

School of Health Sciences University of Minho

Annual Report 2005

School of Health Sciences

ANNUAL REPORT 2005

1. INTRODUCTION

1.1 In its persistent path to install the Medical Degree Programmes and the Life and Health Sciences Research Institute (ICVS), the School of Health Sciences (ECS) is investing a strong effort to progressively consolidate the School's human and infrastructural resources, as well as the aspects and procedures associate to the organisation and articulation of teaching and research.

Some of the most prominent features in this direction, in 2005, were the beginning of the construction of the new buildings, which will hopefully be operational in 2007, the ministerial decision to approve the infrastructural programmatic financing of the ICVS to the amount of 1.5 million Euros, the strengthening of the academic staff with the successful conclusion of the open contests for three positions of Associate Professor and the opening of seven public contests for positions of other staff as public servants.

In what concerns the operation of the medical degree, the transition to the predominantly clinical education and training of students in the third phase of the medical course proved to be smooth and successful, validating the innovative model adopted for the organisation of the medical residences and the articulation with the health services.

The students' centred teaching model adopted by the ECS, which anticipated and exemplifies some of the best practices inherent to the Bologna Process, is emblematic for the School and is raising a growing interest from various sectors within and outside the University of Minho, which frequently asked for detailed presentations on the way the learning processes are organised.

In connection to research, the ICVS is now well integrated in the R&D system. In 2005, fourteen multidisciplinary research projects have attracted external financing, of which ten are led by the ICVS.

The detailed data on the scientific and pedagogical activities in 2005 is presented as usual in the autonomous reports concerning the medical degree programme and the ICVS. The present report is intended as a summary of those activities, giving an overall view of the School's main strategies and progresses.

1.2 Political instability has once again hindered the installation of the ECS. Some of the pending issues were solved with the former Government, as for example the allocation of some infrastructural financing for the ICVS, but other problems remained and no progress was made to overtake them since the change of Government last March. For instance, the joint Committee MCTES/UM to coordinate the contract for the installation of the School was finally appointed by the former Minister in November 2004, but did not have the opportunity to meet because one of its members left the Ministry when the Government changed. The new Minister did not yet appoint a new member, in spite of the University's requests. Also, the Government is not complying to the clauses in the contract: the drift in the financial timetable is already over fours years, the financing for 2006 is insufficient to pay the works scheduled with the contractor of the new building (which were previously approved by the Ministry) and the process for the consignment of the construction of the Animal Facility waits for the formal approval from the Ministry since July 2004.

The political changes did not affect the process concerning the new Hospital in Braga. In the public contest that closed last August, six candidates have presented their tenders for the construction and operation of the new Hospital, and hopefully a decision to select a contractor will be taken until the end of 2006. Anyway, the new Hospital will not be operational before 2010.

Notwithstanding all the difficulties in the development of the contract, the unfailing institutional support within the University of Minho, specially from the Rector's Office, helped to offset some of the inconveniences and has been crucial for the development of the ECS.

2. PLANS AND STRATEGIES FOR 2005

2.1 Objectives and Policies

The main objectives established for 2005 were to consolidate the phase III of the medical programme, 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 curricular development and the preparations of the courseware for the fifth curricular year of the undergraduate programme and to start the curricular development of the fourth phase (year 6);
- 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 start the construction of the new buildings and to make some extra provisional spaces available for academic activities;
- 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 necessary links and cooperation within the legal framework applying to the health services with university teaching;
- 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 Steering Committee was reappointed in April 2005. One of the former members was replaced, due to a change in the Rector's team, and a new member was added in order to provide a gradual shift towards the normal composition of the future School Council.

Meanwhile, there were also changes in the external members. The present composition is therefore 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);
- João Luís Marques Pereira Monteiro (Pro-Rector for Planning, UM);
- Nuno Jorge Carvalho de Sousa (Associate Professor, ECS)
- Jorge Manuel Rolo Pedrosa (Associate Professor, ECS);
- Lino Mesquita Machado (Director of Hospital de São Marcos);
- José Agostinho Dias de Castro e Freitas (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.

All the administrative affairs are delegated to the Vice-Dean Cecília Leão. An *adhoc* Directive Board advises on 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 Carlos Megre Eugénio Sarmento
- 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
- João Carlos Cruz Sousa
- João Espregueira Mendes
- 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 Jaime Correia de Sousa
- 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 general guidelines for the planning and development of research, teaching and extension activities and matters related to 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 organisation in relation to the horizontal and vertical integration of the curriculum and also to the concept of curricular organisation 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 interconnected 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 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 2005/06 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)

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

- Manuel João Mendes da Costa (Coordinator of the Medical Education Unit)
- Carlos Alberto de Almeida Valério (Coordinator of Community Health)
- Pedro Ricardo Luís Morgado (Student, 5th year)
- Carla Marina Mendonça Gonçalves (Student, 4th year)
- Pedro Miguel Oliveira Azevedo (Student, 3rd year)
- Fábio André Eleutério Amaral (Student, 2nd year)
- Diogo de Oliva Malheiro (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 organisation 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 (2005/2006)

| 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 | JOANA PALHA | Associate Professor (ECS, UM) |
| Gen. Introd. and Musculoskeletal System | Armando Almeida | Assistant Professor (ECS, UM) |
| Digestive System | Jorge Correia Pinto | Inv. Assoc. Professor (ECS, UM) |
| Circulatory and Respiratory Systems | Jorge Correia Pinto | Inv. Assoc. 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 | Associate Professor (ECS, UM) |
| Endocrine System | Joana Palha | Associate Professor (ECS, UM) |
| Synopsis of SOFs | Nuno Sousa | Associate 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 | MD (ECS, UM) |
| Family, Society and Health | CARLOS VALÉRIO | MD (ECS, UM) |
| Follow up of a Family I | CARLOS VALÉRIO | MD (ECS, UM) |
| Vertical Themes ("To Feel the Pulse to Life") | JOAQUIM PINTO MACHADO CLARA COSTA OLIVEIRA | Full Professor (ECS, UM) Assistant Professor (IEP, UM) |

Table 1.b — Area and Module Coordinators - Phase II (2005/2006)

| Curricular Area | Coordinator | Status | |
|---|---|---|--|
| Biopathology and Introduction to Therapeutics | JORGE PEDROSA | Associate 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 | Associate Professor (ECS, UM) | |
| Infectious Pathology | António Gil Castro | Assistant Professor (ECS, UM) | |
| Neoplasies | Fernando Schmitt | Associate Professor (FM, UP) | |
| Introduction to Clinical Medicine | NUNO SOUSA | Associate 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 CLARA COSTA OLIVEIRA | Full Professor (ECS, UM) Assistant Professor (IEP, UM) | |

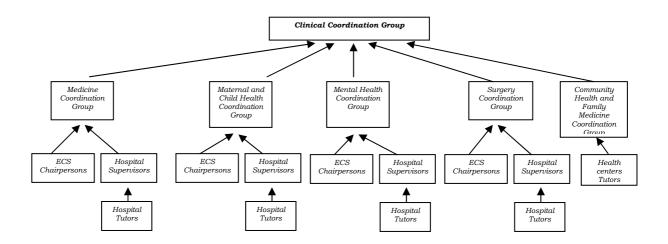
Table 1.c — Area and Module Coordinators - Phase III (2005/2006)

| Curricular Area | Coordinator | Status |
|--|---|--|
| Hospital Internships | NUNO SOUSA | (a) |
| Health Centre Internship | ANTÓNIO JAIME SOUSA | (a) |
| Seminars From Clinic to Molecular Biology I and II | CECÍLIA LEÃO | Full Professor (ECS, UM) |
| Optional Project IV | PATRÍCIA MACIEL PAULA LUDOVICO | Assistant Professor (ECS, UM) Assistant Professor (ECS, UM) |
| Optional Project V | RUI REIS | Assistant Professor (ECS, UM) |
| Vertical Themes | JOAQUIM PINTO MACHADO CLARA COSTA OLIVEIRA | Full Professor (ECS, UM) Assistant Professor (IEP, UM) |

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

2.2.5 Organisation 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, Associate 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 present Residence Coordination Groups are:

a) The Medicine Coordination Group

- Joaquim Pinto Machado (Full Professor/ ECS)
- *Mário Cerqueira Gomes* (Full Professor/ ECS)
- Óscar Rolão Candeias (Hospital Director-Internal Medicine/ ECS)
- Damião Cunha (Hospital Director-Cardiology/ ECS)
- Nuno Sousa (Associate Professor/ 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)
- Sousa Basto (Hospital S. Marcos-Braga)

b) The Maternal and Child Health Coordination Group

- Joaquim Pinto Machado (Full Professor/ECS)
- Nuno Sousa (Associate Professor/ ECS)
- Jorge Correia Pinto (Invited Associate Professor/ ECS)
- Helena Jardim (Assistant Professor/ 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)

c) The Mental Health Coordination Group

- Joaquim Pinto Machado (Full Professor/ ECS)
- Nuno Sousa (Associate Professor/ ECS)
- Rui Mota Cardoso (Full Professor/ FMUP)
- Alberto Bessa-Peixoto (MD, Hospital São Marcos-Braga)

d) The Surgery Coordination Group

- Joaquim Pinto Machado (Full Professor/ ECS)
- Nuno Sousa (Associate Professor/ ECS)
- João Espregueira Mendes (Invited Associate Professor/ ECS)
- Mesquita Rodrigues (MD, Hospital São Marcos-Braga)
- Carlos Alegria (MD, Hospital São Marcos-Braga)
- Carlos Santos (MD, Hospital Senhora da Oliveira-Guimarães)
- Fausto Fernandes (MD, Hospital Senhora da Oliveira-Guimarães)

e) The Community Health and Family Medicine Coordination Group

- Carlos Valério (MD, Family Medicine/ ECS)
- António Jaime Correia Sousa (MD, MPh, Family Medicine/ ECS)
- António Sarmento (MD, Public Health/ ECS)
- Ana Mateus (MD, Family Medicine/ ECS)
- Luís Laranjeiro (MD, Family Medicine/ ECS)
- Margarida Lima (MD, Family Medicine/ ECS)
- Mário Freitas (MD, Public Health/ ECS)

In what concerns the **Supervisors**, their task is to oversee all clinical teaching activities within their Residences in the Hospital or Health Centre. 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 Health Service.

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 |
|---------|--|--|--|
| Medicir | ne I | Abel Rua | Jorge Cotter |
| Matern | Internal Medicine Pneumology Cardiology Gastroenterology Endocrinology al-Child Health | Abel Rua Mariano Machado Adelino Correia Mário Marcelino Altino Freitas | Jorge Cotter Maria Manuel Figueiredo João Almeida José Cotter |
| | Obstetrics Paediatrics | Lucinda Antunes Almerinda Pereira | Pedro Vieira de Castro Pedro Freitas |
| Mental | Health | | |
| | Psychiatry | João Guerra | Mário Lourenço |
| Surgery | • | Mesquita Rodrigues | Carlos Santos |
| | Surgery 1 General Surgery Surgery 2 Vascular Surgery Gynaecology Urology Ophthalmology ENT Orthopaedics Neurosurgery | Mesquita Rodrigues António Carvalho Domingos Jardim Pena Américo Ribeiro Santos Vitorino Ribeiro Tiago Godinho Agostinho Veloso Carlos Alegria | Carlos Santos Amílcar Mesquita Pedro Vieira de Castro Jaime Faria Luís Gonçalves Fausto Fernandes Joaquim Ribeiro |
| Medicir | ne II | Sousa Basto | Jorge Cotter |
| | Internal Medicine Neurology Hemato-oncology Dermatology | Narciso Oliveira Ramalho Fontes Rui Nabiço Sousa Basto | Jorge Cotter Isabel Coelho Camila Pinto António Ferrete |

As for the Residences in Community Health and Family Medicine, the **Supervisors** in the Health Centres are:

Comunity Health andMargarida LimaCentro de Saúde de Braga

Family Medicine Luís Laranjeiro Centro de Saúde de Guimarães e Taipas

In the curricular area of *Follow up of a Family* the students are also accompanied by clinical tutors in four Health Centres in Braga, coordinated by a General Supervisor and Supervisors in each Health Centre. The MDs involved as Supervisors are:

| Follow up of a Family | Teresa Macedo | Unidade de Saúde de Gualtar-Braga |
|---------------------------|-----------------|-----------------------------------|
| Follow up of a Family I | Lopo Antunes | Unidade de Saúde de Maximinos |
| | Luísa Carvalho | Unidade de Saúde de Infias |
| | Eugénia Esteves | Unidade de Saúde do Carandá |
| Pellow up of a Persile II | I and Antonia | Haidada da Carida da Maniarina |
| Follow up of a Family II | Lopo Antunes | Unidade de Saúde de Maximinos |
| | Luísa Carvalho | Unidade de Saúde de Infias |
| | Eugénia Esteves | Unidade de Saúde do Carandá |

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*, the Coordinator of Post-graduation is Prof. *Joana Palha* and the Coordinator of the International Postgraduate Programme 2006 is Prof. *Paula Ludovico*. The coordinators of the different post-graduation courses are listed in Table 2, under point 3.2.

2.2.7 The External Advisory Committee

The External Advisory Committee (EAC), in 2005, included the following external members:

- Alcindo Maciel Barbosa (North Regional Health Administration)
- Alistair Warren (University of Sheffield)

- Arsélio Pato de Carvalho (University of Coimbra)
- David Macfadyen (World Health Organisation)
- Eduardo Marçal Grilo (Calouste Gulbenkian Foundation)
- Fernando Lopes da Silva (University of Amsterdam)
- Henry Walton (University of Edinburgh)
- Joseph S. Gonnella (Thomas Jefferson University)
- Pedro M. H. Nunes (Ordem dos Médicos)
- Walter Friedrich Osswald (University of Porto)

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 18-19 February 2005. The report from the visit is fully transcribed next:

Introduction.

The meeting took place at the School of Health Sciences of the Universidade do Minho in Braga. The External Advisory Committee (EAC) met first with the Steering Committee. The following members were present: Dr Alistair Warren, Professors Arsélio Pato de Carvalho, David Macfadyen, Eduardo Marçal Grilo, Henry Walton, Walter Osswald, and Fernando Lopes da Silva (Chair). Professor Joseph Gonnella could not attend for personal reasons, but he sent a letter with a number of remarks that were taken into consideration. It was with great sadness that the EAC received the news that Dr Jean Claude Yernault passed away recently. Dr Ângelo Azenha did not participate because he is no longer the representative of the North Regional Council of the *Ordem dos Médicos*. The *Ordem* has not yet appointed a replacement. The EAC was pleasedthat Professor David Macfadyen, who has a large experience as epidemiologist and as collaborator of the World Health Organization, accepted the invitation to join the Committee.

During the introductory session the EAC received a short account of the progress made by the Health Sciences School, and a number of additional reports

The EAC is grateful for the hospitality shown by the University and is impressed by the continuing commitment, enthusiasm and dedication of its staff.

1. General assessment

The EAC was extremely impressed by the smooth development of the program of the Medical Degree Course. The documentation that the EAC received was highly appreciated and it was considered exemplary. The EAC wishes to state its very positive assessment of the progress made by the program. Notwithstanding this general positive note, the EAC wishes to make a number of points that the Steering Committee should take into account.

2. M.D./ Ph.D. routes

The EAC considers this to be a most valuable addition to the Program. However the EAC recommends that the Steering Committee give detailed consideration to its implementation and especially the funding for this important international initiative. This program has also to take into account fully the Bologna Agreement, as this may have an impact on the detailed timing of this initiative. With respect to this, it was suggested that the Ph.D. route should be made available at the appropriate time of the medical course. The protocol that has been agreed with the Thomas Jefferson Medical School and Columbia University Medical School to develop a MD/PhD program is considered to be an excellent opportunity.

3. Research Institute

The EAC does not consider its task to evaluate the content of the research being done at the 'Life and Health Sciences Research Institute' and recommended that an External Advisory Committee for research assessment should be appointed to carry out this task. A close contact between this Committee and the EAC would be welcome. Nevertheless the EAC made a number of remarks based on the assessment of the Faculty in general that have implications regarding the organization of the research activities.

The EAC noted that the staff appears to be heavily committed and may be close to overload. The staff performs a multitude of tasks, including extensive teaching duties, significant administrative and organizational tasks as well as research. Taking into consideration this fact the EAC recommended that the research should be highly focused on the most promising topics, in order to optimize the human and other resources available. The lack of full-time research staff was pointed out. This may be compensated by attracting research Post-Docs and by creating a system of sabbaticals for the staff. Furthermore the formulation of a policy with respect to academic career progression would be most welcome.

4. Medical Education Unit (MEU) and research

The EAC was most positively impressed by both the amount and the quality of work done by the MEU. However the EAC emphasized that it is important that the MEU develops an active research program using the valuable longitudinal data that this new course is capable of yielding.

5. Clinical teaching

The EAC was happy to note that the Faculty has already completed a report on 'Medicine I Residency' that started this academic year. In general the Report gives a fair impression of the strengths and weaknesses of the Residency. During the meetings with the staff and the visit to the Hospital of Guimarães it became obvious that the clinical residencies are taking shape in a most responsible way. The attitude and commitment of the staff at the Hospital of Guimarães was excellent. There are, of course, problems to be solved and it may not be expected that at this stage the performance of the different Services will be equally optimal, but the EAC became convinced that the Coordinating Group is well aware of these issues and is capable of taking the appropriate actions needed to ensure full participation in the new curriculum. It is clear that the selection, training and supervision of the clinical teaching staff should remain a high priority for the School. The EAC pointed out that it is necessary to appoint Clinical Academic Staff to the Faculty in order to promote and consolidate the articulation between the Faculty and the clinical departments that share the responsibilities of clinical teaching.

New building, infra-structures and financing

The EAC was pleased to hear from the Steering Committee that the decision to start building the new facilities had been taken recently. However the Faculty needs an important investment in infrastructures for research and teaching and the EAC was concerned that the Faculty did not receive the expected funds from the FCT for this purpose. Subsequently the EAC was informed, however, that these funds may be awarded by the FCT in the near future. This is part of the framework of a national program to support new institutions that already have shown potential for research.

In any case the Faculty has to pursue an active policy of Fund raising.

6. Relations with the Nursing School

The EAC recommended that the Steering Committee should explore further the possibilities offered by the presence of a Nursing school in the same campus.

7. Students

Last but not least, the EAC points out that it was most impressed by the contacts with the students, who showed strong motivation, an enthusiastic drive and a critical attitude. Furthermore they presented themselves as articulate and assertive young people, who represent an invaluable asset of the School. It is clear that these—students are the best ambassadors for the new Faculty.

The meeting with the students revealed the importance that they attach to the option projects and to the vertical program. It was clear that the students are already actively shaping the curriculum according to their experience and criticisms. In this context the students see themselves not as clients of the Faculty but as part of the process and members of the Faculty's team. This is a most healthy attitude.

The actions taken by the School in connection with the EAC recommendations are detailed in section 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 first protocol with the Regional Health Administration North (ARS-N), 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).

- The School established frequent contacts 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 continues to increase, as a stronger involvement of health professionals in the degree programme takes place. The formal protocols that were established 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 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.

To consolidate this cooperation, the School and the ARS-N have recently agreed on a new protocol under the legal framework established by the Decree-Law 206/2004 (Appendix I), very similar to those signed with the Hospitals of Braga and Guimarães.

2.3.1 University-Health Services 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. A similar Committee was established with ARS-N for the articulation with Health Centres.

In accordance with the multi-centre approach adopted for the clinical training of the students, the Hospitals of São Marcos and Senhora da Oliveira, as well as a network of Health Centres under ARS-N, qualify all as *Health Services with University Teaching*. The corresponding Articulation Committees have been operating on a regular basis, with the following composition:

| Articulation Committee | Members From ECS | Members from the Health Service |
|---------------------------------------|------------------------------------|--|
| | Joaquim Pinto Machado | Sousa Basto |
| ECS – Hospital de São Marcos | MD, PhD, Course Director | MD, by delegation of the President of the Administration Council |
| | Nuno Sousa | Anabela Correia |
| | MD, PhD, Clinical Area Coordinator | MD, Clinical Director |
| | Joaquim Pinto Machado | Fausto Manuel V. Santos Fernandes |
| ECS – Hospital Senhora da Oliveira | MD, PhD Course Director | MD, Clinical Director |
| | Nuno Sousa | Joaquim Manuel Araújo Barbosa |
| | MD, PhD, Clinical Area Coordinator | by delegation of the President of the Administration Council |
| | Maria Cecília Leão | António J. S. Pimenta Marinho |
| ECS - ARS-N | PhD, Vice-Dean | MD, by delegation of the President of the ARS-N |
| | Carlos Valério | José Carlos Garcia |
| | MD, Clinical Area Coordinator | MD, Clinical Director at SRS-Braga |

One of the competences of the Articulation Committees is to decide on matters of relevance for the articulation between the School and the Health Services. The established Committees have adopted an Articulation Regime which defines the model of cooperation in what concerns the clinical training of the medical students. These regulations cover 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.

3. ACTIVITIES IN 2005

3.1 Medical Degree Programme

An autonomous annual report was prepared for the undergraduate programme, detailing the pedagogical activities undertaken in the academic year 2004/05, 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 four years, particularly in the last academic year, and the pedagogical planning for the academic year 2005/06.

The student centred learning methodologies are leading to good success rates, as expected. Indeed, in the academic year 2004/05, only three first year students (5%), one

second year student (2%) and one third year student (2%) failed. One hundred per cent success was registered for fourth year students.

For the year 2005/06, 61 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 3 under the special regime for handicapped students). The average entrance marks for the new students was 184.8 out of 200 (if only the students under the general admission regime are considered, this value raises to 187.6).

The gender balance is 70% female and 30% male students. Regarding the provenance of students, 68% come from the District of Braga, 94% from the Northern districts and 97% 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, 62 in the second year, 51 in the third year, 45 in the fourth year and 50 in the fifth year, amounting to a total of 272.

For the first time, the School is receiving foreign students. Two Spanish students are attending the third curricular year for the whole academic year under the Erasmus Programme and a Brazilian is spending the first semester with the fourth year students.

A few points deserve a special reference in this report. One relates to the essential role of the Medical Education Unit, in its multiple functions 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. Two workshops on learning methodologies were organised in 2005, one of them, on *Effective Teaching*, with a large external and internal participation. The staff of this Unit was reinforced with a new element, counting now with the collaboration of a qualified expert on education, with two members qualified with university degrees on psychology and educational sciences, a specialist on informatics and two administrative elements.

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 is now well advanced in developing a MD/PhD optional programme, which has already the support from the University Academic Council. For this effect, a cooperation agreement was 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.

Another important point refers to the development and certification of clinical skills. In a joint initiative with the Calouste Gulbenkian Foundation, the ECS is developing a national programme of simulated/standardised patients for the training, assessment and certification of clinical skills. The programme, to be implemented until 2008, is co-funded in 80% by the Gulbenkian Foundation (325 000 Euros). Its specific goals are: the acquisition and training of clinical skills by pre-graduate students in Medicine and other clinical areas, such as Nursing and Biomedical Engineering; the training of clinical skills in the scope of medical continuing education, with the aim to improve the performance of clinicians on specific competences and consequently to increase the quality of health care; the promotion of medical continuing education; the assessment of clinical competences along the clinical phases of the medical course and at the entrance to internship; the possibility of formal assessments for periodical professional re-certification of health professionals using simulation environments based on real medical evidence in consulting-rooms, medical emergency rooms and surgery rooms. This programme represents a big step to the implementation of the Clinical Skills Centre at the ECS.

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 Federation of Medical Students Associations (IFMSA).

The activities of NEMUM in 2005 covered a wide range of initiatives, in an excellent contribution to the external image of the ECS.

In the field of communitarian intervention, four health promotion actions were developed aiming at the prevention of diabetes mellitus and hypertension. Two of these actions took place in Braga, one in the nearby village of Caldas das Taipas and the last in the University campuses of Braga and Guimarães.

In cooperation with the University Students' Union (AAUM), the Nursing Students' Association and Braga's Firemen, NEMUM organised a support program to the

students who participated in the celebrations of the academic festival "Enterro da Gata". About 300 people were received in NEMUM's support tent. As a contribution to avoid the excessive consumption of alcoholic drinks among students and cooperate with the campaign "don't drink and drive", alcoholometry tests were performed in the festival's place.

A programme of international mobility of medical students was started, in partnership with ANEM and IFMSA. With the financial support of the ECS, some foreign students were received in July and August to perform clinical training at the Hospitals of Braga and Guimarães and research work at the ICVS.

NEMUM has also cooperated with the ECS in welcoming the new entrants in the medical degree programme, namely by distributing the "Kit NEMUM" with materials of interest.

In November, in cooperation with the Association of Law Students, a Conference on "Defensive Medicine and Law" was organised. This event provided an excellent opportunity to debate the theme of law in medicine and its present applications and limitations.

The journal "Haja Saúde" continued to be regularly issued. A new poetry book, "No Sótão do Pensamento II", including poems written by students and also by staff members, was also published.

Many other social, cultural and sporting activities were carried out, some in cooperation with other associations, in a demonstration of great vitality.

With the support from the Rector and from the ECS, new facilities were allocated to the NEMUM in the campus. This was an important step to consolidate NEMUM, by providing better working conditions.

The School praises very much its students' capacity of initiative and supports NEMUM's activities whenever possible.

3.2 Post-graduation

For the fifth consecutive year, the School continued to offer advanced training in medicine and basic sciences.

The 2005 programme included seven intensive courses, with high level of international collaboration, listed in Table 2, targeting medical doctors as well as academic staff, researchers and health professionals.

Table 2 — International Postgraduate Programme 2005

| Course Title and Dates | Coordinator(s) | Invited Tutor(s) |
|---|--|---|
| Psychomotor Development Evaluation of Newborns (1st edition) 1-3 June | Joana Palha, ECS, UM. Maria José Costeira, Hospital Senhora da Oliveira, Guimarães. | Bélen Saénz-Rico de Santiago, Hospital Universitário de La Paz, Madrid. Susana Ares, Hospital Universitário de La Paz, Madrid. Alfredo Garcia Alix, Hospital Universitário de La Paz, Madrid. |
| From Acute to Chronic Pain: Basic and Clinical Approaches (2 nd edition) 18-22 July | Armando Almeida, ECS, UM. Laurinda Lemos, Hospital Senhora da Oliveira, Guimarães. | Alexandre Teixeira, Clinica Privada da Dor, Porto. Beatriz Craveiro Lopes, Hospital Garcia da Horta, Almada. Elena Pita Calandre, Instituto de Neurociências, University of Granada. Francisco Cruz, Faculty of Medicine, UP. Menno Sluijter, Swiss Paraplegic Center, Nottwill, Switzerland. Harald Keller, Swiss Paraplegic Center, Nottwill, Switzerland. Michael Ossipov, University of Arizona, Tucson, USA. Teresa McIntyre, IEP, UM. Helmut Frerick, Working and Research Group for Drug Safety, Cologne, Germany. Isaura Tavares, Faculty of Medicine, UP. José M. Castro-Lopes, Faculty of Medicine, UP. |
| Application and Development of Instructional Software in Biosciences 25-29 July | Manuel João Costa, ECS, UM. Guilherme Marson, Institut Suisse de la Recherche Expérimentale sur le Cancer, Lausanne, Suisse. | Guilherme Marson, Institut Suisse de la Recherche Expérimentale sur le Cancer, Lausanne. |
| Multi Sclerosis 8-10 September | Patrícia Maciel, ECS, UM. Nuno Sousa, ECS, UM. Maria Edite Rio, Hospital de São João, Porto. | Andrew Pachner, University of Medicine and Dentistry New Jersey, USA. Jack Antel, McGill University, Montreal, Canada. Óscar Gonçalves, IEP, UM. Peter Rieckman, Würzburg University, Germany. Cláudia Sousa, Centro de Investigação em Psicologia, UM. Isabel Firmino, Serono Symposia International, Lisboa. Jonh Klein, Centro de Investigação em Psicologia, UM. |
| Different Tissues, Same Strategies: Common Molecules in Different Development Systems | Isabel Palmeirim, ECS, UM. | Sólveig Thorsteinsdóttir, Faculty of Sciences, UL. Salvador Martinez, CSIC & Miguel Hérnandez University, Alicante, Spain Jacqueline Deschamps, Netherlands Institute for Developmental Biology, Hubrecht, Netherlands. Markus Affolter, Biozentrum der Uni Basel, Basel, Switzerland. Christine Mummery, Netherlands Institute for Developmental Biology, Hubrecht, Netherlands Juan José Sanz Ezquerro, Centro Nacional de Biotecnologia, Madrid. |

Table 2 — International Postgraduate Programme 2005 (cont.)

| Course Title and | Coordinator(s) | Invited Tutor(s) |
|------------------|----------------|------------------|
| Dates | | |

| Host-Parasite Interactions In Fungal Infections 27-29 October | Jorge Pedrosa, ECS, UM. Manuel Vilanova, ICBAS, Porto. Fernando Rodrigues, ECS, UM. | António Sarmento, Hospital Pedro Hispano, Matosinhos, e ECS, UM. Emmanuel Roilides, Aristotle University of Thessaloniki, Hippokkration Hospital, Greece. Fernando Campilho, Instituto Portugués de Oncologia Francisco Gentil, Delegação Norte, Porto. Luigina Romani, Department of Experimental Medicine and Biochemical Sciences, University of Perugia, Italy. Stuart M. Levitz, Bóston Medical Center, Bóston, Ma, USA. Manuel Vilanova, IBMC, Porto. Isabelina Ferreira, Instituto Português de Oncologia Francisco Gentil, Lisboa. João Lacerda, Instituto Português de Oncologia Francisco Gentil, Lisboa. |
|--|---|---|
| Cerebral Sulci and Gyri Neuroanatomy (2 nd Edition) 14-18 November | Nuno Sousa, ECS, UM. Carlos Alegria, Hospital de São Marcos, Braga. | Antonio Cesar Mussi, University of S. Paulo, Brasil. Evandro de Oliveira, University of S. Paulo, Brasil. Ugur Ture, Istambul University, Turkey. Guilherme Carvalhal Ribas, University of S. Paulo, Brasil. |
| Workshop: Angiogenesis and Lymphangiogenesis in Clinical Pratice: from basic research to applications 26 February | Fernando Schmitt, Portuguese Pedriatics Society. Adhemar Longatto Filho, ECS, UM. Fernanda Milanezi, ECS, UM Rui R. Reis, ECS, UM. | Sérgio Dias, Instituto Português de Oncologia, Porto. Carla Mouta, Harvard Medical School, Bóston, USA. Paul Van Diest, University Medical Center, Amsterdam, Neetherlands. Lieve Moons, Faculty of Medicine, University of Leuven, Belgium. Paulo Cortes, Faculty of Medicine, University of Lisbon. Fermin Ruiz de Erenchun, International Medical Manage F-Hoffman La Roche LTD, Basle, Switzerland. |
| Workshop: Effective Teaching 9-10 May | Manuel João Costa, ECS, UM. Richard Felder, National Effective Teaching Institute (NETI), USA. Rebeca Brent, National Effective Teaching Institute (NETI), USA. | Richard Felder, National Effective Teaching Institute (NETI), USA. Rebeca Brent, National Effective Teaching Institute (NETI) USA. |
| Workshop: Learning Problems in Children with emotional and Behaior Disorders 12-13 May | Manuel João Costa, ECS, UM. Roger Thomas, University of Galgary Canada. João Lopes, IEP, UM. | Roger Thomas, University of Galgary, Canada. João Lopes, IEP, UM. Luísa Morais, Hospital de São Marcos, Braga. Virgínia Rocha, Hospital de São Marcos, Braga. |
| Join Initiative - Laboratory Animal Science 2-6 May | Held at the IBMC, Porto. | |

Three workshops were also organised, two of them on learning methodologies. Additionally, the joint initiative on Laboratory Animal Science, started in 2004 with the Institute for Molecular and Cell Biology, was this year organised in Porto.

The ICVS annual report includes detailed data on the post-graduation courses and their evaluation. It is however worth mentioning that the programme was attended by 354 participants, of which 146 were medical doctors, 85 had a background on biological

sciences and 45 were related to other health professions. The results from the questionnaire passed to the participants showed a high degree of satisfaction (99% rated the courses as excellent or good).

Detailed information on the courses and workshops is also available at the internet address http://www.ecsaude.uminho.pt/postgrad.

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.

The School, in order to complement the contract signed with the Government in 2000, as was then foreseen, proposed in 2003 a special contract to the Ministry of Science and Higher Education for the infrastructural funding of the 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 funding of only about 20% of the proposed value, although with an indication that the remaining should be considered for further funding from the FCT. Finally, in March 2005, a proposal from the FCT to the Minister was approved, allocating 1,5 million Euros for the most urgent laboratory equipments.

In spite of the difficulties and delays with the funding 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. In 2005 the reinforcement of equipment included a gamma-counter and equipment to work with radioactive materials, thermocyclers, software and equipment for flow cytometry, equipments for behavioural studies, orbital shakers and incubators, a spectrophotometer, a fluorescence microscope with digital camera and software, a stereology microscope with image analysis system, a gastroscope, ventilated racks and cages for rodents.

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, 90 researchers are actively involved in the ICVS activities [20 PhD researchers and 70 Post-graduation students (35 PhD students, 4 Master students, 11 Assistants and 1 Monitor at ECS, 15 research assistants and 4 technical researchers)], supported by 26 members of the non-academic

staff (11 in administration, 10 in the laboratories and 5 in the Medical Education Unit) shared with the School.

Although there is still some extra work load on the academic staff 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 2005, the international publications from ICVS included 63 papers, 8 book chapters and 45 abstracts in Congresses, and the national publications comprised 2 papers, 3 book chapters, 9 abstracts published in Journal Supplements and 46 communications at Conferences, Seminars and other events. Four PhD and two Master thesis with supervision from affiliated ICVS researchers were concluded. Eleven 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 and promotion 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.

Aware that the human resources are the School's most important assets, the ECS has been investing on the discussion and approval of two policy documents concerning the development and management of the academic staff. One of these documents, included

as Appendix II, refers to the standards established by the ECS in regard to the required profiles for professorship in each of the ranks of the academic career. It is an important reference paper that will act as an incentive to the faculty and contribute to the embedding of a culture for quality.

The second document establishes a model for the allocation of workload to the different functions performed by the academic staff. The summary in Appendix III highlights the main aspects of the time allocation model. But it is worth mentioning that on average the faculty is expected to dedicate more than half of the annual workload to research activities.

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 45.

At present the School has a faculty of 51 members (27,5 FTE) and counts in addition with 10 regular collaborators and many other 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 and Health Centres, in a total of around 190 clinicians, are indicated in Tables 4-a to 4-d.

In terms of the faculty profile, it is interesting to notice that 75% (38 out of 51) of the regular staff members are MDs. Regarding academic qualifications, 20 have a doctoral degree. Considering also the permanent collaborators, 70% of the faculty (43 out of 61) are MDs and 26 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 Emérito | | CSH,SC, |
| Maria Cecília L.P. Estrela Leão | PhD, Agregação | Prof. Catedrático Exc. | Infectious Diseases | MC |
| António Carlos M. E. Sarmento | MD, PhD, Agregação | Prof. Catedrático Conv. 30% | | BP, C |
| Damião J. G. Lourenço da Cunha | MD, PhD | Prof. Catedrático Conv. 30% | | С |
| Mário José Cerqueira Gomes Braga | MD, PhD, Agregação | Prof. Catedrático Conv. 30% | | С |
| Óscar Ferreira Rolão Candeias | MD | Prof. Catedrático Conv. 30% | | C |
| Joana Almeida S. Pacheco Palha | PhD | Prof. Associado Exc. | Neurosciences | SOF |
| Jorge Manuel Rolo Pedrosa | PhD | Prof. Associado Exc. | Infectious Diseases | BP |
| Nuno Jorge Carvalho de Sousa | MD, PhD | Prof. Associado | Neurosciences | SOF, C |
| Jorge Manuel Nunes Correia Pinto | MD, PhD | Prof. Associado Conv. 50% | Development and Neoplasia | SOF, C |
| João D. C. S. Espregueira Mendes | MD, PhD | Prof. Associado Conv. 20% | | С |
| 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 |
| Maria de Fátima M. Baltazar | PhD | Prof. Auxiliar. Exc. | Development and Neoplasia | BP |
| 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 |
| Rui Manuel Vieira Reis | PhD | Prof. Auxiliar Conv. Exc. | Development and Neoplasia | BP |
| João Carlos Cruz Sousa | MD, PhD | Prof. Auxiliar Conv. 30% | Neurosciences | SOF |
| António José Alegre Sarmento | MD | Chefe de Serviço de Saúde Pública (Requisição 50%) | | SC |
| Filipa Santos Costa Pinto Ribeiro | Lic ^a Biology | Assistente Conv. 50% | Neurosciences | SOF |
| Manuel José L. Costa Rodrigues | MD | Assistente Conv. 50% | Neurosciences | SOF |
| Ana Maria R. Morais Mateus | MD | Assistente Conv. 40% | | SC |
| André Filipe Couto Carvalho | MD | Assistente Conv. 40% | Neurosciences | SOF |
| Carla Rolanda Rocha Gonçalves | MD | Assistente Conv. 40% | Development and Neoplasia | SOF |
| Hugo Miguel B. Almeida Tavares | MD | Assistente Conv. 40% | Neurosciences | SOF |
| Isabel Margarida Moura Tavares | MD | Assistente Conv. 40% | | BP |
| Isabel Maria S.S. Ribeiro Oliveira | MD | Assistente Conv. 40% | Development and Neoplasia | SOF |
| João José F.C. Araújo Cerqueira | MD | Assistente Conv. 40% | Neurosciences | SOF |
| João Miguel S. Bessa Peixoto | MD | Assistente Conv. 40% | Neurosciences | SOF |

João Paulo Soares Fernandes

Assistente Conv. 40% Development and Neoplasia SOF

Table 3 — Academic Staff (cont.)

| Name | Qualifications | Categoria (Rank) | Research | Area |
|-----------------------------------|------------------|--|---------------------------|------|
| José Miguel G. Moreira Pêgo | MD | Assistente Conv. 40% | Neurosciences | 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 |
| Mário Jorge Alves Oliveira | MD | Assistente Conv. 40% | Neurosciences | SOF |
| Mário Nelson Morais Freitas | MD | Assistente Conv. 40% | | SC |
| Pedro Alexandre L.A.G. Teixeira | MD | Assistente Conv. 40% | Neurosciences | SOF |
| Pedro da Paula S. Alves Monteiro | MD | Assistente Conv. 40% | | BP |
| Rui Pedro da Rocha Bastos | MD | Assistente Conv. 40% | Development and Neoplasia | SOF |
| Sónia M. Rodrigues Magalhães | MD | Assistente Conv. 40% | Development and Neoplasia | SOF |
| Tiago da Silva Pinto Teixeira | MD | Assistente Conv. 40% | | BP |
| Ana Maria Lacerda A. Horta | MD | Assistente Conv 20% | | BP |
| António Jaime B. Correia da Sousa | MD | Assistente Conv. 20% | | SC |
| Elisabete Guimarães de Sousa | MD | Assistente Conv. 20% | | BP |
| Fernando Pardal de Oliveira | MD | Assistente Conv. 20% | | BP |
| Cristina Isabel Nogueira da Silva | Student 5th year | Monitor | | SOF |
| Gustavo Filipe M. Alves Rocha | MD | Monitor | Development and Neoplasia | SOF |
| José Mário Coutinho Roriz | MD | Monitor | Development and Neoplasia | SOF |
| Permanent Collaborators: | | | | |
| Adhemar Longatto Filho | PhD | Prof. Auxiliar Visitante 100%. | Development and Neoplasia | BP |
| Carlos Alberto Almeida Valério | MD | Chefe Serviço Clínica Geral | | SC |
| Clara Costa Oliveira | PhD | Prof. Aux./IEP-UM Colab. 40% | | CSH |
| Claudio H. Sunkel Cariola | PhD, Agregação | Prof. Cat./ICBAS-UP | | MC |
| Constantino Theodor Sakellarides | PhD | Prof. Cat./ESSP-UNL Colab. 10% | | SC |
| Fernando Carlos L. Schmitt | MD, PhD | Prof. Assoc./FM-UP | | BP |
| Jorge António G. Pinto Basto | MD | Intern. Compl./Inst. Genética Médica | | BP |
| Luís Filipe F. Lima Laranjeiro | MD | Chefe de Serviço/Centro de Saúde de Guimarães | | SC |
| Margarida Conceição Lima | MD | Chefe de Serviço/Centro de Saúde de Braga | | SC |
| Pedro Nuno F. Pinto Oliveira | PhD | Prof. Assoc./ENG Colab. 10% | | |

Table 4-a - Clinical Tutors at Hospital de São Marcos (2005/06)

Residence/Sub-Speciality Tutors (MDs)

Introduction to Clinical Medicine

Internal Medicine Juan Rafael G. Sanchez-Reyes Garcia

Maria Adelina Ferreira Maria João Nogueira Costa

Narciso Oliveira Sameiro Ferreira Sameiro Neves

Medicine I

Internal Medicine Alexandre Carvalho

Juan Rafael G. Sanchez-Reyes Garcia

Maria Adelina Ferreira Maria João Nogueira Costa

Narciso Oliveira Sameiro Neves

Pneumology João Cunha

José Eduardo Oliveira

Lurdes Ferreira

Manuel Macedo Gonçalves

Cardiology Alberto Salgado

Jorge Marques Márcia Torres

Rui André Rodrigues

Sérgio Rocha

Gastroenterology José Luís Barata

Raquel Gonçalves

Vera Dias

Endocrinology Cástor G. Pereira

Maria Lopes Pereira

Olinda Amélia Pinho Marques

Maternal-Child Health

Obstetrics Domingos Ribeiro

Luís Carvalho Manuela Araújo Maria Luísa Cardoso Paula Pinheiro

Pedro Cabrita

Table 4-a - Clinical Tutors at Hospital de São Marcos (2005/06) - Cont.

Residence/Sub-Speciality Tutors (MDs)

Paediatrics Ana Maria Antunes

Esmeralda Silva Henedina Marques Maria Augusta Gonçalves Maria Helena Silva Isabel Cunha

Mental Health

Mental Health Alberto Bessa Peixoto

Isabel Mota Joaquim Duarte Joaquim Gonçalves

Luísa Silva Lúcia Soares Natália Fernandes

Surgery

Surgery 1 Fernando Ferreira

Joaquim Falcão Maia da Costa Mário Reis Ricardo Pereira Sandra Martins Sónia Vilaça

Surgery 2 Carlos Gomes

Conceição Antunes Fernando Manso Pedro Koch Virgínia Soares

Gynaecology Arlindo Ferreira

Etelvina Cruz José Gabriel Silva Luís Castro Maria José Rocha Maria Teresa Silva

Urology António Lemos de Sousa

Mário Cerqueira Miguel Mendes Vila Mendes

Table 4-a - Clinical Tutors at Hospital de São Marcos (2005/06) - Cont.

 $\label{eq:continuous_continuous_speciality} \textbf{Tutors} \; (MD_s)$

Ophthalmology Carla Pinto

Fernando Silva José Manuel Lemos

ENT Francisco Oliveira

Higínio Fonseca Luís António Dias Vicente Azevedo

Orthopaedics António Pedro Malheiro

Helena Ferreira Mário Ventura Ramiro Fidalgo

Neurosurgery Eva Gonzalez

José António Costa Manuel Afonso Pinto Rui Jorge Almeida

Medicine II

Internal Medicine Adelina Ferreira

Ilídio Brandão José Manuel Paz Maria Teresa Pimentel Narciso Oliveira

Nephrology Isabel Salomé

Neurology Carla Ferreira

Maria Esperança Lourenço

Ricardo Maré

Hemato-oncology Maria Júlia Pereira

Teresa Macedo

Dermatology Ana Paula Vieira

Cristina Macedo

José Carlos Fernandes Maria Celeste Brito Maria da Luz Duarte

Table 4-b - Clinical Tutors at Hospital Senhora da Oliveira (2005/06)

Residence/Sub-Speciality Tutors (MD_s)

Introduction to Clinical Medicine

Internal Medicine Lurdes Natália Mendes Oliveira

Maria Elisa Barroso Torres Maria Emília Castro Lopes Maria da Glória Sousa Alves

Maria Helena Jacinto Sarmento Pereira Pedro Miguel Guimarães Cunha

Medicine I

Internal Medicine Lurdes Natália Mendes Oliveira

Maria Elisa Barroso Torres Maria Emília Castro Lopes Maria da Glória Sousa Alves

Maria Helena Jacinto Sarmento Pereira

Pedro Miguel Guimarães Cunha

Cardiology António Rodrigo Miranda Lourenço

Gastroenterology Salomé Bruno Costa Gonçalves Lima

Maternal-Child Health

Obstetrics Elsa Pereira

Isabel Maria Dória Reis Buhier Maria José Gonçalves Pires Costa

Maria Odosinda Rosmaninho Lopes Sousa

Maria Sofia Dantas Pinto Xavier Rosa Maria Freitas Fernandes

Paediatrics Ana Cláudia de Castro Tavares

Clara Sofia Domingues Paz Dias Cristina Maria Gonçalves Ferreira Fernando Eduardo Meireles Maio Graça Maria José Teixeira Costeira Paulo Susana Noites de Brito Peres

Mental Health

Mental Health Ana Geraia

Emanuela Lopes Gerly Macedo José Luís Gouveia

Table 4-b - Clinical Tutors at Hospital Senhora da Oliveira (2005/06) - Cont.

Residence/Sub-Speciality Tutors (MDs)

Surgery

General Surgery António Abreu

Carlos Alpoim Jorge Magalhães Lima Terroso Manuel Ferreira Salete Ferreira

Vascular Surgery Celso Carrilho

Gynaecology Fernanda Tavares

José Manuel Furtado José Vivas de Freitas Manuela Mesquita Maria José Pires Pedro Oliveira

Urology Carlos Guimarães

Ophthalmology António Fernandes

ENT Carlos Matos

Nuno Lousan Rui Fonseca

Orthopaedics António Gomes Cruz

Carlos Vilela Gomes

Gomes Cruz Manuel Ferreira Manuel Loureiro Vítor Caetano

Medicine II

Internal Medicine Elisa Torres

Emília Lopes Glória Alves Helena Sarmento Natália Oliveira Pedro Cunha

Neurology Ângela Silva

Lurdes Rodrigues

Oncology Camila Pinto

Dermatology Olga Ferreira

Table 4-c - Clinical Tutors at the Health Centres Residences (2005/06)

Health Centre Tutors (MDs)

Centro de Saúde de Braga

Unidade de Saúde do Carandá Adriana Vaz Dias

Isabela Chorão

Maria Augusta Pereira Maria Eugénia Esteves Maria Palmira Carneiro

Peláez Carones Rámon Areas

Unidade de Saúde de Infias Luísa Carvalho

Maria Eloina Rodrigues Maria José Cabrita Maria Raindo Mário Mendonça

Unidade de Saúde de Maximinos Isabel Subiela

José Luís Franqueira Maria dos Anjos Ribeiro

Ricardo Armada

Centro de Saúde de Guimarães

Extensão de Urgeses *Ângela Liane Sperb*

Jorge Lourenço Castro Marco Santos Pina

Extensão de Pevidém Maria José Teixeira

Paula Cristina Silva

Extensão de Serzedelo José Manuel Sousa

Susana Cristina Pires

Centro de Saúde das Taipas Alice Conceição Pérez Dias

João Luís Barata Silva Maria Alcina Dias de Castro Maria João Pinto Ribeiro Nuno Manuel Dias de Castro

Table 4-d - Clinical Tutors for the area Follow up of a Family (2005/06)

| Health Centre | Tutors (MD _s) |
|------------------------------|--|
| Centro de Saúde de Braga I | Adelaide Alves |
| | Adriana Dias |
| | Cristina Lopes |
| | Filomena Carvalho |
| | Isabela Chorão |
| | Maria Augusta Pereira |
| | Olga Silva |
| | Peláez Carones |
| Centro de Saúde de Braga II | Fernanda Maria Vieira |
| centro de Saude de Braga II | Jessi Anita Oliveira Silva |
| | Maria dos Anjos Vieira Ribeiro |
| | Maria do Carmo Pais Machado |
| | Maria José Alves Menezes |
| | Maria Madalena Graça |
| | Maria Teresa Almeida Gonçalves |
| | Paula Marques |
| Contro do Soúdo do Progo III | Angrésia Darhang Silva Draga |
| Centro de Saúde de Braga III | Aparício Barbosa Silva Braga Luísa Carvalho |
| | Maria da Conceicão S. Ferreira Cruz |
| | Maria de Fátima Pinto |
| | Maria José Cabrita |
| | mara ooc cabraa |
| Unidade de Saúde de Gualtar | Eugénia Esteves |
| | Márcia Milet |
| | Teresa Macedo |

Non-academic staff

Three new staff members were recruited, one of them with a degree on information technologies. Table 5 indicates the staff members, in a total of 26, and their qualifications, rank and allocation. The academic profile of the staff is above the average situation in the Portuguese higher education system (50% of the staff have a higher education degree).

Table 5 — Non-academic Staff

| Name | Qualifications Categoria (Rank) Service | | 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 | Laboratories | |
| Ana Paula Salgueira Rodrigues | Licenciatura | Técnico Superior | UEM | |
| Cláudia M. Borges Barreira | Licenciatura | Técnico Superior | Financial Office | |
| Isabel Alexandra M. Dias | Licenciatura | Técnico Superior | Laboratories | |
| Lucília G. Ribeiro Pinto | Licenciatura | Técnico Superior | Laboratories | |
| Magda João Castelhano Carlos | Licenciatura | Técnico Superior | Laboratories | |
| Maria Paulina D.M. Santos | Licenciatura | Técnico Superior | Project Support Office | |
| Paula C.F. Gomes Pereira | Licenciatura | Técnico Superior | Human Resources | |
| Sérgio Miguel V. de Almeida | Licenciatura | Especialista de Informática | Informatics Office | |
| Jorge Manuel S.G. Freitas | Bachelor | Especialista de Informática | UEM | |
| Luís Filipe F. Oliveira Martins | Bachelor | Técnico | Laboratories | |
| Domingos Ferreira Dias | Secondary Education | Técnico de Informática | Informatics Office | |
| Ana Maria Oliveira Faria | Secondary Education | Assistente Administrativo | UEM | |
| 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 | |
| Sónia Margarida R. da Cruz | Secondary Education | Assistente Administrativo | Laboratories | |
| 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 Técnico | Laboratories | |
| Maria Manuela S. Carneiro | Basic Education | Auxiliar Técnico | 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 provided systematic advice and support to the academic staff members, concerning the learning methodologies. The students are also specifically trained to adapt to the learning methodologies and to the e-environment within the ECS.

One training session was organised to introduce the clinical tutors in the Health Centres to the School's organisation and to the learning methodologies in use. One other session, organised for the clinicians at Hospital de São Marcos, dealt with opportunities of research in medical education subjacent to the Hospital Residences.

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 took place in 2005, which lead to the promotion of there staff members to the rank of Associate Professor.

The integration of staff in the national and international scientific community is also important. In 2005 a total of 22 leaves of absence to travel abroad, comprehending 208 days of absence, were provided to staff members, including some financial support.

3.5 Infrastructures

The infrastructures for the School activities have been developing in three concomitant lines: the process for the construction of the new buildings, the provisional academic area and the provisional laboratory spaces.

Considering the successive delays in the construction of the new buildings, as previously reported, additional spaces were found in 2003 and 2004 to expand both the academic and research areas. In 2005 the changes done in the provisional facilities included the creation of new specialised areas for research and a Post-Graduation Office, as well as a Centre for the Medical Students Association (NEMUM).

The Centre for NEMUM was installed in a separate structure located between the Pedagogic Complex II and the Laboratory Facilities Building. The specialised areas for research were implemented to accommodate work with radioisotopes (Radioisotope room and Gamma-counter room), since research projects requiring this technology were funded and launched in the ICVS.

For 2006 it will be possible to achieve an important expansion of the School's facilities, by occupying some new spaces located in an independent wing adjacent to the upper floor of the Laboratory Facilities Building, which are becoming vacant due to the move of the Institute of Social Sciences to a new building in the Campus. These new spaces, including 17 rooms, with an overall area of 360 m², will accommodate the teaching staff presently located at the Pedagogic Complex II and will also allow for the creation of

additional areas for the training of clinical skills, for a unit of clinical simulation and standardised patients and for a library. The spaces made free at the Pedagogic Complex II will be used as extra seminar rooms.

A brief account of the presently available provisional facilities is presented next.

Pedagogic Complex II

In the Pedagogic Complex II of the Gualtar Campus, a part of the third floor is occupied by the Health Sciences School. This area, with a floor space of about 1 250 m², comprises six self-learning and tutorial classrooms (1), a seminar room (2), the medical education unit (3) and three large rooms for the use of the teaching staff (4), in a collective "open-space" concept.

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 four of these tutorial classrooms are shared by the first and fourth and by the second and fifth year students, respectively. 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 building

The laboratory facilities of the ECS/ICVS occupy an area of 1 750m² and are located about 100 meters from the classrooms of Pedagogic Complex II. The School will use these facilities for a few years 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 building is divided in three different areas: the academic area, the area dedicated to research and postgraduate activities and the area for administration and clinical facilities.

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 and Clinical Skills (8), Histology and

Cytology (10) and Biopathology (11), with accommodation for 30 students each. Additionally, the area for clinical skills training comprises a room for Clinical Simulation training (3).

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: Biosafety Level 2 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 post-graduate office (9b), a room for computer terminals (21), a centrifuge and ultra freezer room (22), an anatomy cadaver preparation room (23), storage rooms (25a and 25b), a dark room (26), a 4° C temperature controlled room (27), a radioisotopes room (31), a gamma-counter room (4) 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 room (28), a biosafety level 3 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.

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 and one of them includes an area for training of clinical skills and clinical simulation. These seminar rooms are also used 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 2005 related to the lump sum are indicated in Table 6. Due to the difficulties in the financing of the University, the annual allocation grew only 6.25%, although the number of students had increased nearly 40%. The expenses are categorized as "salaries", "other current expenses" and "capital investments" (equipment), to show their relative weight. The category "salaries" includes the payments made to the Health Services relating to the cooperation of the Supervisors and Tutors. Although the amount for salaries has increased in a significant way, it was still possible to invest around 11% of the income in equipment.

Table 6 - Financial resources (2005)

| Income | Expenses | | | Surplus | |
|----------------------|----------|------------------------|-----------------------|---------|-------|
| Annual allocation | Salaries | Other current expenses | Capital investment | Total | |
| 2 550.0 | 1 553.1 | 725.5 (a) | 272.2 | 2 550.8 | - 0.8 |

Unit: 10³ Euro

(a) Includes 158.0 kept at central administration, for general expenses and maintenance.

Additionally, in the scope of the special contract signed in 2004 with the Ministry for the partial infrastructural funding of the ICVS, the amount of 206 592 Euros was transferred in 2005. As for the infrastructural funding approved by FCT in 2005, in the amount of 1,5 million Euros, only 100 000 were actually transferred to the ICVS.

The research projects run at ICVS also had external funding from FCT (15 projects), Calouste Gulbenkian Foundation (4 projects), CRUP (1 project) and *Agência de Inovação* (2 projects), in a total amount of about 1,5 million Euros over three years, of which 327 230 were actual income in 2005. The FCT has provided in 2005 an amount of 64 910 Euros as basal funding for the ICVS and 77 836 Euros as part of the pluriannual programmatic funding.

In conclusion, in the year 2005 the School, including the ICVS, had a total current income of around 3,4 million Euros.

4. PLANS FOR 2006

The dynamics of the School operation is now well established and the experience from the four previous academic years permitted a consolidated overall view of the medical programme curriculum. The main problems to be addressed in the coming year continue to be the reinforcement of the human resources, the completion of the detailed curricular development for the full undergraduate programme and the consolidation of the links and cooperation with the health services. The consolidation of the School's organisational structure will also be an important issue. Specific objectives for 2006 are, therefore:

- to finish the preparation of curricular development and courseware for the sixth curricular year of the undergraduate programme;
- to admit a new group of 60 students;
- to proceed with the post-graduation programmes and to have the MD/PhD programme formally approved within the new legal framework that is being set up in connection to the implementation of the Bologna Process;
- 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 funding of the 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 continue the process of construction of the new buildings and to refurbish and equip the new provisional spaces 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;
- 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 review the School Regulations with a focus on functionally oriented organisational structures, rather than rigid administrative departments, and to set up procedures and criteria for strategic planning and management in the coming steady-state phase of the School;
- 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)organisation 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.

Unfortunately, no progresses were made in 2005 in these fields. The School of Health Sciences will continue to actively participate in any initiatives that the $Grupo\ de$

Missão will take in this regard, viz. the meetings of the Medical Faculties, and push forward the concrete proposals we have presented, as mentioned in earlier reports.

5. CONCLUSIONS

5.1 Analytical Summary

A brief critical analysis of the School's operation shows that the core strategies and goals set up for 2005 were met in their essential aspects. The continuing enthusiasm, commitment, permanent availability and competence of all School members were determinant for the progresses achieved and constitute a great asset for the School.

Important strengths, on which the School has been 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 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.

The fact that the construction of the new building is finally moving forward is a good incentive to suffer in a gracious way the limitation of the present facilities. Concerning the new Hospital, the contest for the public-private partnership is progressing and six candidates have submitted their tenders last August. The decision process will be complex and slow, meaning that the construction works will probably start only in 2007 and the Hospital will be operational in 2010.

The recognition and funding of the ICVS by the Foundation for Science and Technology, as well as the significant number of projects financed by the Gulbenkian Foundation, have a strong impact on the working conditions and in improving critical mass for research.

The School is aware that 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.

In spite of the continuing negative economic conjuncture in Portugal, the Government's intention to develop a National Technologic Plan and invest in innovation may open new windows of opportunity for centres of science and technology integrated in knowledge platforms for a regional sustained development. In this respect, the ECS is following closely the plans for the setting up of a cluster on health technologies in the Minho Region.

5.2 The Recommendations from the External Advisory Committee

The School of Health Sciences is strongly committed to address and take into consideration the opinions and recommendations from the External Advisory Committee and to make explicit on the annual report the measures that were taken 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. M.D./Ph.D. routes

"The EAC recommends that the Steering Committee give detailed consideration to (the program) implementation and specially the funding for this important international initiative. (...) With respect to (the Bologna Agreement), it was suggested that the Ph.D. route should be made available at the appropriate time of the medical course".

The ECS is starting the Summer laboratory rotations already in 2006, so that students interested in this new route can fulfil the admission requirements to start the PhD programme in the academic year 2007/08. The main need for financial resources is related with grants for the doctoral students, which will only occur in two years time. Preliminary contacts with funding agencies are promising and we are convinced that a pool of doctoral grants will be made available at the appropriate time.

The second point raises two different questions. One is the legal requirement that PhD entrants must have a former degree of *Licenciado* or *Mestre*, which in the present situation would not be met by the medical students before finishing their sixth curricular year. According to a project for a decree-law to be approved very soon by the Government this problem will not longer exist, because the medical degree programmes will be considered as an integrated Master degree and after the completion of the first three years of the curriculum a certificate of *Licenciatura* will automatically be issued.

The other question is related to the internal requirements for admission into the MD/PhD programme. The School believes that before entering the PhD route, the students must be mature enough in what concerns the scientific foundations and the laboratory practice. So, although the students will acquire the *Licenciatura* degree after three years of learning, for admission into PhD they will be required to finish the 5th year and successful perform two Summer laboratory rotations.

2. Research Institute

"The EAC (...) recommended that an External Advisory Committee for research assessment should be appointed"

As pointed out in the ICVS annual report, the External Advisory Committee for the ICVS has already been set up, in accordance with the FCT regulations. Its first meeting is scheduled to happen next May.

"The EAC recommended that the research should be highly focused on the most promising topics, in order to optimise the human resources available. (...) Furthermore, the formulation of a policy with respect to academic career progression would be most welcome".

In the previews annual report, where the question of an integrative policy for research was already raised, we have concurred with the EAC's suggestion to consolidate in the strategically important areas of research. The initial planning of the ICVS, taking into account the prevalent heath problems in the region and also the articulation between teaching and research in order to provide a research based learning environment in all the major areas of teaching, defined six strategic research areas, but soon after a more aggregated organisation was adopted, concentrating in the present three wider areas of strategic interest for the scientific foundations of the medical degree.

The research projects that were approved for external funding in 2005, as well as some recent papers, already reflect the interdisciplinary approach resulting from the integrative policy that was adopted.

As for the second question and as mentioned in section 3.4, the School, following discussions within the Scientific Council and the Directive Board, has adopted two policy documents highly relevant to the academic career progression and the focus on research: one deals with the required profiles for professorship in the different ranks of the academic career at the ECS (Appendix I) and the other clarifies the average percentage of time that the faculty is expected to dedicate to pedagogical and to research activities (Appendix II).

In what concerns the desirable requirements for progression, the standards established at the ECS are significantly more demanding than those recommended in the University's general criteria. The wide acceptance of the standards within the ECS shows the strong commitment of the faculty to built up a School of reference.

As for the time allocation to the different academic functions, it is worth mentioning that, although the learning methodologies in use at the ECS are very demanding on the faculty during the teaching periods, on average for each hour of effective contact with the students the teachers have two hours available for preparation and coordination of the pedagogical activities and, more important, 57,5% of the faculty annual workload is dedicated to research activities.

3. Medical Education Unit (MEU) and research

"The EAC emphasised that it is important that the MEU develops an active research program using the valuable longitudinal data that this new course is capable of yielding"

The Medical Education Unit is working on the planning of this project and will present it to the EAC at the coming visit.

In a similar line, the unit is keeping a scientific look on the innovative learning processes experienced at the ECS. Four papers were submitted to the European Congress on Medical Education and accepted to presentation, two of which are being submitted to international journals on Medical Education.

4. Clinical teaching

"The EAC pointed out that it is necessary to appoint Clinical Academic Staff to the Faculty in order to promote and consolidate the articulation between the Faculty and the clinical departments that share the responsibilities of clinical teaching".

The school is moving into the direction pointed out by the EAC, but in a careful way in order to safeguard two basic principles that underlie the model adopted for the articulation with the health services: (i) the clinical training of the students is the responsibility of competent clinicians in the health services where the Residences take place, whom are encouraged to assume an academic differentiation by involving themselves in postgraduate and research activities, and have an official status within the ECS; (ii) the coordination of all teaching and the clinical seminars concerned with the cognitive levels of teaching is an inalienable responsibility of the ECS.

In 2005 a formal contract was assumed with several MDs cooperating with the School, as can be seen in Table 3. Consequently, 75% of the regular faculty members (38 out of 51) are MDs, nine of them with a doctoral degree and many others are pursuing doctoral studies. This policy line will shortly lead to a strong nucleus of highly qualified clinical academic staff.

5. New building, infra-structures and financing

"In any case, the faculty has to pursue an active policy of fund raising"

The recognition of the ICVS by the FCT and its rating as Excellent, as well as the positive public image of the Medical Degree Programme, are good starting points to try to increase fund raising, although the difficulties are huge due both to the unfavourable economic situation in Portugal and to the prevailing culture that does not favour the emergence of Maecenas for scientific activities. Some progress was made in 2005 and new contacts are under way.

6. Relations with the Nursing School

"The EAC recommended that the Steering Committee should explore further the possibilities offered by the presence of a Nursing School in the same campus".

The ECS and the Nursing School (ESECG – Escola Superior de Enfermagem Calouste Gulbenkian) have been working together with the aim to integrate their activities as much as possible. The fact that the facilities of the Nursing School are still in mid town, away from the campus, raises some difficulties, but some progresses have been accomplished, as shown in the report from the joint committee ECS/ESECG included in Appendix IV.

The most significant advances, so far, respect to synergies between the medical and the nursing degrees (mutual co-operation of faculty, joint activities for students in the curricular areas of Vertical Domains, support from the Medical Education Unit to help in the reformulation of the learning processes in the nursing degree), to the co-operation of the ICVS in Seminars delivered in specialization (post-graduation) courses at the ESECG, and to the development of a strategic plan for the upgrading of the academic qualifications of the ESECG faculty with the support from the ICVS human and laboratorial resources.

7. Students

"Last but not least, the EAC points out that it was most impressed by the contacts with the students, who showed strong motivation, an enthusiastic drive and a critical attitude. Furthermore they presented themselves as articulate and assertive young people, who represent an invaluable asset of the School. It is clear that these students are the best ambassadors for the new Faculty.

The meeting with the students revealed the importance that they attach to the option projects and to the vertical program. It was clear that the students are already actively shaping the curriculum according to their experience and criticisms. In this context the students see themselves not as clients of the Faculty but as part of the process and members of the Faculty's team. This is a most healthy attitude."

The EAC findings confirm our everyday impressions and the School is proud of its students' sense of belonging and partnership. This is a great incentive to pursue and strengthen the curricular areas more adaptable to the students' wishes and interests – the Optional Projects, the Vertical Domains and also the Seminars *From Clinics to Molecular Biology* – and to continue to provide learning environments where horizontal personal and interpersonal skills can be nurtured, having in mind not only the training of competent medical professionals but also the education of active, critical and actuating citizens.

5.3 A Final Comment

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The progresses accomplished in 2005 represent a further and positive step to bring into practice the ambitious ideas and goals formulated in the ECS mission statement. The fact that quite positive results have been achieved with scare human and financial resources clearly demonstrates the unwavering effort, enthusiasm and professionalism of all the School members, staff and students alike, in the collective task we are undertaking. A strong and warm word of praise and thanks is due to all of them.

Counting on the institutional support from the University, the zeal of the School members and the goodwill of the many persons and entities that cooperate with us, we will pursue with determination the efforts to maintain the dynamics of the project and achieve the objectives established for 2006.

Sérgio Machado dos Santos President of the Steering Committee January. 2006

List of Acronyms

ANEM - National Association of Medical StudentsARS-N - Northern Regional Health Administration

BP - Biopathology

C - Clinics

CRUP - National Rectors' Conference
 CSH - Social and Human Sciences
 EAC - External Advisory Committee

EC - School of Sciences

ECS - School of Health Sciences
ENG - School of Engineering

ESECG - Nursing School (Escola Superior de Enfermagem Calouste Gulbenkian)

FCT - Foundation for Science and Technology

FM - Faculty of Medicine
FTE - Full time equivalent

HSM - Hospital de São Marcos-Braga

HSO - Hospital Senhora da Oliveira-Guimarães

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

Lica - *Licenciatura* (university 1st cycle degree)

MC - Molecules and Cells

MCTES - Ministry for Science, Technology and Higher Education

MD - Medical doctor

NEMUM - Association of Medical Students of University of Minho

SC - Community Health

SOF - Organic and Functional Systems

SRS - Sub-Região de Saúde

UEM - Medical Education Unit

UM - University of Minho

UP - University of Porto



APPENDIX I

ARTICULATION WITH THE HEALTH CENTRES WITH UNIVERSITY TEACHING

ARTICULATION WITH THE HEALTH CENTRES WITH UNIVERSITY TEACHING

The Decree-Law 206/2004 (19.August) established the legal framework for the health services 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 hospital services 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. 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.

In what concerns the School of Health Sciences, the Hospitals of São Marcos (Braga) and Senhora da Oliveira (Guimarães) are *Hospitals with University Teaching*. The protocols established in 2003 with these two Hospitals were subjected to minor adjustments to comply with the new regulations and were signed in 2004.

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.

Under the multi-centre approach adopted by the ECS for the clinical training of its students, several Health Centres in the Northern Region are cooperating with the School

and may qualify as *Health Centre with University Teaching*. Consequently, there was a need to establish appropriate formal coordination mechanisms for the articulation with the Health Centres. For this effect, a protocol and an articulation regime were agreed with the Regional Health Administration – North (ARS-N), following very closely the terms of the similar agreements with the Hospitals in Braga and Guimarães².

The texts of the protocol and the articulation regime with the ARS-N are fully transcribed in this Appendix, to exemplify the operational aspects of the articulation model.

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² The protocol and the articulation regime with the *Hospital Senhora da Oliveira – Guimarães* were included as Appendices in the *Annual Report 2004 of the School of Health Sciences*, University of Minho, January 2005.

PROTOCOLO DE ARTICULAÇÃO INSTITUCIONAL

ENTRE A UNIVERSIDADE DO MINHO

E A ADMINISTRAÇÃO REGIONAL DE SAÚDE-NORTE

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 a Administração Regional de Saúde-Norte (ARS-Norte), um protocolo que articula institucionalmente a Escola de Ciências da Saúde (ECS) da UM com a ARS-Norte, protocolo que se regerá pelo D.L. n° 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 a ARS-Norte consideram-se articulados institucionalmente para efeitos de leccionação nos Centros de Saúde da ARS-Norte, 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, que ficam a fazer parte integrante do presente protocolo.

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 da ARS-Norte, ou em quem ele delegar;
 - b) o Presidente da ECS, ou um seu delegado;
 - c) o Presidente do Conselho Científico da ECS que poderá delegar no coordenador da área científica de Saúde Comunitária ou em qualquer dos coordenadores das suas áreas curriculares;
 - d) O Director dos Serviços de Saúde da Sub-Região ou um seu delegado.
- **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)** propor planos de desenvolvimento dos Centros de Saúde, tendo em vista a sua adequação às necessidades da Escola em termos de meios humanos e materiais.
 - c) o apoio administrativo à Comissão será assegurado pela UM.

Cláusula 3ª

- 1. Os médicos da ARS- Norte, 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 da ARS- Norte como docentes da ECS serão autorizados pelo Reitor da Universidade, precedendo a anuência do Presidente do Conselho de Administração da ARS-Norte, e regulam-se pelas disposições aplicáveis do Decreto-Lei nº 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 da ARS-Norte o pagamento das remunerações resultante dos contratos é feito por esta através de transferência mensal de verbas da UM para a ARS-Norte até ao montante global dos encargos correspondentes.
- **5.** O montante global das verbas a transferir, no âmbito das actividades de formação clínica, será definido no acordo constante do "Regime de Articulação entre a Escola de Ciências da Saúde da Universidade do Minho e a ARS-Norte, para a Formação Clínica dos Alunos do Curso de Medicina".
- **6.** Aos médicos da ARS-Norte 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 da ARS-Norte, de acordo com a legislação aplicável.
- **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 ARS-Norte ou a quem esta indicar o conjunto das instalações e equipamentos desta que deverão ser afectados à leccionação das matérias dos planos de estudo da ECS, sem prejuízo da prestação de cuidados aos inscritos nos Centros de Saúde.
- **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 nos Centros de Saúde pela ECS, desde que incluídos nos planos de actividades propostos pela Comissão e aprovados pela ARS e pela ECS.

Cláusula 6ª

1. Face à especificidade da concepção da organização curricular do curso de Medicina que se rege por princípios de integração, transversal e longitudinal, o aluno tem contacto com a realidade clínica, neste caso com os Centros de Saúde, desde o 1º ao último ano curricular, e de acordo com as alíneas a) e b) do nº 6º do Artº 3º do D.L. nº 206/2004, de 19 de Agosto, o presente protocolo contempla o apoio genérico em todo o curso.

Cláusula 7ª

Na eventualidade de danos causados pelas actividades dos alunos durante o período de permanência e de formação nas instalações da ARS-Norte, cabe à Universidade do Minho a responsabilidade pela reparação daqueles.

Cláusula 8ª

As dúvidas surgidas na execução do presente protocolo serão resolvidas por despacho conjunto do Reitor da UM e do Presidente do Conselho de Administração da ARS-Norte.

Cláusula 9ª

- 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, 1 de Agosto 2005

REGIME DE ARTICULAÇÃO ENTRE A ESCOLA DE CIÊNCIAS DA SAÚDE DA UNIVERSIDADE DO MINHO E A ADMINISTRAÇÃO REGIONAL DE SAÚDE DO NORTE, PARA A FORMAÇÃO CLÍNICA DOS ALUNOS DO CURSO DE MEDICINA

Preâmbulo

Com vista à leccionação nos Centros de Saúde da Administração Regional de Saúde do Norte (ARS-Norte), 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 a ARS-Norte, no que diz respeito à formação clínica dos alunos do curso de licenciatura de Medicina.

Cláusula 1ª

Princípios Orientadores

- 1 A ECS preconiza uma alteração significativa dos modelos de formação clínica prégraduada vigentes em outras escolas médicas. 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 Centros de Saúde, 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.

Cláusula 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 da ARS-Norte.
- 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 por formação clínica em Medicina Geral e Familiar e Saúde Pública a decorrer em Centros de Saúde.
- 4 No âmbito da formação no domínio cognitivo, poderá ainda haver necessidade de recurso às instalações dos Centros de Saúde, sendo necessária a autorização prévia do seu responsável.

Cláusula 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 quadro de pessoal da ARS-Norte.
- 2 A programação, o acompanhamento, a supervisão e a avaliação das actividades de formação clínica nos Centros de Saúde é da responsabilidade do Supervisor Clínico com a aprovação prévia do responsável do Centro de Saúde/Unidade de Saúde, onde decorrem essas actividades.
- 3 A participação dos médicos da ARS-Norte prevista no n.º 2 da cláusula 2ª e nos números 1 e 2 da presente cláusula necessitam da aprovação prévia do responsável do Centro de Saúde/Unidade de Saúde.
- 4 A UM pagará à ARS-Norte, nos termos previstos no nº 4 da cláusula 3ª do "Protocolo de Articulação Institucional entre a Universidade do Minho e a Administração Regional de Saúde do Norte", uma verba a acordar, a qual deverá ter em consideração o número de

alunos envolvidos em actividades de formação clínica em Medicina Geral e Familiar e Saúde Pública bem como os recursos humanos disponibilizados para esse efeito.

5 – A ECS compromete-se ainda a facultar aos médicos da ARS-Norte envolvidos no projecto o acesso, sem encargos, às actividades de formação e investigação por si promovidas.

Cláusula 4ª

Do Estatuto do Supervisor Clínico

- 1 O supervisor clínico é um docente da Área Curricular de Medicina Geral e Familiar e Saúde Pública, em número de um por Centro de Saúde onde existam alunos, pertencente ao quadro médico da respectiva ARS, designado pela Comissão Mista Permanente, sob proposta do Coordenador da Área curricular.
- 2 As actividades docentes do supervisor clínico estão obrigatoriamente incluídas nas suas funções no Centro de Saúde, 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 propinas.
- 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 Centro de Saúde ou grupos de Centros de Saúde, 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 Centro de Saúde;
- c) supervisionar as actividades dos alunos ao longo das residências em Centros de Saúde;
- d) participar, sempre que solicitado, nas actividades do Grupo de Trabalho da Residência em Centros de Saúde.

Clausula 5^a

Do Estatuto do Tutor Clínico

- 1 O tutor clínico é recrutado de entre os médicos do Centro de Saúde, sendo designado pela Comissão mista Permanente, sob proposta do supervisor clínico.
- 2 As actividades docentes do tutor clínico, estão obrigatoriamente incluídas nas suas funções assistenciais, 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 propinas.
- 5 O tutor clínico terá acesso prioritário às actividades de investigação clínica a decorrer no ICVS, podendo integrar as suas equipas de investigação.

Cláusula 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 a ARS-Norte para a leccionação das actividades curriculares da ECS, sendo da sua competência solucionar as dúvidas ou omissões nele contidas.

Cláusula 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.

APPENDIX II

STANDARDS RELATED TO THE REQUIRED PROFILES FOR PROFESSORSHIP AT THE ECS

STANDARDS RELATED TO THE REQUIRED PROFILES FOR PROFESSORSHIP AT THE ECS

Since its early stages the University of Minho has establish an internal set of standards as a reference to the required profiles for tenure in the academic career. These are minimal standards, but each School is expected to define more rigorous criteria, taking into consideration the specificities of its scientific domain.

This is a crucial question for the ECS, in view of the strict requirements for quality and innovation inherent to its creation. In particular, the way teaching and research are articulated and the objective to develop the Medical Programme and the ICVS as reference projects of excellence confer a greater responsibility to the ECS in regard to the quality standards to adopt in both the scientific and the pedagogic dimensions.

The policy paper included in this appendix establishes the principle of a annual assessment of each faculty member and sets up the profiles required for professorship in each rank of the academic career.

REFERENCIAL

PARA CONCURSO DE LUGARES DE QUADRO DE PROFESSORES, RECRUTAMENTO DE PROFESSORES AUXILIARES, PROVIMENTO DEFINITIVO E ADMISSIBILIDADE A PROVAS DE AGREGAÇÃO

NA ESCOLA DE CIÊNCIAS DA SAÚDE

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| 1.2. | Avaliação Anual |
| 2. | Concurso para professor associado |
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| В) | Mérito Científico |
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| 3. | Concurso para professor catedrático |
| A) | Competência pedagógica e orientação de dissertações |
| B) | Mérito Científico |
| C) | Assunção de responsabilidades institucionais |
| D) | Maturidade académica |
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1. Introdução

1.1. Enquadramento

Os recursos mais importantes de uma Escola Universitária são os seus recursos humanos. O prestígio e a afirmação da Escola, tanto no plano nacional como no internacional, passam de forma determinante pela qualidade e projecção do seu corpo docente/investigador, o que exige critérios de grande rigor no recrutamento e promoção do pessoal docente, que promovam e estimulem a qualidade. A experiência portuguesa demonstra que as Escolas que não souberam ou não puderam, na fase de crescimento, encarar com rigor esta questão se debatem com problemas de afirmação e qualidade ao atingirem a fase de estabilização, em que a renovação de quadros é lenta e não permite, por conseguinte, colmatar por essa via pontos fracos derivados de opções de recrutamento ou promoção menos adequadas.

A Universidade do Minho, bem consciente deste problema, procurou bem cedo definir critérios para a progressão na carreira docente, no sentido de estabelecer um referencial para as propostas de abertura de concurso por parte dos Conselhos Científicos e para os próprios júris, em termos de um conjunto de requisitos curriculares mínimos recomendáveis para apresentação a concurso.

Houve, no entanto, desde logo a noção de que a aplicação de critérios desta natureza não poderá deixar de ter em conta a especificidade de cada um dos domínios do saber, tendo ficado criada a expectativa de que cada uma das Escolas, com base nos paradigmas próprios da respectiva área do conhecimento, viesse a aferir esses critérios em termos de uma especificação mais pormenorizada e tendencialmente conducente a padrões mais rigorosos, dentro da ideia de se estimular uma diferenciação positiva entre Escolas.

Este tipo de preocupações reveste-se de uma importância acrescida para a Escola de Ciências da Saúde (ECS), face aos requisitos de qualidade e inovação que estiveram inerentes à autorização para a sua criação e que deverão orientar o seu desenvolvimento. Em particular, a forma articulada de organização do ensino e da investigação, bem como o objectivo de que o Curso de Medicina e o Instituto de Ciências da Vida e Saúde (ICVS) se constituam como pólos de referência, conferem uma maior responsabilidade quanto aos padrões de qualidade a adoptar em ambas as vertentes, padrões esses que se deverão enquadrar em referenciais internacionais.

1.2. Avaliação Anual

Pelas razões acima apontadas, assume-se como essencial que a cultura interna de qualidade da ECS, que constitui já um dos seus pontos fortes, encare decisivamente a tarefa (dificil e delicada, por falta de experiência e tradição em Portugal) de promover uma Avaliação Anual de desempenho em relação ao pessoal docente, efectuada por uma Comissão de Professores Catedráticos da Escola (**CPCE**). Esta avaliação, a efectuar em Janeiro de cada ano, deverá considerar o nível do desempenho global atingido por cada docente, integrando explicitamente os domínios de docência, de investigação e de assunção de responsabilidades institucionais, bem como o reconhecimento de maturidade académica. Esta apreciação global será expressa numa escala qualitativa de classificações de níveis de "EXCELENTE", "MUITO BOM", "BOM", "SUFICIENTE" ou "INSUFICIENTE".

É com estes objectivos em mente que se equacionam os critérios definidos nos pontos seguintes, a aplicar pelo período de cinco anos, com início em 2006, findo o qual poderão ser objecto de actualização face à evolução dos paradigmas deste domínio científico.

2. Concurso para professor associado

Para além dos requisitos legais estipulados no ECDU, deverão constituir condições mínimas para concurso de professor associado na ECS o cumprimento **cumulativo** dos critérios apresentados nas alíneas seguintes (Alíneas A a D).

A) Competência pedagógica e orientação de dissertações

Avaliação pela CPCE dos itens seguintes com classificação no seu conjunto de, pelo menos, Bom nos dois últimos anos.

- **a.1.** Assunção de responsabilidades no âmbito da coordenação pedagógica, bem como de experiência das metodologias de aprendizagem praticadas na ECS, documentadas pela qualidade dos *dossiers* pedagógicos e de textos e outros elementos de apoio à leccionação preparados pelo docente.
- **a.2.** Frequência de acções de formação, de cursos de pós-graduação nacionais ou internacionais na área da educação, com apresentação de certificado, perfazendo um total mínimo de 18 horas em cada dois anos.
- **a.3.** Publicações no domínio pedagógico nos últimos três anos das quais, pelo menos, uma comunicação num Congresso Internacional de Educação Médica, com afiliação à ECS.
- **a.4.** Avaliação individual do desempenho docente (inquéritos aos alunos, item "É um Excelente Professor") com classificação de Muito Bom/Excelente, pelo menos nos 2 anos precedentes.
- **a.5.** Assunção de responsabilidades de formação pós-graduada, traduzida:
 - na orientação (na qualidade de orientador principal) de, pelo menos:

2 alunos de PhD inscritos,

OU

6 alunos de Mestrado, 2 dos quais terminado com sucesso

- na organização de, pelo menos, duas actividades de pós-graduação (Cursos, Congressos, ...)

B) Mérito Científico

- b.1. Produção científica aferida pelos seguintes indicadores de avaliação:
 - Produção científica (aferida pelo Factor de Impacto, IF) ≥ 25

Produção científica = $\sum (IF_k \times f_k)$; Critérios de ponderação para o somatório: 1° ou último autor, f_k =1; 2° ou penúltimo autor, f_k =0,6; outro, f_k =0,3.

- Nº de citações ≥100
- **b.2.** Elaboração e coordenação de projectos científicos (na qualidade de PI) que tenham captado financiamentos externos em regime competitivo nos últimos três anos com, pelo menos, um montante de 50 000 Euros.

C) Assunção de responsabilidades institucionais

Avaliação pela CPCE da assunção de responsabilidades institucionais com classificação de, pelo menos, Bom nos dois últimos anos. Neste item será considerada a qualidade demonstrada no cumprimento de responsabilidades de gestão e de coordenação. Estas responsabilidades são consideradas nos seguintes contextos:

- Participação em Órgãos Directivos / Gestão Universitária da ECS **OU**
- · Participação em Órgãos Directivos / Gestão científica do ICVS
- Participação na coordenação de Núcleos/Unidades Funcionais da ECS/ICVS **OU**
- · Participação activa nas Interfaces ECS/Universidade/Sociedade

D) Maturidade académica

Maturidade académica para ocupação de um lugar de quadro, reconhecida explicitamente na última classificação anual atribuída pela CPCE.

3. Concurso para professor catedrático

Para além dos requisitos legais estipulados no ECDU, deverão constituir condições mínimas para concurso de professor catedrático na ECS o cumprimento **cumulativo** dos critérios apresentados nas alíneas seguintes (Alíneas A a D).

A) Competência pedagógica e orientação de dissertações

Avaliação pela CPCE dos itens seguintes, com classificação no seu conjunto de Muito Bom/Excelente nos três últimos anos.

- **a.1.** Assunção de responsabilidades pedagógicas no âmbito da coordenação pedagógica, bem como de experiência das metodologias de aprendizagem praticadas na ECS, documentadas pela qualidade dos *dossiers* pedagógicos e de textos e outros elementos de apoio à leccionação preparados pelo docente.
- **a.2.** Frequência de acções de formação, de cursos de pós-graduação nacionais ou internacionais na área da educação, com apresentação de certificado, perfazendo um total mínimo de 18 horas em cada dois anos.
- **a.3.** Publicações no domínio pedagógico nos últimos três anos das quais, pelo menos, uma comunicação num Congresso Internacional de Educação Médica, com afiliação à ECS, como 1º ou último autor.
- **a.4.** Avaliação individual do desempenho docente (inquéritos aos alunos, item "É um Excelente Professor") com classificação Muito Bom/Excelente, pelo menos nos 3 anos precedentes.
- **a.5.** Assunção de responsabilidades de formação pós-graduada, traduzida:
 - na orientação (na qualidade de orientador principal) de pelo menos:
 - 4 alunos de PhD inscritos, 2 dos quais terminados com sucesso
 - OU
 - 3 alunos de PhD inscritos e 3 de Mestrado, 4 dos quais terminados com sucesso
 - na organização de, pelo menos, 4 actividades de pós-graduação (Cursos, Congressos, ...)

B) Mérito Científico

OU

- **b.1.** Produção científica aferida pelos seguintes indicadores de avaliação:
 - Produção científica (aferida pelo Factor de Impacto, IF) ≥50
 - Produção científica = $\sum (IF_k \times f_k)$; Critérios de ponderação para o somatório: 1° ou último autor, f_k =1; 2° ou penúltimo autor, f_k =0,6; outro, f_k =0,3.
 - Nº de citações ≥250
- **b.2.** Elaboração e coordenação de projectos científicos (na qualidade de PI) que tenham captado financiamentos externos em regime competitivo nos últimos cinco anos com, pelo menos, um montante de 100 000 Euros.

C) Assunção de responsabilidades institucionais

Avaliação efectuada pela CPCE com classificação de Muito Bom/Excelente, pelo menos em dois anos enquanto professor associado, da assunção de responsabilidades institucionais. Neste item será considerada a qualidade demonstrada para o cumprimento de responsabilidades de gestão. Estas responsabilidades são consideradas nos seguintes contextos:

Participação em Órgãos Directivos / Gestão Universitária da ECS

- Participação em Órgãos Directivos / Gestão científica do ICVS
 OU
- Participação na coordenação de Núcleos/Unidades Funcionais da ECS/ICVS
 OU
- · Participação activa nas Interfaces ECS/Universidade/Sociedade

D) Maturidade académica

Maturidade académica para ocupação de um lugar de quadro, reconhecida explicitamente na última classificação anual atribuída pela CPCE.

4. Disposições complementares

4.1. Recrutamento de professores auxiliares

A categoria normal de recrutamento de pessoal de carreira será, tendencialmente, a de professor auxiliar.

É importante garantir que os candidatos seleccionados tenham conhecimento pleno das especificidades do projecto de ensino e da forma prevista para o seu desenvolvimento, nomeadamente em cinco aspectos essenciais: (i) a perspectiva do Curso de Medicina como um projecto a ser construído e desenvolvido de forma participada e permanentemente acompanhada; (ii) os processos de aprendizagem centrados no estudante, perante os quais a forma tradicional de ensino magistral perde significado; (iii) a organização horizontal dos conteúdos curriculares e a organização modular do currículo, que implicam que as competências associadas à coordenação de disciplinas individuais sejam transferidas para os coordenadores de área curricular e coordenadores de módulo; (iv) o papel da Unidade de Educação Médica, em termos de apoio, coordenação e monitorização na prossecução dos objectivos educacionais; (v) o papel da investigação, como elemento crucial para um processo de aprendizagem baseado na investigação, bem como a subordinação dos projectos de investigação às orientações estratégicas e às áreas prioritárias definidas para o ICVS.

Por essa razão, é política da Escola contratar os docentes doutorados como professores auxiliares convidados por um período probatório de dois anos, após o qual, mediante o cumprimento dos requisitos nas alíneas **a.1** e **a.4** do ponto **2** com respeito ao ano mais recente, se procederá à contratação em lugar de carreira.

4.2 Provimento definitivo

A concessão de provimento definitivo constitui um acto de natureza essencialmente administrativa, em que está em causa um juízo sobre a adequação do trabalho produzido face à categoria em que o docente se integra e aos objectivos e interesses da instituição.

O provimento provisório dos professores associados e catedráticos pode ser prorrogado uma vez, pelo que, ao fim do primeiro período de provimento, se justifica a adopção de critérios de avaliação de desempenho equivalentes aos adoptados para a abertura do concurso.

Nos restantes casos, dado que a negação do provimento definitivo implica a cessação do contrato, o interesse da Escola na manutenção do docente assume relevância especial. Contudo, a consideração do interesse institucional só deverá significar que, no conjunto das três componentes curriculares essenciais – a docência, a investigação e a assunção de responsabilidades institucionais – se possa admitir não estarem marginalmente cumpridas as condições mínimas (nos termos indicados neste documento a propósito da abertura de concurso para professor associado) apenas numa delas, desde que se verifique um cumprimento superior aos requisitos mínimos nas restantes.

4.3. Provas de agregação

As provas de agregação são requeridas sob responsabilidade do candidato. Compete à Escola propor a composição do júri, podendo ainda optar pela apreciação prévia sobre a admissibilidade às provas.

A Escola de Ciências da Saúde adopta como política proceder de forma sistemática à apreciação prévia sobre a admissibilidade às provas, facultando essa apreciação quer aos candidatos, quer aos júris que forem constituídos.

Tomando por base os critérios a este respeito definidos pela Universidade do Minho, adopta-se como base referencial para a referida apreciação prévia:

Demonstração de capacidade para coordenar projectos e equipas, no desenvolvimento de investigação independente e/ou no desenvolvimento de projectos de interacção com a comunidade (mínimo de 5 anos);

Demonstração de capacidade de coordenação pedagógica (nos termos indicados neste documento a propósito da abertura de concurso para professor catedrático);

a) Demonstração de *impacto científico* da investigação desenvolvida individualmente e em equipa, bem como em resultado da orientação de formação a nível de doutoramento (produção científica ao nível dos valores exigidos para abertura de concurso para professor catedrático);

b) Demonstração de capacidade de orientação de formação pós-graduada a nível de doutoramento (pelo menos um doutoramento concluído com sucesso).

APPENDIX III

A MODEL FOR THE ALLOCATION OF WORKLOAD TO PEDAGOGIC AND SCIENTIFIC ACTIVITIES

A MODEL FOR THE ALLOCATION OF WORKLOAD TO

PEDAGOGIC AND SCIENTIFIC ACTIVITIES

The ECS faces some difficulties to fill into the information system of the University, namely in what concerns the average teaching load of faculty in terms of contact hours computed on a weekly basis according to the traditional model of magisterial teaching and an even distribution of teaching loads for each staff member along the academic year.

Indeed, the way teaching is organised at the ECS implies that teachers have periods of intensive contact with the students along one or more modules, alternating with periods of intensive research activity. Consequently, there is the need to develop a model to estimate the equivalent to fixed weekly teaching loads. This has also the advantage of allowing a better perception of the annual workloads dedicated to pedagogic and to research activities.

The policy document in this appendix develops such a model and concludes that, on average:

- a) the faculty dedicates 57.5% of the annual workload to research activities and 42.5% to pedagogic activities;
- b) regarding the pedagogic workload, one third refers to contact hours with the students and two thirds to pedagogic coordination and to prepare the lesson, *i.e.*, for each contact hour there are two hours available for coordination and preparation.

REFERENCIAL PARA AFECTAÇÃO DE HORAS DE SERVIÇO - ENSINO, INVESTIGAÇÃO E COORDENAÇÃO/GESTÃO - DOS DOCENTES COM VÍNCULO CONTRATUAL À ESCOLA DE CIÊNCIAS DA SAÚDE

1. Introdução

A Escola de Ciências da Saúde (ECS) é frequentemente confrontada com a necessidade de fornecer dados estatísticos ou de planeamento relativos a cargas lectivas computadas no modelo tradicional de ensino presencial organizado por disciplinas.

A forma como o ensino se organiza na ECS, com períodos intensivos de contacto com os estudantes ao longo de um ou mais módulos, que alternam com períodos de actividades de investigação intensiva, e em que os períodos para exames são muito mais curtos, implica que se estabeleça um referencial de afectação de horas de serviço que permita definir o equivalente a cargas lectivas médias distribuídas ao longo do ano académico.

Um exercício desta natureza tem ainda a vantagem de fornecer uma percepção mais clara das percentagens de tempo que, num cômputo anual, são dedicadas às principais vertentes funcionais.

Desenvolve-se, por conseguinte, um referencial de imputação de horas de serviço pelas vertentes pedagógica e de investigação científica, que poderá ser aperfeiçoado à medida que se ganhe experiência na sua aplicação.

2. Referencial de Imputação (para um período lectivo anual de 40 semanas)

2.1. Processo de Bolonha:

- Horas de trabalho total do aluno durante 40 semanas lectivas: 1600 horas anuais (40 horas/semana)
- Horas de contacto do docente com o aluno durante 40 semanas lectivas: 960 horas anuais (60%)
- Horas de trabalho individual do aluno durante 40 semanas lectivas: 640 horas (40%)

2.2. ETIs alocados à ECS:

- ratio de 1/8 para os três primeiros anos do curso

- em média 7,5 docentes ETIs por ano lectivo (para 60 alunos)

2.3. Referencial para a distribuição das horas de ensino presencial dos docentes:

- 50% das actividades de ensino (sessões laboratoriais, discussão de artigos, etc.): **Média** de **2,5** docentes em permanência para 60 alunos
- 25% das actividades de ensino (auto-aprendizagem tutorizada e outras): **Média** de **1,5** docentes em permanência para 60 alunos
- 25% das actividades de ensino (seminários, actividades de discussão, sínteses, avaliação e outras.): **Média** de **1,5** docentes em permanência para 60 alunos
- consequentemente, uma permanência **Média de 2** docentes para 60 alunos

2.4. Carga horária resultante:

- 1 920 horas presenciais totais dos docentes por ano lectivo (960x2)
- 256 horas por ano lectivo / ETI (1 920 / 7,5 ETIs)
- 6,4 horas / semana /ETI (256 / 40 semanas lectivas)

2.5. Síntese de afectação de horas de serviço por regime contratual (40 semanas de período lectivo):

| | Vertente Pedagógica (50%) | | Vertente de Investigação Científica (50%) | Total de horas de serviço na ECS (40 semanas/ano lectivo) | |
|------------------|--|---|--|---|----------------------|
| | Ensino Presencial (horas de contacto com o aluno incluindo avaliação) | Preparação de aulas e actividades de coordenação/gestão pedagógica | Investigação eCoordenação/Gestão Científica | Horas/Sema na | Horas/Ano Lectivo |
| Contrato 100% | 256 h/ano lectivo | 444 h/ano lectivo | 700 h/ano lectivo | 35 | 1400 |
| | (6,4 h/semana) * | (11,1 h/semana) | 17,5 h/semana | | |
| Contrato 50% | 128 h/ano lectivo | 222 h/ano lectivo | 350 h/ano lectivo | 17,5 | 700 |
| | (3,2 h/semana) | (5,55 h/semana) | 8,75 h/semana | | |
| Contrato 40% | 102,4 h/ano lectivo 2,56 h/semana | 177,6 h/ano lectivo 4.44 h/semana | 280 h/ano lectivo 7 h/semana | 14 | 560 |
| Contrato 30% | 76,8 h/ano lectivo | 133,2 h/ano lectivo | 210 h/ano lectivo | 10,5 | 420 |
| | 1,92 h/semana | 3,33 h/semana | 5,25 h/semana | | |
| Contrato 20% | 51,2 h/ano lectivo | 88,8 h/ano lectivo | 140 h/ano lectivo | 7 | 280 |
| | 1,28 h/semana | 2,22 h/semana | 3,50 h/semana | | |

^{*} Esta correspondência de carga lectiva ao modelo tradicional de ensino presencial corresponde, na prática da ECS com concentração de períodos de ensino presencial, a cerca de 8 semanas (a 4 dias úteis/semana) de serviço lectivo por docente / por ano lectivo.

3. Reflexões complementares

- **3.1** É política da ECS que, por princípio, todo o pessoal docente esteja envolvido em actividades de investigação, incluindo o pessoal com contrato a tempo parcial.
- É, no entanto, de admitir que pontualmente possa existir uma contratação a tempo parcial exclusivamente para actividades de natureza pedagógica. Nesse caso, o número de horas a dedicar à vertente pedagógica será, naturalmente, o que na tabela é indicado na coluna "total de horas em serviço na ECS".
- 3.2 A imputação de 50% do tempo à vertente pedagógica durante as 40 semanas do ano lectivo permite uma alocação, bastante favorável, de cerca de duas horas para preparação de aulas e actividades de coordenação/gestão pedagógica por cada aula de "ensino presencial".
- 3.3 Considerando que, das restantes 12 semanas do ano, cinco correspondem a férias e sete são dedicadas exclusivamente à investigação, resultam 245 horas adicionais (7 x 35) de tempo para investigação, *i.e.*, das 1 645 horas de trabalho total anual 945 são dedicadas à investigação (57,5%) e 700 horas são atribuídas à vertente pedagógica (42,5%).

APPENDIX IV

ARTICULATION BETWEEN THE NURSING AND THE HEALTH SCIENCES SCHOOLS

REPORT FROM THE JOINT COMMITTEE ECS/ESECG

ARTICULATION BETWEEN THE NURSING AND THE HEALTH SCIENCES SCHOOLS Report from the Joint Committee ECS/ESECG

The Nursing School (Escola Superior de Enfermagem Calouste Gulbenkian – ESECG) was integrate into the University of Minho as an autonomous polytechnic school, but there has been a mutual understanding from the ESECG and the ECS, supported by the Rector, that there should be a strong scientific and pedagogic integration between the two Schools.

A Joint Committee was set up, to define the model of articulation and the procedures and initiatives to gradually implement the integration of activities whenever possible. The fact that the ESECG is located in mid-town and that it will take a few years to build its new facilities at the Gualtar Campus raises some problems, but progresses are being achieved.

The overall strategy for the articulation between the ESECG and the ECS was already included in the previous annual report¹. The main objectives that were established 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 towards a more 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.

The Joint Committee, in the enclosed document, reports on the initiatives taken in the academic year 2004/2005 and establishes an action plan for 2005/2006.

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¹ Annual Report 2004, School of Health Sciences, University of Minho, January 2005. pp. 71.82.

RELATÓRIO DE ACTIVIDADES DA COMISSÃO DE INTEGRAÇÃO CIENTÍFICO-PEDAGÓGICA DA ESCOLA SUPERIOR DE ENFERMAGEM CALOUSTE GULBENKIAN NA ESCOLA DE CIÊNCIAS DA SAÚDE DA UNIVERSIDADE DO MINHO

Grupo de Trabalho

Cecília Leão (ECS, Coordenação) Armando Almeida (ECS) Jorge Correia Pinto (ECS) Beatriz Araújo (ESECG) Nazaré Vieira (ESECG)

Junho de 2005

I. ANO LECTIVO 2004-2005

Durante o ano lectivo 2004-2005 iniciaram-se as actividades de integração da Escola Superior de Enfermagem Calouste Gulbenkian (ESECG) na Escola de Ciências da Saúde (ECS) da Universidade do Minho, segundo os critérios e o programa estabelecido no Dossier de Integração Científico-Pedagógica do Projecto delineado pelo Grupo de Trabalho estabelecido pela Reitoria da Universidade do Minho, constituído pelos Professores Cecília Leão (Coordenação), Armando Almeida e Jorge Correia Pinto pela ECS e pelas Doutoras Beatriz Araújo e Nazaré Vieira pela ESECG e aprovado em Julho de 2004 pelo Senado da Universidade do Minho.

A. Integração a nível do Ensino

1. Ensino Graduado

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

Foram identificadas disciplinas do plano de estudos da Licenciatura de Enfermagem para as quais não existem valências de ensino na ESECG que, com o recurso a docentes da ECS, evitarão a necessidade de recorrer a Professores Externos à Universidade do Minho, conforme o Anexo I do Documento de Julho de 2004. Assim, foi decidido:

- Avançar já no ano lectivo 2005-2006 com a participação de Professores da ECS no ensino das disciplinas de Microbiologia e Imunologia.
- No entanto, devido à existência de compromissos anteriores com diversos professores de outras disciplinas do 1º ano da Licenciatura em Enfermagem, estas recorrerão ainda no ano lectivo 2005-2006 a Professores Convidados externos à ESECG e ECS.
- Deste modo, não será ainda durante o ano lectivo 2005-2006 que se procederá a uma estruturação de todas as disciplinas do 1º ano da Licenciatura em Enfermagem em Áreas Curriculares distribuídas por Módulos, segundo o modelo que decorre já em pleno na ECS.

No decorrer da Área Curricular da ECS "Domínios Verticais", transversal ao 1°-4° ano do Curso de Medicina, ocorreu em algumas sessões com temas de carácter didáctico e de divulgação médico-científica, a junção dos alunos das duas Licenciaturas, Medicina e Enfermagem. As sessões decorreram no Anfiteatro da ESECG com capacidade para albergar

os alunos de um ano de cada Licenciatura. Os temas e os anos de Licenciatura presentes foram os seguintes:

- "O apelo da relação"- Mestre Goreti Mendes (Enfermagem) 2° ano de Medicina e 2° ano de Enfermagem
- "Os idosos"- Mestre Isabel Lage (Enfermagem) 3° ano de Medicina e 2° ano de Enfermagem
- "Nutrição e Saúde"- Dra Sandra Lourenço 3º ano de Medicina e 2º ano de Enfermagem
- "Sexualidade", Dr. Freitas Gomes 3° ano de Medicina e 2° ano de Enfermagem
- "Ética na relação com o Outro"- Prof. Ana Queiróz (E. E. Bissaya Barreto, de Coimbra) - 4º ano de Medicina e 2º ano de Enfermagem

Estabeleceram-se os primeiros contactos entre a ESECG e a Unidade de Educação Médica da ECS no sentido de se estabelecerem pontos de contacto para que metodologias de Ensino e Avaliação possam ser utilizadas ou adaptadas pela ESECG à Licenciatura de Enfermagem, nomeadamente aos docentes e alunos.

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

Apesar de apenas ser possível avançar com uma colaboração na docência em duas disciplinas da Licenciatura de Enfermagem e não ser concretizável em 2005-2006 o estabelecimento do ensino por Módulos de Áreas Curriculares de Ensino Integrado e centrado no aluno, foi decidido que as outras disciplinas do 1º (e pontualmente do 2º e 3º) ano serão libertadas dos seus compromissos com Professores Externos à Universidade do Minho de modo ao ano Lectivo 2006-2007 já proporcionar aos alunos que entrem de novo na Licenciatura de Enfermagem o modelo de ensino praticado desde 2001-2002 na ECS.

2. Ensino Pós-Graduado

- **2.1** Ensino Pós-Graduado não conducente a Grau Académico
- **2.1.1**. Cursos que conferem Título Profissional de Enfermeiro Especialista

Foi mantido o Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Materna e Obstetrícia.

2.1.2. Outros cursos de Pós-Graduação

O curso de Pós-Graduação de Especialização em Enfermagem de Estomaterapia já se realizou em 2004-2005 com a colaboração de docentes e investigadores da Escola de Ciências da Saúde e do Instituto de Investigação em Ciências da Vida e da Saúde (ICVS), os quais ministraram seminários nas áreas de especialização de ensino e/ou investigação apropriadas. Os seminários e tutores da ECS foram os seguintes, por ordem cronológica no Curso:

- "Anatomia do Intestino" Nuno Sousa (Prof. Assoc./ECS)
- "Histologia e Embriologia do Intestino" Armando Almeida (Prof. Aux./ECS)
- "Fisiologia do Intestino" Jorge Correia-Pinto (Prof. Assoc. Convidado/ECS)
- "A Flora Microbiana do Intestino" Prof

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 ((Prof. Cat./ECS))
- "Estomas Gastrointestinais em Crianças" Jorge Correia-Pinto (Prof. Assoc. Convidado/ECS)
- "Estomas Genito-urinários em Crianças" Jorge Correia-Pinto (Prof. Assoc. Convidado/ECS)
- "Neurobiologia da Dor" Armando Almeida (Prof. Aux./ECS
- "Gestão e Abordagem da Dor Crónica" Doutora Laurinda Lemos (FM/UP)
- "Fundamentos da Farmacologia Gastrointestinal" Fátima Baltazar (Prof. Aux./ECS)

2.2. Ensino Pós-Graduado conducente a Grau Académico

Estabeleceram-se as bases de uma colaboração entre a ESECG e a ECS com o objectivo de determinar as áreas de investigação nas quais os docentes e investigadores da ECS poderão apoiar a realização de temas de investigação que permitam a docentes devidamente motivados da ESECG realizarem uma tese de doutoramento e obterem o Grau de Doutor sob a orientação de docentes da ECS.

Foi ainda acordado que os temas de investigação para obtenção de uma Tese de Doutoramento implicarão a realização de um conjunto de trabalhos laboratoriais.

B. Integração ao nível da Investigação

Para a realização dos trabalhos laboratoriais serão disponibilizados os laboratórios do Instituto de Investigação em Ciências da Vida e da Saúde (ICVS), associado à ECS.

II. ANO LECTIVO 2005-2006

Durante o ano lectivo 2005-2006 irá ser reforçada a integração da ESECG na ECS da Universidade do Minho, não só através da manutenção das colaborações já iniciadas durante 2004-2005 como através de diversas iniciativas que terão o seu arranque real durante 2005-2006.

A. Integração a nível do Ensino

1. Ensino Graduado

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

Em relação às disciplinas do plano de estudos da Licenciatura de Enfermagem para as quais não existem valências de ensino na ESECG que, com o recurso a Professores da ECS, evitarão a necessidade de recorrer a Professores Externos à Universidade do Minho, foi decidido:

- Iniciar a participação de Professores da ECS no ensino das disciplinas de Microbiologia e Imunologia.
- Ser este o último ano lectivo com recurso a Professores Convidados externos à Universidade do Minho, de modo a permitir que as outras disciplinas básicas do 1º ano da Licenciatura em Enfermagem possam iniciar, no ano lectivo 2006-2007, o ensino integrado por Módulos de Aprendizagem de Áreas Curriculares que já se realiza na ECS.
- Determinar quais os docentes da ECS que de modo concreto serão escalonados para a docência das Áreas Curriculares do 1º ano e do 2º/3º ano que serão organizadas por Professores da ECS.
- Definir os moldes de realização e o ano lectivo de início da Área Curricular Projectos de Opção (2º ano do Curso de Licenciatura de Enfermagem) que, pelo seu sucesso na Licenciatura em Medicina, deverá ocorrer o mais brevemente possível.
- Continuar e aumentar a participação conjunta de alunos de Enfermagem e de Medicina na Área Curricular da ECS "Domínios Verticais", transversal ao 1º-4º ano do Curso de Medicina, não só pelo valor dos temas de carácter didáctico e

de divulgação médico-científica que decorrem ao longo desta Área Curricular como também pela junção, na mesma actividade, dos alunos das duas Licenciaturas, Medicina e Enfermagem.

Reforçar a colaboração entre a Unidade de Educação Médica (UEM) da ECS e o Conselho Pedagógico da ESECG na transmissão da experiência de análise pedagógica e de metodologias de Ensino e Avaliação à Licenciatura de Enfermagem, nomeadamente aos docentes e alunos.

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

Confirmar o ano lectivo de início da participação dos docentes da ECS na organização das Áreas Curriculares do 2º e 3º ano da Licenciatura em Enfermagem que serão da responsabilidade da ECS.

2. Ensino Pós-Graduado

2.1. Ensino Pós-Graduado não conducente a Grau Académico

2.1.1. Cursos que conferem Título Profissional de Enfermeiro Especialista

Será mantido o Curso de Pós-Licenciatura de Especialização em Enfermagem de Saúde Materna e Obstetrícia introduzindo a participação de Professores da ECS nos temas adequados deste curso.

2.1.2. Outros cursos de Pós-Graduação

Foi decidido:

- Manter a colaboração de docentes e investigadores da Escola de Ciências da Saúde e do Instituto de Investigação em Ciências da Vida e da Saúde (ICVS) que ministraram seminários nas áreas de especialização de ensino e/ou investigação apropriadas no curso de Pós-Graduação de Especialização em Enfermagem de Estomaterapia;
- Iniciar o Curso de Pós-Graduação de Especialização em Enfermagem de Reabilitação, com início no ano lectivo de 2005-2006, com 20 alunos, em colaboração com a ECS, com a participação de Docentes da ECS;
- Implementar o 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 e com a participação de docentes da ECS.

2.2. Ensino Pós-Graduado conducente a Grau Académico

Determinar os nomes e temas de teses dos docentes da ESECG que realizarão o doutoramento sob orientação de docentes da ECS nas instalações do ICVS - ECS.

B. Integração ao nível da Investigação

Para a realização dos trabalhos laboratoriais integrados no plano de Doutoramento dos docentes da ESECG sob orientação de docentes da ECS serão disponibilizados os laboratórios do Instituto de Investigação em Ciências da Vida e da Saúde (ICVS), associado à ECS.

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