ano

lectivo, visa a atribuição do grau de Licenciatura em Enfermagem aos enfermeiros titulares do grau de bacharel.

Neste plano pedagógico o serviço docente será maioritariamente afecto à ESECG. A ECS prestará colaboração docente essencialmente ao nível das áreas básicas de natureza biomédica do 1ºano e, pontualmente, ao nível dos 2º e 3º anos nas áreas de especialização clínica e biomédica, nos termos definidos no ponto anterior (1.1.).

2. Ensino Pós-Graduado

2.1. Princípios

Ao nível do ensino graduado, pelas razões explicitadas no ponto anterior, não estão actualmente reunidas as condições para a criação de novos cursos de licenciatura, sendo a aposta na qualidade e inovação do ensino associadas a um aumento do *numerus clausus* de alunos de ingresso. Por sua vez, ao nível do ensino pós-graduado, considera-se que o presente processo de integração da ESECG abre caminho para um vasto campo a explorar em termos de criação de novos cursos, ainda a descoberto no país, nos vários domínios da Enfermagem. No plano a seguir apresentado propõe-se a criação de novos cursos de ensino pós-graduado em todas as vertentes de especialização em Enfermagem actualmente reconhecidas pela Ordem dos Enfermeiros, assente nos seguintes princípios de organização e funcionamento:

- integração e flexibilidade;
- articulação aos diversos níveis e modalidades de formação que, no final, poderá conduzir a diplomas e graus de vários níveis, designadamente: (i) Diplomas de Cursos Avançados de curta duração; (ii) Diplomas de Cursos de Especialização; (iii) Grau de Mestre; (iv) Grau de Doutor.
- acesso dos docentes da ESECG às actividades promovidas por ambas as Escolas assente em princípios orientadores comuns, designadamente no que respeita ao número de candidatos a admitir em cada edição anual e à isenção do pagamento de propinas.

Pretende-se assim, através do presente processo de integração científico-pedagógica da ESECG na ECS, implementar na Universidade do Minho uma estrutura, de referência nacional e internacional, de Estudos Pós-graduados em Ciências da Saúde nos domínios da Medicina e da Enfermagem.

2.2. Ensino Pós-Graduado não Conducente a Grau Académico

2.2.1. Cursos que conferem Titulo Profissional de Enfermeiro Especialista

Os Cursos de Pós-Licenciatura de Especialização em Enfermagem em diferentes áreas clínicas visam assegurar a aquisição de competências científicas, técnicas, humanas e culturais adequadas à prestação de cuidados de Enfermagem especializados. Estes cursos, com a duração variável entre dois a quatro semestres, conferem o diploma de Especialização em Enfermagem, conducente ao título profissional de Enfermeiro Especialista, em consonância com a auto regulação da profissão de Enfermagem (Portaria n.º 268/2002, de 13 de Março).

A ESECG tem em funcionamento um curso deste âmbito na área da Saúde Materna e Obstetrícia (Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Materna e Obstetrícia), com a duração de dois anos lectivos e com 30 alunos, o qual tem por base as disposições e orientações constantes em diplomas legais de nível nacional e internacional.

Para os próximos anos projecta-se:

- manter em funcionamento o Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Materna e Obstetrícia, com 30 alunos, até 2005-2006, reduzindo o *numerus clausus* para 20 alunos a partir do ano lectivo de 2007-2008, até que as necessidades de enfermeiros especializados nesta área estejam satisfeitas a nível da zona norte (**Anexo IV**);
- criar o Curso de Pós-Licenciatura de Especialização em Enfermagem de Reabilitação, com início no ano lectivo de 2005-2006, com 20 alunos (**Anexo V**);
- criar o Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Infantil e Pediatria, com início no ano lectivo de 2006-2007, com 25 alunos (**Anexo VI**);
- criar o Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Mental e Psiquiatria, com início no ano lectivo de 2007-2008, com 25 alunos (**Anexo VII**);
- criar o Curso de Pós-Licenciatura de Especialização em Enfermagem Comunitária, com início no ano lectivo de 2008-2009, com 25 alunos (**Anexo VIII**);
- criar o Curso de Pós-Licenciatura de Especialização em Enfermagem Médico-Cirúrgica, com início no ano lectivo de 2009-2010, com 25 alunos (**Anexo IX**).

2.2.2. Outros cursos de pós-graduação

Com base no actual programa de pós-graduação da ECS promover-se-ão as actividades a seguir apresentadas.

► Criação gradual de uma rede de programas de pós-graduação em Ciências da Saúde para médicos, enfermeiros e outros licenciados em áreas afins às ciências da vida e da saúde. Este programa contemplaria vários níveis de diferenciação, com módulos curriculares comuns.

► Em articulação com os programas referidos no ponto anterior, e estimulando a participação de equipas multidisciplinares de docentes de Medicina e de Enfermagem, promover a implementação dos seguintes cursos:

- curso de Pós-Graduação, Especialização em Enfermagem de Estomaterapia, tendo em conta as orientações do WCSN (World Council Stomaterapy Nurse), com início em Janeiro de 2005 em colaboração com a ECS (**Anexo X**);
- curso de Pós-Graduação, Especialização em Enfermagem de Geriatria/Gerontologia, com a duração de um ano, a ter início em Janeiro de 2006 em colaboração com a ECS;
- curso de Pós-Graduação em Cuidados Paliativos, com a duração de um ano, a ter início em Janeiro de 2007 em colaboração com a ECS.

2.3. Ensino Pós-Graduado conducente a grau académico

Grau de Mestre

Pretende-se promover a implementação de um Curso de Mestrado em Ciências da Saúde com diferentes áreas de especialização que, sem prejuízo de alargamento futuro, numa primeira fase incluiria uma "Área de Especialização em Ciências Biomédicas" e uma "Área de Especialização em Ciências de Enfermagem", cuja estruturação de base assenta nos princípios a seguir apresentados.

► Componente de ensino formal do curso:
  - organizada em articulação com os módulos curriculares dos programas de formação contínua pós-graduada e dos cursos de especialização em Medicina e em Enfermagem;
  - constituída por um elenco de unidades curriculares acumuláveis;
  - privilegiando uma forte componente de Opções de modo a permitir direccionar, logo desde o início, para a área de especialização.

► Dissertação de Mestrado nas respectivas áreas de especialização.

- ► Para cada edição do curso de Mestrado, duração máxima de 2 anos para todas as actividades (componente curricular e dissertação) conducentes à concessão do grau de mestre.

Neste contexto, está em curso na ECS a preparação de uma proposta de um Curso de Mestrado em Ciências da Saúde onde se inclui um ramo de Especialização em Enfermagem. A frequência e aprovação nas diferentes áreas curriculares dos vários cursos de Especialização em Enfermagem referidos no ponto 2.2., para além de conduzir à obtenção do respectivo Diploma, poderá vir a ser reconhecida ao nível dos órgãos académicos competentes da UM, sob proposta do Conselho Científico da ECS, como equivalente à componente curricular do Mestrado em Ciências da Saúde - Área de Especialização em Enfermagem - contando com a participação intensiva da ECS no planeamento e orientação dos trabalhos de dissertação do Mestrado.

Grau de Doutor

Propõe-se a manutenção de um só Ramo de Doutoramento em Ciências da Saúde e o alargamento das actuais áreas do conhecimento à Enfermagem, conforme abaixo indicado.

Ramo de Doutoramento

Ciências da Saúde

Áreas do conhecimento

- Ciências Biológicas e Biomédicas
- Patologia
- Medicina Clínica
- Saúde Comunitária
- Enfermagem

Obedecendo aos princípios referenciados nos pontos anteriores, apresenta-se em **Anexo XI** o plano estratégico de formação académica dos docentes da ESECG para 2004-10.

B. INTEGRAÇÃO AO NÍVEL DA INVESTIGAÇÃO

O espaço de investigação, por excelência, seria o Instituto de Investigação em Ciências da Vida e Saúde (ICVS), que passaria a acolher progressivamente os elementos da ESECG, mediante aprovação prévia dos planos de formação em Conselho Científico de Ciências da Saúde.

C. INTEGRAÇÂO AO NÍVEL DOS ÓRGÃOS DE GESTÃO E COORDENAÇÃO CIENTÍFICO-PEDAGÓGICA DOS CURSOS DE LICENCIATURA EM MEDICINA E EM ENFERMAGEM

1. Ao nível do Conselho de Cursos de Ciências da Saúde

- Coordenação global da gestão científico-pedagógica do curso de licenciatura em enfermagem pelo Conselho de Cursos de Ciências da Saúde que deste modo passaria a incluir os seguintes cursos:

  . Licenciatura em Medicina

  . Licenciatura em Enfermagem

- Criação da Comissão de curso de Licenciatura em Enfermagem nos termos do regulamento em vigor na UM e elaboração do respectivo regulamento num contexto universitário, convergindo para uma composição, gestão e coordenação assentes em princípios comuns aos da Licenciatura em Medicina.

- Adequação do actual regulamento do Conselho de Cursos em Ciências da Saúde à inclusão do curso de licenciatura em Enfermagem, salvaguardando o princípio da manutenção de uma gestão e coordenação científico-pedagógica de exigência de nível universitário comum aos dois cursos.

2. Ao nível do Conselho Científico da Escola de Ciências da Saúde

- Manter em funcionamento os actuais Conselhos Científicos de cada uma das Escolas.
- ***Numa fase de transição, assumir o "Conselho Científico (CC) da Escola de Ciências da Saúde" (por definição estatutária constituído por todos os membros doutorados da Escola) como estrutura académica agregadora da gestão e coordenação das actividades promovidas no âmbito da Medicina e da Enfermagem, promovendo a inclusão no actual CC da ECS de membros da ESECG (em número a definir) que, enquanto não detentores do grau de Doutor, seriam membros a título de convidados.***
- Evoluir para a implementação de um "Conselho Científico em Ciências da Saúde", prevendo a criação de comissões especializadas no seio deste Conselho Científico adequadas às especificidades de cada uma das áreas, Medicina e Enfermagem.

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