



**School of Health Sciences**

**ANNUAL REPORT**

**2010**

**University of Minho**

## **1. INTRODUCTION**

The School of Health Sciences (ECS) has celebrated in 2010 its tenth anniversary. This milestone represented an important moment of internal assessment and external accountability. Overall, we are proud to say that we have achieved our goals and mission. This feeling of achievement is, however, accompanied by a sense of increased responsibility and the need to pursue continuous improvement in the next decade, to consolidate further this academic project. In parallel, we have graduated the forth cohort of medical students in 2010.

In 2010, and in agreement to our commitment to set the benchmark of quality at the highest international level, the ECS has promoted several important educational and research initiatives. At the educational level, the collaborative effort with the National Board of Medical Examiners (NBME-USA) was pursued so that every Minho' medical students could again participate in an international experience of assessment of clinical knowledge (along with Medical Schools from several other countries in the world). Additionally, and for the first time in 2010, we set up together with the NBME and Leuven Medical School, a basic science exam. The performance of students in these exams was extremely positive, which reassured the quality of the educational programme at an international level. These results are in accordance with a highly satisfactory performance of our graduates at the national selection examination (again significantly above mean national scoring in 2010).

In order to permanently adjust the curriculum to clinical practice realities, we have approved small, but important, changes in the curriculum. To expand the time for learning and training of medical semiology, we have expanded the duration of 2 curricular units in the 3<sup>rd</sup> year of the program. In addition, and to increase the time and number of clinical electives in the 5<sup>th</sup> year of the medical degree, we have augmented the time of this curricular unit; this move, in parallel with the establishment of protocols with several day-units in affiliated hospitals and with the National Institute of Forensic Medicine, will now allow new rotations for the students to will increase their contact with expanding realities in clinical practice such as ambulatory surgery.

Also relevant is the fact that the Pedagogic Council has approved by unanimity the new Assessment Regulation. This important step is a clear demonstration of the interplay and partnership of students and faculty members in the development of this project. Additionally, and also by unanimity the Pedagogic Council and, subsequently, the Scientific Council have approved a New Pathway for the Medical Degree for students holding a bachelor or "licenciatura"; this proposal was approved by the

University of Minho and is now under scrutiny by the National Accreditation of Higher Education Agency (A3ES). Hopefully, it will be implemented in September 2011.

At the external level it is important to mention that the ECS is now coordinating the Board of Portuguese Medical Schools. In this context, we have been taking an active role in the proposal of a new exam for the assessment to Medical residencies, but also in several proposals to adjust the assessment to Medical Schools, to coordinate efforts in post-graduation activities and in the recognition of medical degrees. Overall, these cooperative efforts have provided a coordinated action and position for the Medical Schools in Portugal, and the ECS is proud to be taking an important role in this taskforce. At the international effort, we are very proud to announce that the ECS has been included in the founding members of the European Board for Medical Assessment (EuroBMA).

The Life and Health Sciences Research Institute (ICVS) is a Research Unit fully integrated in the ECS, formally recognized by the Portuguese Foundation for the Science and Technology (FCT) in 2003. The ICVS was created to develop high profile biomedical, translational and clinical research on: (i) *Microbiology and Infection*, (ii) *Neurosciences* and, (iii) *Surgical Sciences*, assuming a relevant impact at the national and international levels, as highlighted by the maximum grade of “Excellent” granted by the FCT’s International Evaluation Panels in 2003 and in 2008.

In the present year, 86 papers were published in international peer-reviewed journals, with an average impact factor of 4.92. The ICVS publications included six papers in journals with impact factor above 10 and two papers in highly recognized journals, with an impact factor above 20. In addition, the work developed at the ICVS in 2010 resulted in the conclusion of nine PhD theses. The institute pursued the establishment an extensive network of national and international scientific collaborations and, as an important achievement of 2010, a significant amount of external/competitive funding was captured, not only from FCT, but also from the European FP7 as well as from International Foundations.

Importantly, in 2010 the second call for the formal PhD and Master programmes was successfully launched. To highlight, the first two students from our MD/PhD program defended their thesis. This accomplishment, for the first time in a Portuguese institution, proves that it is possible for MD students to obtain scientific credentials before completion of the medical training and engagement in clinical duties.

The detailed data on the scientific and pedagogical activities in 2010 is presented as usual in the autonomous reports. The present report is intended as a summary of those activities, giving an overall view of the School's organisation and its main strategies and progresses.

Due to continuous growth of the ECS, the number of faculty and non-faculty members has also be increased. The incorporation of these new members has been in general extremely positive and their integration brought added value. This integration has been achieved in parallel with the effort to improve the scientific and pedagogic qualities of the staff. The ECS has continuously monitored the performance of every staff member in several academic domains (scientific, pedagogic and managerial); a similar monitoring policy has been put forward in what regards the non-academic staff. Importantly, and in general, these policies have now been adopted by the University.

It is of relevance to mention here the excellent interaction between the ECS and healthcare institutions with which the ECS is affiliated. There is a continuous renewal of the efforts to expand this relevant partnership to assure the best environment for medical training and clinical care.

From the financial perspective, 2010 was a very difficult period for the University as a whole, and as a consequence for the Medical School. However, it is in moments of crisis that innovative solutions emerge. In parallel with a rigorous financial management, the ECS and the ICVS have significantly broaden their source of competitive funding. This has mitigated the detrimental impact of reduced budgets and assured the conditions for the continuous development, and subsequent consolidation, of the ECS project.

In the 10th year Report we are proud of what we did! We are, however, motivated to not only keep doing it, but even to improve it!

## **2. PLANS AND STRATEGIES FOR 2010**

### **2.1 Objectives and Policies**

The main objectives established for 2010 were to consolidate the undergraduate medical programme and the ECS/ICVS infrastructures, and to keep the pace of the development in ECS. To achieve these aims, we focused on the:

- improvement of the pedagogic and scientific quality of the ECS project;
- adjustment of the undergraduate curriculum, based on the experience of previous editions;
- recruitment of students that, based on the specificities of the curriculum/project, apply to the undergraduate medical program of the ECS-UM as first option;
- adjustment the post-graduation activities based on the previous experience of the Master and PhD programmes;
- recruitment new staff members (faculty, non-faculty and research) that bring extra-value to the project;
- effort to promote on staff development;
- strategic addition of equipment to maintain the quality of the facilities for pedagogic and research activities;
- continuous dialogue with the national health system (Ministry, Regional and Sub-Regional Administration, Hospitals, Health Centres) partners;
- revision the School's internal regulations, adjusting them to the new legal framework, and towards increased functionally-oriented organisation;
- support of our internal and external efforts to promote the best practices in medical education and research.

## 2.2 Organisation and Management

At present the governing bodies of the ECS are:

### Directive Board

The present composition is the following:

- *Maria Cecília Lemos Pinto Estrela Leão, President;*
- *Nuno Jorge Carvalho de Sousa, Vice-President* (Director of the Medical Degree);
- *Jorge Manuel Rolo Pedrosa, Vice-President* (Director of ICVS);
- *Joana Palha, Vice-President* (Director of Post-graduation).

The Directive Board meets on a weekly basis. The Directive Board manages and plans the School's in all its dimensions and monitors the on-going activities.

### The Scientific Council

The scope of the Scientific Council includes the scientific policy for the ECS, 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 the academic staff.

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

*Maria Cecília Lemos Pinto Estrela Leão, President*

*António Gil Pereira de Castro*

*Fernando José Santos Rodrigues*

*Joana Almeida Santos Pacheco Palha*

*Jorge Manuel Nunes Correia Pinto*

*Jorge Manuel Rolo Pedrosa*

*Manuel João Tavares Mendes da Costa*

*Maria Margarida Teles de Vasconcelos Correia Neves*

*Margarida Sofia da Silva Santos Saraiva*

*Nuno Jorge Carvalho Sousa*

*Paula Cristina da Costa Monteiro Ludovico*

### **The Pedagogic Council (Medical Course Committee)**

The main competences of the Pedagogic Council are the overview of the normal operation of the undergraduate medical degree programme and the continuous review of the curriculum. The committee also scrutinizes the actions taken as a result of the recommendations from the External Advisory Committee.

The Committee abides to the University of Minho's regulations concerning Pedagogic Councils, with the specific adaptations required by the integrated curricular organisation and also by the structural organization into phases. The Council integrates the Course Director (President). The members of Pedagogical Council at December 31<sup>st</sup>, 2010 were:

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December 31<sup>st</sup>, 2010

Nuno Sousa (President)

João Cerqueira

Paula Ludovico

Jaime Correia de Sousa

Joana Palha

Jorge Pedrosa

João Bessa

Manuel João Costa

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#### ***Students***

Teresa Pinto (6<sup>th</sup>y)

Ana Luísa Sousa(5<sup>th</sup>y)

João Firmino Machado (4<sup>th</sup>y)

João Louro (3<sup>rd</sup>y)

Alberto Silva (2<sup>nd</sup>y)

Ana Isabel Sá (1<sup>st</sup>y)

Vítor Hugo Pereira (3<sup>rd</sup> cycle)

Miguel Carvalho (3<sup>rd</sup> cycle)

### **The Scientific Area, Curricular Area and Module Coordinators**

The ECS has implemented innovative organizational policies within the University of Minho. In contrast with the characteristic departmentalization of other Schools, the “Scientific Area” was the organizational Unit elected by the ECS. It was considered that the benefits arising from a shared administrative management with no losses in scientific autonomy suited the School objectives better; in such terms, the Department concept of territorial ownership in the curriculum is dismissed, like what had been the case on the design of the curriculum and the organization of ICVS.

The duties of the Scientific Areas are to coordinate the curricular development and delivery in the corresponding areas, and assure an implementation of the adequate educational strategies and methods. The Scientific areas agglutinate and articulate the curricular areas in each phase of the Medical Curriculum promote the articulation between the phases, thus guaranteeing the overall coherence of the curriculum, paying attention to and eliminating omissions or repetitions. With the intention of strengthening the role of Scientific Areas Coordinators, they are elected by peers in the Scientific Area. The present Areas and respective Coordinators are as follows:

<b>Scientific Area</b>	<b>Coordinator</b>
Biomedical Sciences	Joana Almeida Palha
Pathology	Jorge Pedrosa
Community Health	António Jaime Correia de Sousa (as delegate of the President of the School)
Clinics	Nuno Jorge Carvalho de Sousa

The present coordinators are listed in Table 1 and appendix II.



**Table 1.a — Curricular Unit and Module Coordinators of Phase I (2010)**

<b>Curricular Unit</b> Module	<b>Coordinator</b>
<b>Introduction to the Medical Degree</b>	MANUEL JOÃO COSTA
<b>Molecules and Cells</b>	FERNANDO RODRIGUES
From Anatomy to Cellular Physiology	Paula Ludovico
Molecular Genetics Foundations	Fernando Rodrigues
Proliferation Differentiation Cellular and Death	Susana Pascoal
<b>Functional and Organic Systems I, II and III</b>	JOANA PALHA
Gen. Introd. and Musculoskeletal System and Skin	Armando Almeida Joana Palha
Digestive System	Carla Rolanda
Circulatory and Respiratory Systems	Jorge Correia Pinto Maria João Baptista
Urinary System	Armando Almeida
Reproductive System and Development, Growth and Ageing	Patrícia Maciel
Nervous System	João Bessa João Cerqueira
Endocrine System	João Sousa
<b>Option Project I</b>	PAULA LUDOVICO
<b>Option Project II</b>	ANTÓNIO GIL CASTRO RUI REIS
<b>Training in a Health Centre</b>	ANTÓNIO JAIME SOUSA
<b>Family, Society and Health I</b>	ANTÓNIO JAIME SOUSA
<b>Vertical Domains I</b>	CECÍLIA LEÃO

**Table 1.b — Curricular Unit and Module Coordinators - Phase II (2010)**

<b>Curricular Unit</b>	<b>Coordinator</b>
<b>Biopathology and Introduction to Therapeutics</b>	JORGE PEDROSA
General Pathology and Introd. to Pharmacology	José Miguel Pêgo
Genetics and Environment	Rui Reis
Immunopathology	António Gil Castro
Infectious Diseases	Margarida Correia Neves
<b>Introduction to Clinical Medicine</b>	NUNO SOUSA
<b>Introduction to Community Health</b>	ANTÓNIO JAIME SOUSA
<b>Follow -up of a Family II</b>	ANTÓNIO JAIME SOUSA
<b>Vertical Domains II and III</b>	CECÍLIA LEÃO

**Table 1.c — Curricular Unit and Module Coordinators - Phase III (2010)**

<b>Curricular Unit</b>	<b>Coordinator</b>	<b>Status</b>
<b>Health Centre Residencies I and II (a)</b>	ANTÓNIO JAIME SOUSA	MD, MSc, Assistant Professor (ECS, UM)
<b>Medicine I and II Residencies</b>	NUNO SOUSA	MD, Full Professor (ECS, UM)
<b>Maternal and Child Health Residence</b>	JORGE CORREIA-PINTO	MD, Associate Professor (ECS, UM)
<b>Clinical Neurosciences</b>		
<b>From Clinical to Molecular Biology I and II</b>	JOANA PALHA	Associate Professor (ECS, UM)
<b>Option Project III</b>	RUI REIS ANTÓNIO GIL CASTRO	Assistant Professor (ECS, UM) Associate Professor (ECS, UM)
<b>Optional Residencies</b>	NUNO SOUSA	MD, Full Professor (ECS, UM)
<b>Vertical Domains IV and V</b>	CECÍLIA LEÃO	Full Professor (ECS, UM)

- (a) The Clinical Coordination Group has the responsibility for the overall coordination of the clinical training programme. Each residence Coordination Group has the responsibility to the responsibility of defining learning objectives and clinical duties (skills and tasks) for the students during that Residence; they also delineate the assessment process

**Table 1.d — Curricular Unit and Module Coordinators - Phase IV (2010)**

Curricular Unit	Coordinator	Status
Hospital Residencies. Final Training (a)	NUNO SOUSA	MD, Full Professor (ECS, UM)
Health Centre Residency II I- Final Training (a)	ANTÓNIO JAIME SOUSA	MD, MSc, Assistant Professor (ECS, UM)
From Clinical to Molecular Biology III	ANTÓNIO GIL CASTRO	Associate Professor (ECS, UM)
Optional Project – Final Training	PATRÍCIA MACIEL	Assistant Professor (ECS, UM)
	NUNO SOUSA	Full Professor (ECS, UM)

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

### **Coordination of Postgraduate Programmes and Research**

The Coordinator of the postgraduate programmes on health sciences oversees the whole postgraduate activities within the ECS. In 2010 these activities included:

- a) A program of 27 post-graduation courses and workshops (see Appendix 3), that involved 507 participants (41% medical doctors, 12% other professionals in health sciences and the remainder with a background mostly in biological sciences). Over 78% of the participants rated the courses as Excellent or Very Good.
- b) The admission of 23 PhD students (11 of which MDs) and of 11 Master students and the completion of 9 PhD thesis (2 of which from MDs, and from the 2 MD/PhD program).
- c) The formal admission of 1 MD student with the 5<sup>th</sup> year completed in the MD/PhD program. In addition, a total of 13 students participated in 13 laboratory rotations, a pre-requisite for a future formal application to the MD/PhD program.

### **Life and Health Sciences Research Institute (ICVS)**

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. *Jorge Pedrosa*, the Director of Post-graduation and of the MD/PhD program is Prof. *Joana Palha* and the Coordinator of the International Postgraduate Programme 2009/2010 is Prof. *Patricia Maciel*. The coordinators of the different post-graduation courses are listed in Appendix III.

### **The Advisory Council of the School**

Following the approval of the new Statutes of the School we initiated the process of forming the new advisory board "The Advisory Council of the School". This new board will include some of the members of the previous External Advisory Committee (EAC) that has ceased at July 2009.

### 3. ARTICULATION WITH THE NATIONAL HEALTH SYSTEM

As stated in previous reports, the ECS has set up an innovative articulating strategy with the National Health System. Specifically, the following lines were developed in order to pursue the multicentric approach defined by the School:

- Within the legal framework concerning the articulation between the Medical Schools and the Health Services, a legal document (*Portaria 36/2002*) establishes that the ECS is institutionally articulated, under the terms established by law, with *Hospital de Braga*, *Centro Hospitalar do Alto Ave – Unidade de Guimarães*, *Unidade Local de Saúde do Alto Minho – Viana do Castelo/Ponte de Lima*, *Hospital Pedro Hispano* (Matosinhos), *Hospital Joaquim Urbano* (Porto), *Casa de Saúde do Bom Jesus* (Nogueiró-Braga) and with Health Centres in the Northern Regions of Portugal.

The results of this policy have been very positive. The first protocol established between the ECS and the Regional Health Administration – North (ARS-N), has been considered the model to be followed by all medical schools in the North of Portugal. The cooperation with the Hospital de Braga, the *Centro Hospitalar do Alto Ave – Unidade de Guimarães* and *Unidade Local de Saúde do Alto Minho* developed to new dimensions, namely through a stronger involvement of health professionals in ECS. Indeed, the number of attending physicians engaged in academic and research activities has grown significantly (with some finishing their PhDs). Importantly, the level of commitment with academic activities has persisted, despite the increasing number of editions of the medical degree; the renovation of the clinical staff involved in academic activities has also progressed at a steady level. The quality of the clinical teaching continued to be recognized by students and physicians, and the presence of the students in the affiliated hospitals is very well appreciated.

The cooperation with ARS-N, namely with *Sub-Região de Saúde de Braga* and the Health Centres under its supervision, is progressing very well in all relevant dimensions, including: (i) the practical training (*estágio*) of students in the health units; (ii) the preparation and implementation of the curricular area *Follow-up of a Family*; and (iii) the clinical area *Residence in Health Centres*.

#### 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 members from the ECS and 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 Hospital de Braga, the Centro Hospitalar do Alto Ave – Unidade de Guimarães and the Unidade Local de Saúde do Alto Minho – Viana do Castelo/Ponte de Lima, as well as a network of Health Centres under ARS-N, legally (Decreto-Lei 206/2004 de 19 Agosto) qualify all as *Health Services with University Teaching*. The corresponding Articulation Committees have been operating on a regular basis, with the following composition:

**Table 2**

<b>Articulation Committee</b>	<b>Members From ECS</b>	<b>Members from the Health Service</b>
<b>ECS – Hospital de Braga</b>	<i>Nuno Sousa</i> MD, PhD, Course Director <i>Maria Cecília Leão</i> PhD, Dean	<i>Abel Rua</i> MD, by delegation of the Clinical Director <i>Carlos Valério</i> MD, by delegation of the President of the Administration Council
<b>ECS – Centro Hospitalar do Alto Ave</b>	<i>Nuno Sousa</i> MD, PhD, Course Director <i>Maria Cecília Leão</i> PhD, Dean	<i>Jorge de Almeida Berkeley Cotter</i> MD, PhD, by delegation of the Clinical Director <i>Joaquim Manuel Araújo Barbosa</i> by delegation of the President of the Administration Council
<b>ECS – Unidade Local de Saúde do Alto Minho</b>	<i>Nuno Sousa</i> MD, PhD, Course Director <i>Maria Cecília Leão</i> PhD, Dean	<i>Franklim Ramos</i> MD, Clinical Director <i>Domingos Araújo</i> MD, by delegation of the President of the Administration Council
<b>ECS – ARS-N</b>	<i>Maria Cecília Leão</i> PhD, Dean <i>Jaime Correia de Sousa</i> MD, Clinical Area Coordinator	<i>António J. S. Pimenta Marinho</i> MD, by delegation of the President of the ARS-N

The Articulation Committees are appointed to decide on matters of relevance for the articulation between the School and the Health Services. The established Committees have adopted an Articulation Protocol which proved to be very efficient and became a central piece for the development of an efficient inter-institutional collaboration. In accordance, the Articulation Protocol which, so far, has suffered only minor adjustments, served as the basis for the discussions with the new partner at Hospital de Braga. This Regime defines the model of cooperation (namely the Clerkship coordinating groups) 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 undergraduate clinical training, the competences and responsibilities of each of the participating institutions, and the term of office of the clinical supervisors and of the clinical tutors.

#### **4. ACTIVITIES IN 2010**

##### **4.1 Undergraduate Medical Degree Programme**

A separate report, prepared by the Medical Education Unit, was prepared covering the undergraduate programme, detailing the pedagogical activities undertaken in the academic year 2009/2010 and corresponding results. A brief mention to important highlights follows.

##### **Student academic performance**

It is important to highlight, in a synoptic way, that there were changes in the success rate of the students at their first curricular year. In fact, after the remediation actions specifically implemented for the first year medical students, there was a reduction in the failing rate (8-13% in 2008/09 vs 14-18% in 2007/08). It is also important to note that these failing rates contrast with much higher rates in the first year students in the University of Minho (approx. 35%).

A very high rate of success was registered for all the remaining students.

##### **Admissions and the Student population**

For the year 2009/10, 123 new students were admitted via the national competition system (111 under the general regime, 8 under the special regime for students from the Azores and Madeira Autonomous Regions and 4 under the special regimes for handicapped students, military and descendents of emigrants). Additionally, 7 new students were admitted through a special process for degree holders and 4 through a special regime for athletes. The total number of new students was therefore 135. For the National Admissions Process, the average entrance marks for the new students was 182.7 out of 200 (if only the students under the general admission regime are considered, this value raises to 184.9) and there were a total of 1455 applicants for the 120 places. Importantly, and in agreement in one of our aims, 81% of the students from the general admission regime choose Minho as their first option. This represents an important increase in comparison to previous years.

The gender balance of the new entrants in was 66% female and 34% male students. Regarding the provenance of students, 66% come from the District of Braga, 13% from the District of Porto district and 21% from other Districts of the Country.

The global number of undergraduate students registered in the medical program in the current academic year (2010/2011) is of 151 in the first year, 129 in the second year, 125 in the third year, 82 in the fourth year, 57 (plus one Erasmus student) in the fifth year and 64 in the sixth year, amounting to a total of 609 (which represents an increment of 62 in comparison to the last report).

### **Specific highlights**

A couple of points deserve a special reference in this 2010 report.

One relates to the development of a Basic Science knowledge examination in collaboration with the NBME and University of Leuven in Belgium. Briefly, this exam combined 100 items of Step1 (Basic Sciences); it was administered in English and Portuguese (half-half) to all students from the 3<sup>rd</sup> and 4<sup>th</sup> year at the ECS on the same day and with no recommendations for prior preparation. Registrations for the exam were voluntary; 57% of the eligible students participated. Their performance was very positive and data on the impact of translation was also recorded and presented in an international conference.

The second point relates with the completion, with success, of our first two PhD in the context of our MD/PhD programme. The preparatory phase of the MD/PhD optional programme was started in the Summer of 2005, and involved, since then 48 students in 69 one-month laboratory rotations which are compulsory pre-requisites for admission in the programme. We believe this is a very important achievement that fulfils our aim to support clinician-researchers in Minho; it is our belief that it represents a very good model that should be replicated in other medical schools.

#### **4.2 Association of Medical Students – NEMUM (report from the NEMUM President)**

“Our association is a work in progress, as is our school. We are still very young but we have very ambitious goals. We are determined to involve all our students in community oriented projects that allow them to stick together while helping those who surround us.

Having these purposes in mind we have participated and organized a variety of activities such as reunions, exhibitions, society interventions among others.

The main goal of our association is to provide a better scientific and medical training for the students of our local medical school and so, in the Scientific Domain, we have organized three meetings:

- 1) Minho Medical Meeting, 3<sup>rd</sup> Edition: Perinatal – 200 participants
- 2) Science and Medicine Conference: Nanotechnology – 100 participants
- 3) Medical Education Day – 50 participants



Additionally, it has been our purpose to create events that have real impact on local population, allowing them to get easy access to medical knowledge. In this way we have designed a periodical informal talk, where medical students and the population met together to discuss medical subjects.

Kids health is also our concern and so we have implemented the internationally called “Teddy Bear Hospital” which we have locally baptized as “Hospital dos Bonequinhos” (Little dolls’s Hospital). This activity was organized for 60 students and received about 1000 children between 4 and 6 years old.

It’s also relevant to highlight NEMUM’s cooperation in the organization of the Portuguese Society for Immunology’s annual meeting, which demonstrates our versatility and also our growing ability on managing big events.

Finally, it was also a priority to remodel our graphical image in a modern and attractive way by the creation of a webpage ([www.nemum.com](http://www.nemum.com)), a new logo and the publication of our activities on social networks, as Facebook.

NEMUM is still a young medical students association, although it has already a substantial impact on students and community’s life. For the future, it’s our intention to improve not only the quality but also the diversity of our activities, in order to increase the participation of the students and, with them, to grow in strength and sustainability.”

The NEMUM’s executive board:

Firmino Machado (President)

Teresa Pinto (Vice-President)

Ana Luísa Pinto (Treasurer)

Ana Luísa Sousa (Project’s coordinator)

#### **4.3 Alumni Association (Report from the Alumni Medicina President)**

*“Alumni Medicina (Núcleo de Antigos Estudantes de Medicina da Universidade do Minho)* is a non-profitable association that includes all alumni of ECS, providing a collective voice for its members. Dedicated to serve the best interests of alumni, students and faculty, our association is raising the basis to support, in a short-term, the ECS project.

In 2011, *Alumni Medicina* proceeded the work it had been developing, organizing “medical talks” about Ambulatory Therapeutics in Psychiatry and Dermatology and an advanced course on “Intravenous accesses” for young residents of several medical specialities.

*Alumni Medicina* also closely cooperated with ECS Medical Education Unit to organize the 1<sup>st</sup> *Med Day* that took place on May 8th. The Med Day was created as an opportunity for the Alumni to get back in touch with the ECS, promoting a place not only for workshops but also for leisure activities. Other leisure activities as the 3rd annual meeting happened on December.

2010 was also the year to continue supporting ECS medical students with financial difficulties. In total, twelve students were engaged in the program during the academic year 2009/2010.

At the moment, efforts are being made to improve the number and quality of courses and workshops promoted by *Alumni Medicina*, which were as success. We also intend to cooperate with ECS Medical education Unit in the elaboration of the 2<sup>nd</sup> Med Day in May 2011.

Furthermore, efforts in fund raising are about to be made, regarding further educational support and scientific programs at the ECS.”

Pedro Morgado  
(President)

#### **4.4 Post-graduation**

The School continues to envision post-graduation in two perspectives: that of formal training for a degree and that of voluntary professional improvement. In 2010, the PhD Programmes in Medicine and in Health Sciences and the Master Program in Health Sciences enrolled 11, 11 and 12 students, respectively.

Still with respect to doctoral programs, it has been the ECS’s believe that synergies with other institutions are valuable for promoting national collaborations and to endorse excellence in science. In accordance, the School collaborated in a successful multi-institutional application to the Fundação Calouste Gulbenkian, for an inter-institutional PhD program in Aging and Degeneration of Complex Biological Systems, with the partnership of Faculty of Medicine (Universidade de Coimbra) and Faculty of Medical Sciences (Universidade Nova de Lisboa) that promotes interaction among the involved institutions , including the presence of the enrolled students in each institution for a period of two months, in the first year.

At the same time, the ECS continues to promote courses in cutting-edge subjects in medicine and in biological sciences. In 2010 these courses counted with 507 participants, of which 41% medical doctors. It is of notice the number of participants originating from international institutions (13%) and from national institutions outside the University of Minho (43%), some of which are within European networks and/or with the support of international societies.

The School's intention to promote clinical research is continuing, not only by enrolling MDs in translational research projects and clinical projects, but also by continuing to involve the participation of undergraduate students in laboratory rotations within the "Option projects" and within the MD/PhD program. To highlight in 2010 is the completion of the PhD theses of the first two students enrolled in the MD/PhD program. This achievement is of notice, showing that it is possible to motivate students to interrupt their medical degree to complete a PhD before formal commitment to medical duties in the health services. It should be referred that both students achieved levels of excellence as recognized by the publications of original articles, as first authors, in international journals of reference. An additional student was formally selected for the thesis part of the MD/PhD program last May; the program now totalizes three students presently enrolled in their PhD thesis projects.

#### **4.5 Research**

As referred above, the ECS research activities are developed in the ICVS, a Sub-Unit fully incorporated within the School. The essential points of the ICVS activities are summarised hereafter.

Following an initial contract signed with the Government in 2000 and special contracts from 2003, 2004 and 2009, for the infrastructural funding of the ICVS, involving a total amount of 4.2 million €, a total of around 3.3 million € were transferred to the School. Therefore, the ICVS will request in the future the remaining amount of approximately 0.9 million € for equipments to be installed in the animal facility wing to be constructed adjacent to the ICVS building.

Following the guiding principles of the previous years, the ECS maintained the effort of allocating as many resources as possible to the ICVS research projects, through the support of the Research Domain activities and through the reinforcement of scientific equipments and laboratories.

In 2010, among other, the following equipments were purchased and installed in ICVS: 4-capillary Genetic Analyzer, Microscope with MicrobrightField Stereoinvestigator and NeuroLucida Software for stereological analysis, integrated rodent behaviour system Phenoworld (TSE equipment in development under a ICVS scientific expertise research agreement), Gel Doc EZ Imaging system, Morris Water Maze Pool with Videotracking software, and a T-Maze.

For the Research Domains, resources were allocated to support all members of the academic staff actively involved in research, as well as to attract new postgraduate researchers. Additionally, during the present year, it is to highlight the successful integration of a significant number of PhD

researchers. Presently, 208 researchers are involved in the ICVS activities [50 PhD researchers and 158 post-graduation students (87 PhD students, 37 Master students and 34 associate researchers)], supported by 18 members of the non-academic staff (5 in administration and 13 in the laboratories, with their salaries supported by the School).

The strategy of the ICVS from its launching has been, in fact, to implement a sustained increase within multidisciplinary Research Domains, with a dimension and level of expertise that would be highly competitive in the international scenario. As a result, the following scientific production was attained in 2010: 86 papers in international peer-reviewed journals with an average impact factor (IF) of 4.92, corresponding to an average of 1.72 papers/PhD. These ICVS publications included six papers in journals with IF above 10 and two papers in highly recognized journals with an IF above 20. Nine PhD theses with supervision from affiliated ICVS researchers were concluded and a high number of research prizes were awarded to the ICVS researchers.

Regarding the scope of the ICVS research, the priority in 2010 has been the reinforcement of the translational and clinical activities, through the fostering of key partnerships. Among the collaborating institutions in the surrounding environment we highlight the network of affiliated Hospitals in which dedicated clinical research takes place in the context of the ICVS *Clinical Academic Centre*; the *INL-International Iberian Nanotechnology Laboratory*; the *Avepark*- a park of science and technology; the *3B's Research Group* and several other research units of the University of Minho.

In 2010, we have particularly pursued our networking activities in Nanotechnology, a transversal scientific area of priority interest for the ICVS Research Domains. In this context, effective collaborations were established with other research units of the University of Minho from the Engineering and the Science Schools, as well as with the INL, with the objective of launching an international Doctoral Programme in Nanomedicine.

In 2010, we have greatly reinforced the diversification of the ICVS funding sources. Importantly, we successfully applied for two EU-FP7 Grants (in addition to three ongoing EU-FP7 projects), involving preclinical and clinical studies, as well for a multicentered clinical consortium in the context of the *Health Cluster Portugal* (HCP/QREN), in addition to 15 projects with a clinical and translational scope that were initialized with FCT funding.

Importantly, the combined teaching and research expertise of the ECS/ICVS PhD staff also contributed to the successful training of medical students, promoting the interaction between different fields of biomedical research and medical education, as, for example, in the context of: (i)

38 projects in the Curricular Area “Option Projects” and; (ii) 14 rotations in the MD/PhD programme (in collaboration with the Thomas Jefferson and Columbia Medical Schools).

In 2010 the ICVS, together with the ECS, promoted several activities devoted to the promotion of the public awareness of science, which involved 57 researchers from the three Research Domains and reached more than 3 000 people. These initiatives comprised interactive talks in schools and experimental activities at the ICVS, including: the *Science and Technology Week*, the *International Brain Awareness Week*, the *Open Doors to high schools*, and the *Summer in the Campus*. The three Research Domains provided at least three types of activities for these initiatives, taking into consideration the target population. For example, younger students saw how a chick embryo develops; older students isolated DNA for fingerprinting to solve a crime; while senior population learned the basis of a neurological exam.

Altogether, these results, comparatively with those from the previous years, represent a sustained increase in the quality and impact of the ICVS scientific productivity, placing the institute among the Portuguese leading research units in Health Sciences. The increasing interaction of ICVS with international high profile research institutions is reflected in the number of international funded projects, both in the context of the European FP7 and of International Foundations and Companies.

Presently, the major remaining difficulties of ICVS are related with funding for the construction of the originally planned Animal Facility wing, as well as to support the salaries of specialized technicians.

## **4.6 Human Resources**

### **Academic staff**

As repeatedly stated in former reports, the School is paying careful attention to the recruitment and promotion of academic staff. For that purpose, the ECS has established its own benchmarks/recommendations for academic progression, which are known by all the members of the faculty (and by those that express their interest in joining the faculty). The number of potential candidates with relevant scientific qualifications is high, which certainly is a consequence of the external perception of the quality of the ECS project.

It is important to be sure that the selected candidates have an adequate understanding on the institutional project and commit to contribute to the development of its specificities, namely in what concerns seven 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 loses most of its significance; (iii) the horizontal integration of the curricular contents and the modular organisation of the curriculum with the consequent transfer of management competences from individual subjects to the coordinators of the curricular areas or modules; (iv) the relevance of student's and peer assessment, permanent monitoring and quality assurance; (v) the role of the Medical Education Unit, in terms of support, coordination and monitoring in connection with the pursuit of the educational objectives; (vi) the role of research, as a crucial element for a research-based learning process, and (vii) the engagement to research activities (including submission of the research projects to the strategic guidelines and priority areas defined for the ICVS).

The Medical Education Unit has advanced with a faculty development program to target newly admitted staff members. The programme is based on workshops, supplemented with small team activities and informal discussions that create opportunities for addressing individual issues.

In quantitative terms, there are severe administrative limitations imposed by the Government on the maximum number of full time equivalent (FTE) teaching staff that can be hired, as a function of the number of students enrolled (2009-2010, ratio 1:6.8). Thus, the standard number of FTE for the 2009-2010 academic year is of 91.03.

At present (December 2010), the School has a faculty of 75 members (37,8 FTE) and counts in addition with 2 visiting professors 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 Supervisors and Tutors (considered members of the Faculty during that academic year), who supported the clinical training of the students in the Hospitals and Health Centres, in a total of around 300 clinicians, are indicated in Appendix II.

In terms of the faculty profile, it is important to highlight that 70,6% (53 out of 75) of the regular staff members are MDs. Regarding academic qualifications, 36 (48%) have a doctoral (PhD) degree.

**Table 3 — Academic Staff (with contract, 31.12.2010)**

<b>Name</b>	<b>Qualifications</b>	<b>Categoria (Status)</b>
Maria Cecília L.P. Estrela Leão	PhD, <i>Agregação</i>	<i>Prof. Catedrática</i>
Joana Almeida S. Pacheco Palha	PhD, <i>Agregação</i>	<i>Prof. Catedrática</i>
Jorge Manuel Rolo Pedrosa	PhD, <i>Agregação</i>	<i>Prof. Catedrático</i>
Nuno Jorge Carvalho de Sousa	MD, PhD, <i>Agregação</i>	<i>Prof. Catedrático (s/exc)</i>
António Gil Pereira de Castro	PhD	<i>Prof. Associado</i>
Armando A.N. Pinto de Almeida	PhD	<i>Prof. Associado</i>
Jorge Manuel Nunes Correia Pinto	MD, PhD	<i>Prof. Associado Conv. 50%</i>

Rui Manuel Rosário Sarmento e Castro	MD, PhD	<i>Prof. Associado Conv. 30%</i>
João D. C. S. Espregueira Mendes	MD, PhD	<i>Prof. Associado Conv. 20%</i>
João Carlos Cruz Sousa	PhD	<i>Prof. Auxiliar</i>
Fernando José dos Santos Rodrigues	PhD	<i>Prof. Auxiliar</i>
Maria de Fátima M. Baltazar	PhD	<i>Prof. Auxiliar</i>
Maria Margarida Teles de Vasconcelos C. Neves	PhD	<i>Prof. Auxiliar</i>
Manuel João Tavares Mendes da Costa	PhD	<i>Prof. Auxiliar</i>
Patrícia Espinheira Sá Maciel	PhD	<i>Prof. Auxiliar</i>
Paula Cristina C. A. Monteiro Ludovico	PhD	<i>Prof. Auxiliar</i>
José Miguel G. Moreira Pêgo	MD, PhD	<i>Prof. Auxiliar Conv. 100%</i>
João José Fernandes C. de Araújo Cerqueira	MD, PhD	<i>Prof. Auxiliar Conv. 100%</i>
João Miguel S. Bessa Peixoto	MD, PhD	<i>Prof. Auxiliar Conv. 100%</i>
Adhemar Longatto	PhD	<i>Prof. Auxiliar Conv. 60%</i>
John Samuel Yaphe	MD	<i>Prof. Auxiliar Conv. 60%</i>
António Jaime Botelho Correia de Sousa	MD, MSc	<i>Prof. Auxiliar Conv. 50%</i>
Patrício Ricardo Soares Costa	PhD	<i>Prof. Auxiliar Conv. 50%</i>
Carla Rolanda Rocha Gonçalves	MD, PhD	<i>Prof. Auxiliar Conv. 40%</i>
Maria João R. Leite Baptista	MD, PhD	<i>Prof. Auxiliar Conv. 40%</i>
Rosete Maria Amorim Novais Nogueira Cardoso	MD	<i>Prof. Auxiliar Conv. 40%</i>
Estevão Augusto Rodrigues de Lima	MD, PhD	<i>Prof. Auxiliar Conv. 30%</i>
Fernanda Cristina Gomes de Sousa Marques	PhD	<i>Prof. Auxiliar Conv. 30%</i>
Jorge de Almeida Berkeley Cotter	MD, PhD	<i>Prof. Auxiliar Conv. 30%</i>
Luísa Alexandra Meireles Pinto	PhD	<i>Prof. Auxiliar Conv. 30%</i>
Nuno Miguel Sampaio Osório	PhD	<i>Prof. Auxiliar Conv. 30%</i>
Rute Carina Silva Moura	PhD	<i>Prof. Auxiliar Conv. 30%</i>
Susana Alexandra Rodrigues Pascoal	PhD	<i>Prof. Auxiliar Conv. 30%</i>
Agostinho José Carvalho dos Santos	MD, PhD	<i>Prof. Auxiliar Conv. 20%</i>
Manuel José Lima da Costa Rodrigues	MD, PhD	<i>Prof. Auxiliar Conv. 20%</i>
Rui Manuel Vieira Reis	PhD	<i>Prof. Auxiliar Conv. 20%</i>
Filipa Santos Costa Pinto Ribeiro Lacerda	Lic. Biology, PhD	<i>Assistente Conv. 100%</i>
Mário Nelson Morais Freitas	MD	<i>Assistente Conv. 50%</i>
Artur Jorge Gomes Vieira	MD	<i>Assistente Conv. 40%</i>
Carla Marina Mendonça Gonçalves	MD	<i>Assistente Conv. 40%</i>
Carlos Alberto Pereira Capela	MD	<i>Assistente Conv. 40%</i>
Cláudia Alexandra Parreira Bulhões	MD	<i>Assistente Conv. 40%</i>
Cristina Isabel Nogueira da Silva	MD	<i>Assistente Conv. 40%</i>
Cristina Raquel Costa Freitas	MD	<i>Assistente Conv. 40%</i>
Emanuel Carvalho Dias	MD	<i>Assistente Conv. 40%</i>
Hélder Novais e Bastos	MD	<i>Assistente Conv. 40%</i>
Isabel Margarida Moura Mesquita	MD	<i>Assistente Conv. 40%</i>
Isaac Leandro Campos Braga	MD	<i>Assistente Conv. 40%</i>
Ivo Ricardo da Silva Ferreira	MD	<i>Assistente Conv. 40%</i>
João Moreira Pinto	MD	<i>Assistente Conv. 40%</i>

José António Briote Mariz	MD	<i>Assistente Conv. 40%</i>
Luís Manuel Cunha P. Figueiredo	MD	<i>Assistente Conv. 40%</i>
Mário Jorge Alves Oliveira	MD	<i>Assistente Conv. 40%</i>
Pedro Alexandre L.A.G. Teixeira	MD, PhD	<i>Assistente Conv. 40%</i>
Pedro Ricardo Luís Morgado	MD	<i>Assistente Conv. 40%</i>
Ricardo Jorge Ferreira Taipa	MD	<i>Assistente Conv. 40%</i>
Rui Manuel F.C.A. Cerqueira	MD	<i>Assistente Conv. 40%</i>
Rui Miguel Fernandes Duarte	MD	<i>Assistente Conv. 40%</i>
Sandra de Fátima F. Martins	MD	<i>Assistente Conv. 40%</i>
Sara Cláudia Santos da Hora Gomes	MD	<i>Assistente Conv. 40%</i>
Sérgio Nabais de Araújo	MD	<i>Assistente Conv. 40%</i>
Susana Maria Fialho Nunes	MD	<i>Assistente Conv. 40%</i>
Vítor Hugo da Eira Pereira	MD	<i>Assistente Conv. 40%</i>
Hugo Miguel V.L. S. de Almeida	Lic. Biochemistry	<i>Assistente Conv. 30%</i>
Mafalda Fernanda Cabral dos Santos Barbosa	MD	<i>Assistente Conv. 30%</i>
Tiago Folhadela Salgado de Faria	MD	<i>Assistente Conv. 30%</i>
Ana Maria Lacerda A. Horta	MD	<i>Assistente Conv. 20%</i>
Alexandre Coutinho Borges Gouveia	MD	<i>Assistente Conv. 20%</i>
Alexandre Manuel Câmara de Carvalho	MD	<i>Assistente Conv. 20%</i>
Hélder Augusto da Silva Lanhas	MD	<i>Assistente Conv. 20%</i>
Jean-Pierre Antunes Gonçalves	MD	<i>Assistente Conv. 20%</i>
Alexandra Sofia Lopes Miranda	MD	<i>Monitor</i>
Ana Raquel Franky Gomes Carvalho	Lic. PhD	<i>Monitor</i>
Paulo Ricardo Oliveira da Mota	MD	<i>Monitor</i>
Roberto Jorge Alves Couto	MD	<i>Monitor</i>
Tiago Gil Rodrigues Oliveira	Lic. PhD	<i>Monitor</i>

Constantino Theodor Sakellarides, MD, *Prof. Catedrático/ENSP-UNL (10%, in collaboration/CRUP)*

Nuno Pedro G. F. Bento Borges, *Prof. Associado /FCNA-UP (15%, in collaboration/CRUP)*

Gustavo Henrique Goldman, PhD, Prof. Titular (Universidade de São Paulo), Visiting Professor

Osborne Almeida, PhD, Researcher (Max Planck Inst. of Psychiatry), Visiting Professor

## Academic development

Regarding staff development, the School was allocated a total of 13 places for tenure positions, 4 full professors and 9 associate professors. At present the places for full professors are already filled; 2 places for Associate Professors are filled, 2 others were authorized in 2010 and 5 other were proposed to be authorized in 2011.



## Non-academic staff

In the non-academic staff there has also been a renewal (with 2 members leaving and 3 that was recruited). Table 4 indicates the staff members, in a total of 35, and their qualifications, rank and allocation. The academic profile of the staff is above the average situation in the Portuguese higher education system (60% of the staff have a higher education degree). It also deserves to be mentioned that part of the staff is allocated to the research institute, given that the ICVS cannot hire personnel; this represents a significant effort from the ECS to guarantee the best possible conditions for the research activities in the ICVS.

The ECS is proud to say that a great care has always been given to assure that every member of the non-academic staff can also undergo educational activities that improve their qualifications. This policy has proved to be efficient and, as a consequence, a high percentage (20%) of non-academic members is/has enrolled in educational programmes to increase their qualifications since they join the ECS.

**Table 4 — Non-academic Staff (with contract, 31.12.2010)**

<b>Name</b>	<b>Qualifications</b>	<b>Categoria (Rank)</b>	<b>Service</b>
José Carlos F. Henriques	<i>Licenciatura/Pós-Graduação</i>	<i>Secretário de Escola</i>	Head Office
Ana Paula Salgueira Rodrigues	<i>Licenciatura</i>	<i>Técnico Superior</i>	UEM
Amandine Marques Azevedo	<i>Licenciatura</i>	<i>Técnico Superior</i>	Secretariat
Lucília G. Ribeiro Pinto	<i>Mestrado</i>	<i>Técnico Superior</i>	Laboratories
Magda João Castelhanos Carlos	<i>Mestrado</i>	<i>Técnico Superior</i>	Laboratories
M <sup>a</sup> Madalena Abreu C. Branco	<i>Licenciatura</i>	<i>Técnico Superior</i>	Secretariat
Maria Paulina D.M. Santos	<i>Licenciatura</i>	<i>Técnico Superior</i>	Project Support Office
Paula C. F. Gomes Pereira	<i>Licenciatura</i>	<i>Técnico Superior</i>	Human Resources
Sandra M <sup>a</sup> T. Coutinho P. V. Santos	<i>Mestrado</i>	<i>Técnico Superior</i>	Laboratories
Luís Filipe F. Oliveira Martins	<i>Licenciatura</i>	<i>Técnico de Diagnóstico e Terapêutica</i>	Laboratories
Domingos Ferreira Dias	<i>Secondary Education</i>	<i>Técnico de Informática Adjunto</i>	Informatics Office
Olga Maria S. Miranda Abreu	<i>Secondary Education</i>	<i>Coordenador Técnico</i>	Secretariat
Denise Maria F. Silva	<i>Secondary Education</i>	<i>Assistente Técnico</i>	Laboratories
Helena Maria A. Nascimento	<i>Licenciatura</i>	<i>Assistente Técnico</i>	Secretariat
Isabel Maria V. Barbosa	<i>Licenciatura</i>	<i>Assistente Técnico</i>	UEM

Maria Manuela M. Mendes	<i>Secondary Education</i>	<i>Assistente Técnico</i>	Financial Office
M <sup>re</sup> José T. F. Tarroso Gomes	<i>Licenciatura</i>	<i>Assistente Técnico</i>	Academic Office
Mónica Custódia C. Gonçalves	<i>Secondary Education</i>	<i>Assistente Técnico</i>	UEM
António Miguel O. da Mota	<i>Basic Education</i>	<i>Assistente Operacional</i>	Laboratories
João Filipe A. Malheiro	<i>Secondary Education</i>	<i>Assistente Operacional</i>	Laboratories
José Carlos Teixeira da Rocha	<i>Secondary Education</i>	<i>Assistente Operacional</i>	Laboratories
Maria Celina F. Barros	<i>Secondary Education</i>	<i>Assistente Operacional</i>	Laboratories
Maria Manuela S. Carneiro	<i>Secondary Education</i>	<i>Assistente Operacional</i>	Laboratories
Maria Fernanda C. Fernandes	<i>Basic Education</i>	<i>Assistente Operacional</i>	Laboratories
Susana Isabel Vaz Santos	<i>Secondary Education</i>	<i>Assistente Operacional</i>	Laboratories
Ana Paula Barreto de Oliveira	<i>Licenciatura</i>	<i>Assistente Técnico (Regime de aquisição de serviços)</i>	UEM
Cláudia Filipa Rodrigues Pereira	<i>Licenciatura</i>	<i>Assistente Técnico (Regime de aquisição de serviços)</i>	Laboratories
Fernando Paulo Duarte Silva	<i>Licenciatura</i>	<i>Assistente Técnico (Regime de aquisição de serviços)</i>	Financial Office
Jorge Manuel S.G. Freitas	<i>Licenciatura</i>	<i>Técnico de Informática (Regime de aquisição de serviços)</i>	UEM
Maria Agostinha F. Costa	<i>Secondary Education</i>	<i>Assistente Técnico (Regime de aquisição de serviços)</i>	Laboratories
Miguel João Teixeira Carneiro	<i>Licenciatura</i>	<i>Técnico de Diagnóstico e Terapêutica (Regime de aquisição de serviços)</i>	Laboratories
Paulo Sérgio S. dos Santos Cabral	<i>Licenciatura</i>	<i>Especialista de Informática, Grau 3, Nível 2 (Regime de aquisição de serviços)</i>	Informatics Office
Ricardo Filipe Silva Mota	<i>Licenciatura</i>	<i>Técnico Superior (Regime de aquisição de serviços)</i>	Post-Graduation Office
Sara Feio de A. R. Alves Malheiro	<i>Licenciatura</i>	<i>Assistente Técnico (Regime de aquisição de serviços)</i>	UEM

#### 4.7 Financial Resources

Since 2000, an annual lump sum has been allocated to the ECS 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 2010 related to the lump sum are indicated in Table 5. 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.

**Table 5 – Financial resources (2009)**

Income	Expenses				Balance
	Salaries	Other current expenses	Capital Investment	Total	
Annual allocation					
5 037.8	2 822.1	1 611.7 (a)	505.5	4 939.3	98.5

Unit: 10<sup>3</sup> Euro

(a) Includes 440.7 kept at central administration, for general expenses and maintenance.

With the funding approved for ECS and ICVS, in the scope of the different contracts signed with the Ministry and FCT, several calls for tenders have been successfully conducted by the ECS staff regarding installation of scientific/pedagogical infrastructures and equipment, as well as informatics equipment, which supported the installation of the school and institute in the new building.

Regarding the basal funding for the ICVS, the FCT has transferred in 2010 an amount of 214.500,00 €. The ability to obtain external competitive funding for research projects has increased significantly in 2010. The budgets of the ongoing research projects, with an average duration of three years, amounted to the total of around 4.4 million €, of which 1.2 million € corresponded to the activities developed in 2010.

## **5. PLANS FOR 2011**

The first goal for the near future is to assure the best possible conditions to strengthen the ECS dynamism. The project of the School is now well established and progressing as planned. According to our proposal, we hope to start in 2011 a New Pathway for the Medical Degree at Minho, specifically designed for students holding a Bachelor/"Licenciatura" degree; this pathway is planned to be shorter in duration (4 years), but involves a great effort from students and faculty, including complementary nocturnal pedagogic activities. This effort is part of our care with the continuous development of the project.

In parallel, the challenge of developing innovative collaborations with the new health-care partners is still open. We are putting great attention to this aspect, namely through the creation of clinical Academic Centres with our network of affiliated healthcare institutions, but also by fostering new collaboration with other research partners (namely the International Nanotechnology Lab) and several industrial partners. The latter objective was tremendously driven by the Health Cluster Portugal and a very important project of QREN in which the ECS/ICVS play the coordinating role.

A final note to highlight our effort to keep increasing the national and the international visibility of the ECS/ICVS project that will hopefully impact on the recruitment of good students/researchers/academics, but also on more sustainable and diversified funding sources.

## 6. CONCLUSIONS

A brief analysis of the ECS's operation and development shows that once again the core strategies and goals were met in 2010 in all their essential aspects. This ends the first decade of this project, in which all the major goals were met (and in several aspects overcome). This was only possible by combining the appropriate mixture of competence, enthusiasm, commitment and team spirit of all ECS members.

The most prominent strengths, on which the School has been building up, are the quality of the training of medical students and the reported high standards of their performance in health-care institutions as physicians; the quality of the research activities that are performed in a state-of-the-art research institute; consolidation of the innovative post-graduation activities. These have translated in the very favourable teaching and research environments lived at the ECS. The systematic monitoring kept on the project by a strong and informed leadership and by continuous external evaluation are the premises needed to keep the ECS/ICVS in the right track.

As a final comment, we would like to highlight the last report of the External Advisory Committee (2009) in which, as concluding remarks, they related that "the School demonstrated a visionary strategy, a clear sense of mission, a strong leadership, the commitment of the staff to a common goal, and the motivation of the students". We believe that not only this still applies, but indeed these are the essential ingredients that keep the ECS moving forward with the determination and the enthusiasm of all its elements.

The institutional support from the University, at all levels, has been very important to the development of the School. This is an incentive to continue to pursue with the same zeal the ideas and goals that have steered our project.

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## **APPENDIXES**

- Ia** - 2010 Snapshot Medical Degree
- Ib** - 2010 Snapshot Appendixes
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- II** - Clinical Coordinating Groups, Supervisors and Tutors at the Affiliated Hospitals and Health Centres
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**MEDICAL DEGREE**



**2010 – A SNAPSHOT**

**ASSESSMENT OF THE ACADEMIC YEAR 2009/2010**

**UNIVERSITY OF MINHO**  
**School of Health Sciences**  
*Medical Education Unit*



# Introduction

This *Snapshot* presents a brief summary of the 2009/2010 edition of the undergraduate Medical Degree in the School of Health Sciences of the University of Minho (ECS-UM). It is a compilation produced by the Medical Education Unit (MEU) as part of the internal processes of quality assessment. The primary objective is that of increasing the accountability of the Medical Degree before the general public, health care institutions and current and future students.

The *Snapshot* is a consequence of the voluntary effort of the SHS-UM to collect data and provide evidence on the quality of the school's undergraduate medical program. It is sustained by a permanent and systematic process of gathering and organization of data. The *Snapshot* summarizes student academic performance, the results of the student evaluations of the undergraduate program (curricular areas, faculty, clerkships and seminars) and the essential demographic elements of the entering class for 2009/2010. The MEU is responsible for the included comments, which take into consideration the final year reflections of the School's Scientific Council. The *Snapshot* has been developed for inclusion in the full report of the School of Health Sciences.

The SHS-UM forth entering class graduated in July 2010. There are now 199 physicians who have graduated in Minho, and are being followed by the School of Health Sciences' Longitudinal Study. The Study collected in 2010, for the first time, ratings of the Supervisors of Minho's graduates on knowledge and professional behaviour in Residency. The collected responses (response rate 26%) revealed that the Supervisors place most graduates of Minho in the group of the best 25% in both dimensions (respectively, 45 and 58%) they had ever supervised. Such preliminary results add further positive evidence on the quality of the undergraduate medical training and it is encouraging to see the elevated ratings given to the professionalism of Minho's Graduates.

There were further important advances in the Longitudinal Study. In 2010, the process of setting up the database for the Study and of transferring all exist in undergraduate and pre-college life of Minho's students was concluded. It is now possible to explore the database with a research perspective – for example to look for predictors of performance – or as a service of the medical school – for example to produce the distribution of scores included in this snapshot. The study is now more visible, has its own webpage and is used as a platform to maintain the proximity with Minho's graduates and the Alumni

Association. As an example, in 8 May 2010, the first Med-day was organized which brought back to the School 44 graduates (see brochure in the appendix).

The School of Health Sciences continues to invest on external measures of student knowledge as a means for better international accountability. In 2010, a new edition of the *International Foundations of Medicine* was held, in which 99 students (55%) from the 4<sup>th</sup> to the 6<sup>th</sup> year participated. In 2010, a new experiment was held in which a web-delivered *Basic Science Examination* was taken by 85 students (57%) from the 3<sup>rd</sup> and 4<sup>th</sup> year students. This was a new collaborative effort with the National Board of Medical Examiners and was included in an International Study of Portuguese/English Translation effects (Holtzman *et. al.* Abstract presented in the Annual Meeting of the Association for Medical Education in Europe, 2010).

This *Snapshot* will be distributed to the School's External Advisory Committee, to faculty members and to the student body of the School of Health Sciences.

School of Health Sciences  
Medical Education Unit  
University of Minho

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# 1. THE RECENT EXPERIENCE WITH THE UNDERGRADUATE MEDICAL PROGRAM

In what concerns the undergraduate medical program, it is worth to highlight that a new curriculum is in place starting in the academic year 2009/2010. The changes, approved in the Scientific Council of the School, respond to constraints and opportunities for improvement identified in the curricular structure in light of past editions. The changes represent feasible alterations that mitigate the following issues: 1) insufficient time in the curriculum for the 3<sup>rd</sup> year courses that introduce students to history taking and physical examination and to community health, which led to the expansion of, respectively, Introduction to Clinical Medicine (ICM) and Introduction to Community Health (ICH); 2) a need to make more time for electives in clinical areas not comprised in the core curriculum dictated the expansion of the 5<sup>th</sup> year the Optional Residency (OR). To accommodate these changes it was necessary to reduce the number of Option Projects (from 6 to 4).

Table 1 - Study plan

PHASE	Scientific Area	Curricular Unit	Weeks		Student work			Credits (ECTS)
			Lecture (1)	Evaluation (2)	Tutored	Individual	Total	
I	CSH	Introduction to the Medical Degree	4		65	40	105	4,0
	CBB	Molecules and Cells	12	1	385	260	645	24,0
	CBB	Organic and Functional Systems I	12	2	400	270	670	25,0
	SC	Training in a Health Centre	1		20	5	25	1,0
	SC	First Aid	1		25		25	1,0
		Option Project I	4		65	40	105	4,0
	CSH	Vertical Domains I	*		25		25	1,0
		<b>1<sup>st</sup> Year – Totals</b>		<b>40</b>	<b>985</b>	<b>615</b>	<b>1 600</b>	<b>60</b>
	CBB	Organic and Functional Systems II	16	2	424	272	696	26,0
	CBB	Organic and Functional Systems III	13	2	363	246	609	23,0
	CSH+SC	Familia, Sociedade e Saúde	2		35	20	55	2,0
	CSH+SC	Follow up of a Family I	*		25	30	55	2,0
		Option Project II	6		98	60	158	6,0
	CSH	Vertical Domains II	*		25		25	1,0
		<b>2<sup>nd</sup> Year – Totals</b>		<b>40</b>	<b>970</b>	<b>630</b>	<b>1 600</b>	<b>60</b>
II	P	Biopathology and Introduction to Therapeutics	25	2	682	458	1 140	43,0
	SC	Introduction to Community Health	6		70	40	110	4,0
	C	Introduction to Clinical Medicine	8	1	169	116	285	10,5
	CSH+SC	Follow up of a Family II	*		20	20	40	1,5
	CSH	Vertical Domains III	*		25		25	1,0
		<b>3<sup>rd</sup> Year – Totals</b>		<b>40</b>	<b>966</b>	<b>634</b>	<b>1 600</b>	<b>60</b>
III	SC	Health Centre Residency I	7		170	110	280	10,5
	C	Medicine Residency I	12	1	290	190	480	18,0
	C	Mother and Child Residency	11	1	275	180	455	17,0
	C	Mental Health Residency	4		105	70	175	6,5
	C+P+CBB	From the Clinic to Molecular Biology I	*		50	30	80	3,0
		Option Project IV	4		65	40	105	4,0
	CSH	Vertical Domains IV	*		25		25	1,0
		<b>4<sup>th</sup> Year – Totals</b>		<b>40</b>	<b>980</b>	<b>620</b>	<b>1 600</b>	<b>60</b>
	SC	Health Centre Residency II	7		170	110	280	10,5
	C	Surgery Residency	12	1	295	200	495	18,5
	C	Medicine Residency II	12	1	289	206	495	18,5
	C	Optional Residencies	5		133	92	225	8,5
	C+P+CBB	From the Clinic to Molecular Biology II	*		50	30	80	3,0
	CSH	Vertical Domains V	*		25		25	1,0
		<b>5<sup>th</sup> Year – Totals</b>		<b>40</b>	<b>962</b>	<b>638</b>	<b>1 600</b>	<b>60</b>
IV	SC	Health Centre Residency - Final Training	7		170	110	280	10,5
	C	Hospital Residencies - Final Training	26		635	420	1055	39,5
	C+P+CBB	From the Clinic to Molecular Biology III	*		50	30	80	3,0
		Option Project – Final Training	7		110	75	185	7,0
		<b>6<sup>th</sup> year – Totals</b>		<b>40</b>	<b>965</b>	<b>635</b>	<b>1 600</b>	<b>60</b>

C – Clinic; CBB –Biologic e Biomedical Sciences; CSH – Human & Social Sciences; P – Pathology; SC – Community Health.

\* - Organized along the curricular year

(1) Evaluation included at the end of the module (2) Includes closing evaluation of the curricular area and the final exam (when applied)

## 2. Student Profiles in 2009-2010: Retrospective Analysis

### 2.1 Candidates

In the academic year 2009-010, the number of applicants for the 120 positions available (National Admission Process) for the UM Medical Degree Course amounted to 1455 (Table 6), corresponding to 12 candidates for each position available. A retrospective analysis of the distribution according to candidate's choice in 2009-10 and the previous curricular years is presented in Table 6.

Table 2 - **Applications in 2009-10 according to preference**

<i>Applicants: n (%)</i>	<i>Choice</i>	<i>1<sup>st</sup></i>	<i>2<sup>nd</sup></i>	<i>3<sup>rd</sup> to 6<sup>th</sup></i>	<i>Total</i>
Academic Year	<b>2009-10</b>	370 (25%)	264 (18%)	821 (57%)	1455
	<b>2008-09</b>	383 (22%)	251 (15%)	1093 (63%)	1727
	<b>2007-08</b>	223 (19%)	196 (16%)	784 (65%)	1203
	<b>2006-07</b>	208 (19%)	239 (22%)	636 (59%)	1083
	<b>2005-06</b>	200 (17%)	182 (16%)	791 (67%)	1173
	<b>2004-05</b>	170 (18%)	152 (16%)	624 (66%)	946
	<b>2003-04</b>	146 (14%)	178 (18%)	685 (68%)	1009
	<b>2002-03</b>	168 (15%)	202 (18%)	746 (67%)	1116
	<b>2001-02</b>	381 (17%)	350 (16%)	1470 (67%)	2201

There were 6 more places available for other admissions processes in accordance with the ministry directives (5% of positions filled by a special admission process for graduates); and 2 more places for the Special admission regimen.

### 2.2 Admissions

In the curricular year of 2009-10, 135 students were admitted to the UM Degree in Medicine as follows:

#### **National Admission Process (N123<sup>a)b)</sup>)**

- General contingency: **111**
- Students proceeding from autonomous regions (Azores and Madeira): **8**
- Portuguese emigrants and family members residing with them: **2**
- Students on official military service: **0**
- Handicapped students: **2**
- Ties: **0**

#### **Special admission process for graduates: 7<sup>c)</sup>**

#### **Special admission regimen: 4**

#### **Special admission process: 0**

#### **Re-admission and transfers: 0**

- a) 2 more students in the 2<sup>nd</sup> part and
- b) 1 more student in the 3<sup>rd</sup> part because 3 students cancelled their registration;
- c) 1 tied student

A comparison between students' choices in 2009-10 and the previous curricular years is presented in the following table.

Table 3 - **Admitted student's distribution according to choice: retrospective analysis**

N of students (%)		Option	1 <sup>a</sup>	2 <sup>a</sup>	3 <sup>a</sup> to 6 <sup>a</sup>	Total
Academic Year		<b>2009-10</b>	100 (81%)	19 (15%)	5 (4%)	124
		<b>2008-09</b>	79 (64%)	17 (14%)	27 (22%)	123 <sup>a</sup>
		<b>2007-08</b>	65 (64%)	8 (8%)	28 (28%)	101
		<b>2006-07<sup>a)</sup></b>	59 (93%) <sup>a)</sup>	3 (5%)	1 (2%)	62
		<b>2005-06</b>	40 (67%)	7 (12%)	13 (21%)	60
		<b>2004-05</b>	53 (88%)	5 (9%)	2 (3%)	60
		<b>2003-04</b>	41 (76%)	3 (5%)	10 (19%)	54 <sup>a</sup>
		<b>2002-03</b>	33 (66%)	9 (18%)	8 (16%)	50
		<b>2001-02</b>	19 (37%)	5 (10%)	28 (53%)	50

e) 100% in the General Contingency; d) does not include information on one student (Special Access)

## 2.3 Admission Grades

Table 8 lists the averages of the admitted students grades (limits and variation) organized according to their application regimes.

Table 4 - **Admission grades in the curricular year of 2009-10 distributed according to contingencies**

Contingent	N of students	Classification (minimum – maximum)	Partial Average	General Average
General	111	181.5 – 197.2	184.9	182,7
Autonomous Regions	8	157.30 – 172.50	166.1	
Emigrants	2	149.7 – 158.7	154.2	
Handicapped	2	151.0 - 172,7	161.9	
Military	0	-	-	

A comparison between student's grades in 2009-10 and the previous curricular year is presented in the following table.

Table 5 - **Admission grade point averages: retrospective analysis**

Academic year	General Average	General Contingent Average
<b>2009-10</b>	182.7	184.9
<b>2008-09</b>	182.6	185.5
<b>2007-08</b>	180.9	184.5
<b>2006-07</b>	183.8	186.4
<b>2005-06</b>	184.9	187.6
<b>2004-05</b>	185.3	188.9
<b>2003-04</b>	182.5	187.4
<b>2002-03</b>	185.7	188.4
<b>2001-02</b>	185.6	187.4

(b) does not include information on two students (Special Access)

## 2.4. Gender

In what concerns gender, 66% of the admitted students were females.

### 3. Final word

In summary, the combination of approaches used by the school and presented in this *snapshot* – internal examinations, external assessments of knowledge, evaluations by students and longitudinal research - generates a wide range of data that concur to the important conclusion that, in 2010, the undergraduate medical degree of the School of Health Sciences was faithful to its mission by delivering an undergraduate program that certainly meets any international standards of quality in medical education.

Braga, December 2010

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Coordinator of the Medical Education Unit

**MEDICAL DEGREE**



**2010 – A SNAPSHOT**

**ASSESSMENT OF THE ACADEMIC YEAR 2009/2010**

**UNIVERSITY OF MINHO**  
**School of Health Sciences**  
*Medical Education Unit*



# **MEDICAL DEGREE COURSE**

## **APPENDIX**

**AUTOMN 2010 – A SNAPSHOT**

**ASSESSMENT OF THE ACADEMIC YEAR 2009/2010 AT THE ENTRANCE OF  
2009/2010**

**UNIVERSITY OF MINHO**  
**School of Health Sciences**  
*Medical Education Unit*

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## INFORMATION REFERRED IN THE MAIN DOCUMENT

This appendix presents two types of information relative to the recent edition of the *Curricular Areas* of the undergraduate medical program offered by the School of Health Sciences of the University of Minho (ECS-UM).

The appendix reports the distribution of student course grades for each curricular area. The grades, typically, are combinations of scores from multiple measurement moments, such as modular- or end-of-year written tests, skill examinations and attitudinal observations. The combinations are defined in the first two weeks of the academic year and approved by the Pedagogic Council of SHS-UM. All missing information is labeled as “Not available”.

Also included are the global results of the student evaluations of the most recent academic year, namely the results, the items and a flowchart of the process of gathering and analyzing the data. The results from student evaluations are an important part of the multidimensional internal quality evaluation mechanisms. The process is modular and was designed in 2006 by the Scientific Council of SHS-UM. The rating forms refer to several aspects of teaching, the academic experience and context specificities of clinical attachments. The process is under the responsibility of the Medical Education Unit.

In addition, the appendix includes informational elements about the socio-demography of the entering class of 2010-2011. The elements are collected during students' first week in the medical school with a survey that students respond to voluntarily. Information is stored in a secure database. Informed consent is collected to collate the data to the *Longitudinal Study of the School of Health Sciences of the University of Minho* <sup>(1)</sup>.

The boxplots of the grade distribution are computed from the database of the ongoing *Longitudinal Study of the School of Health Sciences of the University of Minho* <sup>(1)</sup> assembled as part of a project financed by *Fundação para a Ciência e Tecnologia*, the Portuguese national science foundation (PTDC/ESC/65116/2006).

<sup>(1)</sup> PTDC/ESC/65116/2006: Avaliando o impacto de inovação no Ensino Superior: implementação e desenvolvimento de um estudo longitudinal numa escola médica, Universidade do Minho (UM).

## **STUDENT EVALUATIONS OF TEACHING: BRIEF DESCRIPTION AND FLOWCHART OF THE PROCESS**

The process and the instruments applied in the School of Health Sciences were approved by the School's Scientific Council in 2006 and are administered by the Medical Education Unit (MEU) that also manages the Student Evaluations of Teaching (SET) process and helps facilitate appropriate use of SET data. These instruments have been locally developed and are applied within the 2 weeks following the end of the curricular area, unless circumstances dictate otherwise. The responses are collected on paper in a period explicit in student timetable. The instruments are used in Portuguese. A translation can be found in this appendix.

There are specific SET forms used for distinct purposes.

1. "Overall Evaluation of Curricular Areas": on all the curricular areas of the medical degree, each student fills one form/curricular area; includes 12 items (unless in specific areas where some items do not apply);
2. "Evaluation of Academic Faculty": on individual faculty of all curricular areas which are primarily taught by faculty of SHS-UM; each student fills one form/faculty- the global scores presented in this snapshot are computed for every faculty of the corresponding curricular area and the individual scores are communicated to each faculty and the corresponding area coordinator; includes 8 items;
3. "Evaluation of Clinical Tutors/Services": on individual clinical tutors in the affiliated Health Care Institutions, used exclusively in areas with clinical attachments (from the 3<sup>rd</sup> to the 6<sup>th</sup> year); each student fills one form/faculty- the global scores presented in this snapshot are computed for every faculty of the corresponding curricular area and the individual scores are communicated to the corresponding area supervisor; includes 10 items;
4. "Evaluation of Clinical Seminars/Speakers": on individual clinical seminars/speakers, used exclusively in areas with clinical seminars (from the 3<sup>rd</sup> to the 6<sup>th</sup> year); each student fills one form/seminar - the global scores presented in this snapshot are computed for every seminar/speakers of the corresponding curricular area and the individual scores are communicated to the corresponding area coordinator; includes 6 items;
5. "Evaluation of the Teaching and Learning Methodology": in years 1-3 in on all curricular areas which are primarily taught by faculty of SHS-UM that make use of the methodology of "learning through models of objectives" adopted by the medical school, each student fills one form/curricular area; includes 10 items;
6. "Evaluation of Option Projects": used on all the elective curricular areas of the medical degree; includes 8 items.

Student Evaluations Teaching Process	Instruments	Curricular Areas Evaluation (n)	Outputs
	Overall Evaluation of Curricular Areas	34	Global Score
	Evaluation of Academic Faculty	7	Global Score
			Individual Score
	Evaluation of Clinical Tutors/Services	11	Global Score Form
			Global Score Form/Institution
			Global Score Form/Service
	Evaluation of Clinical Seminars/Speakers	10	Global Score Form
			Global Score Form/Module

## Items for the Overall Evaluation of Curricular Areas

*Area (nuclear items)*

1	I understood the learning objectives
2	The contents were delivered in accordance with the learning objectives.
3	I have gained/developed abilities that I consider useful.
4	The workload required was appropriate to set time for learning.
5	The assessment process was coherent with the objectives of the area.
6	I was appropriately supervised in my learning process.
7	The activities were well organized.
8	The available resources were appropriate.
9	My previous training was adequately prepared me for this area.
10	Globally, I consider the teaching staff is excellent.
11	Globally, I consider this curricular unit is excellent.
12	Globally, the area promoted my personal development

## Items for the Evaluation of Faculty Academic

*Faculty*

1	The instructor is knowledgeable in the concepts and phenomena implied in the learning objectives
2	The instructor arrives on time
3	The instructor aids in the identification, analysis and understanding of the learning objectives
4	The instructor orients the development of learning
5	The instructor stimulates and fosters critical thinking
6	The instructor motivates towards the fulfilment of learning objectives
7	The instructor elps in the synthesis and integration of knowledge
8	Overall, this instructor is excellent.

## Items for the Evaluation of Clinical Tutors/Services

*Tutors/Services*

1	I had access to all the service components (eg: meetings, visits, examinations, etc.)
2	I was stimulated to share my ideas, my knowledge and my uncertainties
3	The tutor was available to answer questions and to clarify uncertainties
4	The tutors' explanations were organized and clear
5	The tutor promoted contacts with patients with different pathologies
6	The tutor helped to me to carry through clinical procedures effectively
7	The tutor was knowledgeable for the concepts, phenomena and clinical practices
8	I received appropriate supervision at the clinical settings
9	I rate this tutor as excellent
10	What I've learned in this residency was useful

## Items for the Evaluation of Seminars/Speakers

*Seminars/Speakers*

1	The contents were approached with clarity
2	Theories and concepts were linked to practice
3	I felt encouraged to participate
4	The recommended bibliography was useful
5	The seminar integrated in the area's/module's objectives
6	I rate this seminar as excellent

## Items for the Evaluation of the Teaching and Learning Methodology in years 1-3

Phase 1	<b>1</b>	Contributed to clarify the objectives
	<b>2</b>	Allowed the reactivation of prior knowledge
Phase 2	<b>3</b>	The time provided was sufficient
	<b>4</b>	The activities were important to learning
Phase 3	<b>5</b>	I was stimulated to share what I learned
	<b>6</b>	Allowed me to access the extent to which I achieved the learning objectives
Phase 4	<b>7</b>	Contributed to fill in some of my learning gaps
	<b>8</b>	The instructors were available
Phase 5	<b>9</b>	Enough time was provided to complete the examinations.
	<b>10</b>	The examinations reflected the objectives of the area.

## Items for the Evaluation of Option Projects




<b>1</b>	I understood the learning objectives
<b>2</b>	The elements of the assessment process reflected the objectives of the area
<b>3</b>	The assessment process was coherent with the objectives of the area
<b>4</b>	The evaluation parameters were defined in time
<b>5</b>	The workload was appropriate to units of credit
<b>6</b>	I would have done this project, even if it were not mandatory
<b>7</b>	Globally, I learned a lot from this area
<b>8</b>	Globally, I consider this curricular unit is excellent

## Scale

Completely disagree	①
Strongly disagree	②
Disagree	③
Agree	④
Strongly agree	⑤
Completely agree	⑥
Without an opinion	⑦

## Legend

- for tutors, faculty and area assessment:

	Question with highest % of favourable responses
	Question with lowest % of favourable responses
	Question with less than 50% of favourable responses

## RESULTS

Student final academic scores

Student Evaluations of Teaching (SETs)



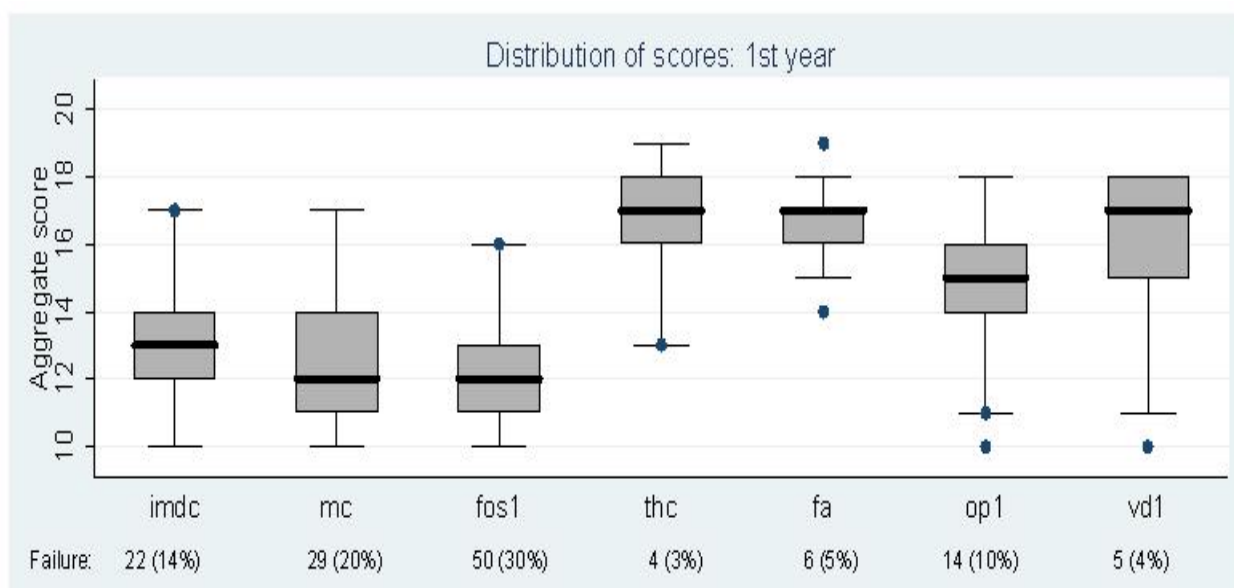
## **DISTRIBUTION OF STUDENT SCORES: LEGEND**

\*Non attendants: students with less than 2/3rds of class attendance; they fail accordingly to the University's regulation.

\*\*Failure: students who attended at least 2/3rds of classes; they fail for academic criteria.

**1<sup>ST</sup> YEAR**

## DISTRIBUTION OF STUDENT SCORES (\*)



### Legend

IMDC – Introduction to the Medical Degree Course

MC – Molecules and Cells

FOS 1 – Functional and Organic Systems I

THC – Training in a Health Centre

FA – First Aid

OP 1 – Option Project I

VD 1 – Vertical Domains I

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## INTRODUCTION TO THE MEDICAL DEGREE COURSE

### Overall Evaluations of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	3	0	2	0	0	5	1	1	1
	Strongly disagree	2	1	2	2	2	2	1	0	9	2	6	3
	Disagree	6	11	9	11	8	5	15	8	23	10	25	12
	<b>Unfavourable responses</b>	<b>8</b>	<b>12</b>	<b>11</b>	<b>17</b>	<b>9</b>	<b>8</b>	<b>15</b>	<b>8</b>	<b>37</b>	<b>13</b>	<b>32</b>	<b>16</b>
	Agree	49	44	35	47	53	39	48	36	37	45	45	52
	Strongly agree	35	35	39	25	30	30	28	42	16	29	14	21
	Completely agree	8	8	15	10	8	23	7	13	8	10	3	7
	<b>Favourable responses</b>	<b>92</b>	<b>88</b>	<b>89</b>	<b>82</b>	<b>90</b>	<b>92</b>	<b>83</b>	<b>91</b>	<b>61</b>	<b>83</b>	<b>63</b>	<b>80</b>
	No opinion	0	0	0	2	1	0	2	2	2	4	5	4
2008/2009	<b>Unfavourable responses</b>	<b>6</b>	<b>19</b>	<b>11</b>	<b>25</b>	<b>27</b>	<b>26</b>	<b>26</b>	<b>14</b>	<b>47</b>	<b>27</b>	<b>58</b>	<b>22</b>
	<b>Favourable responses</b>	<b>94</b>	<b>80</b>	<b>89</b>	<b>75</b>	<b>71</b>	<b>74</b>	<b>74</b>	<b>86</b>	<b>51</b>	<b>71</b>	<b>42</b>	<b>75</b>
	No opinion	0	1	0	0	2	0	0	1	2	2	0	2

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	1	0	0	0	0	0	0	1
	Strongly disagree	0	0	1	1	1	1	1	2
	Disagree	2	1	8	9	7	8	7	6
	<b>Unfavourable responses</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>8</b>
	Agree	21	12	29	32	36	31	34	31
	Strongly agree	36	28	35	35	33	35	34	35
	Completely agree	40	58	26	22	22	23	23	23
	<b>Favourable responses</b>	<b>97</b>	<b>98</b>	<b>91</b>	<b>89</b>	<b>91</b>	<b>89</b>	<b>91</b>	<b>89</b>
	No opinion	0	0	0	1	1	2	1	3
2008/2009	<b>Unfavourable responses</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>16</b>	<b>16</b>
	<b>Favourable responses</b>	<b>96</b>	<b>97</b>	<b>91</b>	<b>85</b>	<b>82</b>	<b>81</b>	<b>82</b>	<b>81</b>
	No opinion	0	0	0	0	2	2	2	4

## MOLECULES AND CELLS

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	3	0	0	0	0	3	2	2	1
	Strongly disagree	2	2	0	2	3	0	2	2	4	2	2	0
	Disagree	6	3	7	24	13	10	12	10	23	25	23	11
	<b>Unfavourable responses</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>29</b>	<b>16</b>	<b>10</b>	<b>14</b>	<b>11</b>	<b>30</b>	<b>29</b>	<b>26</b>	<b>12</b>
	Agree	49	48	44	50	54	50	52	47	43	44	49	53
	Strongly agree	35	39	39	15	24	31	28	33	21	21	17	27
	Completely agree	8	6	10	4	4	7	3	8	2	2	3	6
	<b>Favourable responses</b>	<b>92</b>	<b>94</b>	<b>92</b>	<b>69</b>	<b>82</b>	<b>88</b>	<b>83</b>	<b>88</b>	<b>67</b>	<b>67</b>	<b>69</b>	<b>86</b>
	No opinion	1	1	1	2	2	2	3	1	2	3	5	2
2008/2009	<b>Unfavourable responses</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>30</b>	<b>12</b>	<b>4</b>	<b>17</b>	<b>7</b>	<b>39</b>	<b>17</b>	<b>31</b>	<b>14</b>
	<b>Favourable responses</b>	<b>94</b>	<b>97</b>	<b>96</b>	<b>70</b>	<b>87</b>	<b>96</b>	<b>81</b>	<b>93</b>	<b>60</b>	<b>81</b>	<b>66</b>	<b>84</b>
	No opinion	0	1	0	0	1	0	2	1	2	2	2	2

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	2	1	2	1	0	2	1	7	2
	Strongly disagree	2	7	6	6	2	2	2	0	8	4
	Disagree	12	15	22	9	18	10	11	2	31	14
	<b>Unfavourable responses</b>	<b>14</b>	<b>23</b>	<b>28</b>	<b>18</b>	<b>21</b>	<b>11</b>	<b>15</b>	<b>2</b>	<b>47</b>	<b>19</b>
	Agree	33	39	45	52	37	38	26	19	31	56
	Strongly agree	40	29	16	23	30	33	23	31	15	19
	Completely agree	10	7	8	5	9	14	3	22	5	5
	<b>Favourable responses</b>	<b>83</b>	<b>75</b>	<b>69</b>	<b>80</b>	<b>76</b>	<b>85</b>	<b>52</b>	<b>71</b>	<b>52</b>	<b>80</b>
	No opinion	3	2	2	2	2	3	33	27	2	1
2008/2009	<b>Unfavourable responses</b>	<b>5</b>	<b>17</b>	<b>31</b>	<b>39</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>34</b>	<b>16</b>
	<b>Favourable r4esponses</b>	<b>95</b>	<b>83</b>	<b>64</b>	<b>60</b>	<b>91</b>	<b>92</b>	<b>49</b>	<b>58</b>	<b>66</b>	<b>83</b>
		0	1	5	2	1	1	46	41	0	1

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	1	0	1	1	1	1	1	1
	Strongly disagree	1	0	1	2	1	2	2	1
	Disagree	4	2	7	8	7	7	7	8
	<b>Unfavourable responses</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>11</b>
	Agree	25	21	30	32	34	34	32	32
	Strongly agree	27	23	30	30	27	29	30	28
	Completely agree	37	47	24	20	22	19	21	21
	<b>Favourable responses</b>	<b>88</b>	<b>92</b>	<b>84</b>	<b>82</b>	<b>83</b>	<b>83</b>	<b>84</b>	<b>82</b>
	No opinion	6	6	6	7	7	7	7	7
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>11</b>	<b>9</b>	<b>9</b>	<b>10</b>
	<b>Favourable responses</b>	<b>95</b>	<b>95</b>	<b>92</b>	<b>88</b>	<b>86</b>	<b>88</b>	<b>88</b>	<b>86</b>
	No opinion	2	3	3	3	4	3	3	4

## FUNCTIONAL AND ORGANIC SYSTEMS I

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	2	0	0	0	1	2	0	0	0
	Strongly disagree	1	0	0	4	0	1	0	0	6	1	1	1
	Disagree	3	7	1	32	15	4	5	5	21	15	6	2
	<b>Unfavourable responses</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>38</b>	<b>15</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>29</b>	<b>16</b>	<b>7</b>	<b>3</b>
	Agree	38	37	23	44	50	53	57	46	50	35	39	33
	Strongly agree	41	40	45	12	24	28	28	33	13	32	39	33
	Completely agree	17	15	31	5	11	12	10	14	6	16	13	32
	<b>Favourable responses</b>	<b>96</b>	<b>92</b>	<b>99</b>	<b>61</b>	<b>85</b>	<b>94</b>	<b>95</b>	<b>93</b>	<b>69</b>	<b>83</b>	<b>92</b>	<b>97</b>
2008/2009	No opinion	1	1	0	1	0	2	0	1	2	1	1	0
	<b>Respostas Desfavoráveis</b>	<b>8</b>	<b>8</b>	<b>2</b>	<b>49</b>	<b>13</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>31</b>	<b>11</b>	<b>11</b>	<b>3</b>
	<b>Respostas Favoráveis</b>	<b>91</b>	<b>91</b>	<b>98</b>	<b>51</b>	<b>86</b>	<b>90</b>	<b>89</b>	<b>91</b>	<b>66</b>	<b>88</b>	<b>87</b>	<b>96</b>
	No opinion	1	1	0	0	1	0	1	0	3	2	2	1

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	2	2	0	0	1	0	1	0	1	0
	Strongly disagree	5	8	3	0	0	1	2	0	0	1
	Disagree	20	31	25	6	10	4	4	4	12	18
	<b>Unfavourable responses</b>	<b>27</b>	<b>41</b>	<b>29</b>	<b>6</b>	<b>11</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>13</b>	<b>19</b>
	Agree	48	41	44	43	38	30	19	15	24	41
	Strongly agree	14	13	17	35	34	36	42	33	36	25
	Completely agree	11	5	10	16	14	27	22	39	27	13
	<b>Favourable responses</b>	<b>73</b>	<b>59</b>	<b>71</b>	<b>94</b>	<b>86</b>	<b>93</b>	<b>83</b>	<b>88</b>	<b>87</b>	<b>80</b>
2008/2009	No opinion	0	0	0	0	4	2	10	9	0	1
	<b>Unfavourable responses</b>	<b>15</b>	<b>41</b>	<b>29</b>	<b>6</b>	<b>19</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>13</b>	<b>21</b>
	<b>Favourable responses</b>	<b>84</b>	<b>58</b>	<b>70</b>	<b>93</b>	<b>80</b>	<b>91</b>	<b>90</b>	<b>93</b>	<b>86</b>	<b>78</b>
	No opinion	1	1	1	2	2	1	5	4	1	1

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	0	0	0	0	0	0	0	0
	Disagree	1	1	2	3	3	3	2	2
	<b>Unfavourable responses</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>
	Agree	14	15	24	25	24	24	24	22
	Strongly agree	34	30	37	36	34	36	35	37
	Completely agree	45	47	31	28	30	29	31	31
	<b>Favourable responses</b>	<b>93</b>	<b>92</b>	<b>91</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>90</b>	<b>90</b>
2008/2009	No opinion	6	6	6	7	7	7	7	8
	<b>Unfavourable responses</b>	<b>4</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>8</b>
	<b>Favourable responses</b>	<b>91</b>	<b>92</b>	<b>88</b>	<b>86</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>85</b>
	No opinion	5	5	5	5	5	5	5	7

## TRAINING IN A HEALTH CENTRE

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	1	-	1	1	5	7	1	-	-	3	0
	Strongly disagree	0	1	-	3	2	1	7	3	-	-	0	0
	Disagree	1	4	-	4	3	9	17	13	-	-	6	2
	<b>Unfavourable responses</b>	<b>1</b>	<b>6</b>	<b>-</b>	<b>8</b>	<b>5</b>	<b>17</b>	<b>31</b>	<b>17</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>2</b>
	Agree	16	18	-	25	19	24	21	26	-	-	19	11
	Strongly agree	31	32	-	30	36	21	19	21	-	-	28	19
	Completely agree	52	42	-	38	31	36	29	37	-	-	43	68
	<b>Favourable responses</b>	<b>99</b>	<b>93</b>	<b>-</b>	<b>92</b>	<b>86</b>	<b>81</b>	<b>69</b>	<b>83</b>	<b>-</b>	<b>-</b>	<b>90</b>	<b>98</b>
	No opinion	0	1	-	0	9	3	0	0	-	-	1	0
2008/2009	<b>Unfavourable responses</b>	<b>5</b>	<b>16</b>	<b>-</b>	<b>10</b>	<b>13</b>	<b>32</b>	<b>55</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>19</b>	<b>3</b>
	<b>Favourable responses</b>	<b>95</b>	<b>82</b>	<b>-</b>	<b>88</b>	<b>56</b>	<b>62</b>	<b>45</b>	<b>71</b>	<b>-</b>	<b>-</b>	<b>79</b>	<b>96</b>
	No opinion	0	2	-	2	31	6	1	4	-	-	2	1

## FIRST AID

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	1	0	0	0	0	0	3	-	0	0
	Strongly disagree	0	0	0	0	1	0	0	0	2	-	0	0
	Disagree	1	0	0	5	4	2	0	0	13	-	2	0
	<b>Unfavourable responses</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>-</b>	<b>2</b>	<b>0</b>
	Agree	15	12	7	14	17	15	19	17	30	-	16	11
	Strongly agree	34	35	30	33	32	31	35	33	25	-	35	26
	Completely agree	50	53	62	49	46	52	45	50	24	-	47	63
	<b>Favourable responses</b>	<b>99</b>	<b>100</b>	<b>99</b>	<b>95</b>	<b>95</b>	<b>98</b>	<b>100</b>	<b>100</b>	<b>78</b>	<b>-</b>	<b>98</b>	<b>100</b>
	No opinion	0	0	0	0	0	0	0	0	5	-	0	0
2008/2009	<b>Unfavourable responses</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>13</b>	<b>16</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>28</b>	<b>-</b>	<b>8</b>	<b>3</b>
	<b>Favourable responses</b>	<b>98</b>	<b>94</b>	<b>98</b>	<b>87</b>	<b>84</b>	<b>92</b>	<b>90</b>	<b>93</b>	<b>66</b>	<b>-</b>	<b>91</b>	<b>98</b>
	No opinion	0	0	0	0	0	0	1	0	7		2	0



## OPTION PROJECT I

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	0	1	1	0	4	2	1	1
	Strongly disagree	1	0	0	0	4	2	0	0
	Disagree	0	1	3	2	16	4	0	2
	<b>Unfavourable responses</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>23</b>	<b>8</b>	<b>1</b>	<b>3</b>
	Agree	16	16	15	17	27	22	11	10
	Strongly agree	33	43	44	38	27	31	25	29
	Completely agree	50	38	35	43	23	38	64	58
	<b>Favourable responses</b>	<b>99</b>	<b>96</b>	<b>94</b>	<b>98</b>	<b>77</b>	<b>90</b>	<b>99</b>	<b>96</b>
	No opinion	0	2	3	0	0	2	0	1
2008/2009	<b>Unfavourable responses</b>	<b>1</b>	<b>8</b>	<b>7</b>	<b>23</b>	<b>14</b>	<b>10</b>	<b>4</b>	<b>2</b>
	<b>Favourable responses</b>	<b>99</b>	<b>75</b>	<b>82</b>	<b>76</b>	<b>85</b>	<b>86</b>	<b>96</b>	<b>97</b>
	No opinion	0	17	11	1	1	4	0	1

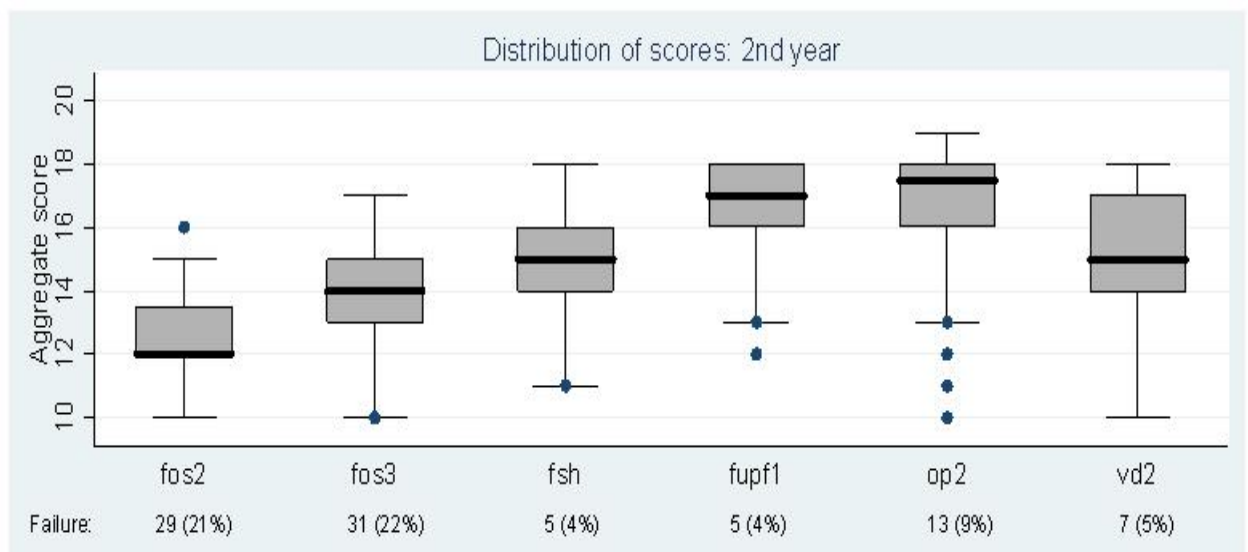
## VERTICAL DOMAINS I

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	1	1	-	0	0	1	-	0	0
	Strongly disagree	0	0	1	0	1	-	0	0	1	-	1	2
	Disagree	5	3	5	8	5	-	5	5	14	-	5	6
	<b>Unfavourable responses</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>-</b>	<b>5</b>	<b>5</b>	<b>16</b>	<b>-</b>	<b>5</b>	<b>8</b>
	Agree	27	27	29	32	29	-	32	32	36	-	23	32
	Strongly agree	36	46	42	32	39	-	42	36	19	-	35	36
	Completely agree	32	23	21	27	20	-	21	25	17	-	36	23
	<b>Favourable responses</b>	<b>95</b>	<b>96</b>	<b>92</b>	<b>90</b>	<b>88</b>	<b>-</b>	<b>95</b>	<b>94</b>	<b>72</b>	<b>-</b>	<b>94</b>	<b>91</b>
	No opinion	1	1	2	1	5	-	1	1	12	-	1	1
2008/2009	<b>Unfavourable responses</b>	<b>11</b>	<b>14</b>	<b>13</b>	<b>19</b>	<b>10</b>	<b>-</b>	<b>12</b>	<b>6</b>	<b>22</b>	<b>-</b>	<b>11</b>	<b>31</b>
	<b>Favourable responses</b>	<b>88</b>	<b>82</b>	<b>86</b>	<b>78</b>	<b>70</b>	<b>-</b>	<b>88</b>	<b>90</b>	<b>58</b>	<b>-</b>	<b>89</b>	<b>69</b>
	No opinion	1	4	1	4	20	-	0	4	20	-	0	0

**2<sup>ND</sup> YEAR**

## DISTRIBUTION OF STUDENT SCORES (\*)



### Legend

FOS 2 – Functional and Organic Systems II  
 FOS 3 – Functional and Organic Systems III  
 FSH – Family, Society and Health  
 FUPF 1 – Follow-up of a Family I  
 OP 2 – Option Project II  
 VD 2 – Vertical Domains II

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## FUNCTIONAL AND ORGANIC SYSTEMS II

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	4	1	0	0	0	1	2	1	1
	Strongly disagree	1	1	0	14	0	2	2	0	2	0	1	0
	Disagree	6	8	1	40	11	5	8	2	14	16	12	5
	<b>Unfavourable responses</b>	<b>6</b>	<b>9</b>	<b>1</b>	<b>57</b>	<b>12</b>	<b>7</b>	<b>10</b>	<b>2</b>	<b>16</b>	<b>18</b>	<b>14</b>	<b>6</b>
	Agree	52	57	39	36	64	50	63	66	56	46	49	38
	Strongly agree	31	27	32	4	19	31	21	23	18	27	25	33
	Completely agree	10	7	28	2	2	10	4	6	6	7	10	21
	<b>Favourable responses</b>	<b>94</b>	<b>91</b>	<b>99</b>	<b>42</b>	<b>84</b>	<b>91</b>	<b>88</b>	<b>96</b>	<b>81</b>	<b>80</b>	<b>85</b>	<b>92</b>
	No opinion	0	0	0	1	4	2	2	2	3	2	2	2
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>9</b>	<b>4</b>	<b>43</b>	<b>19</b>	<b>13</b>	<b>21</b>	<b>12</b>	<b>20</b>	<b>22</b>	<b>16</b>	<b>2</b>
	<b>Favourable responses</b>	<b>98</b>	<b>91</b>	<b>96</b>	<b>57</b>	<b>79</b>	<b>86</b>	<b>79</b>	<b>88</b>	<b>78</b>	<b>69</b>	<b>78</b>	<b>98</b>
	No opinion	0	0	0	0	2	1	0	0	2	9	7	0

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	6	6	4	0	2	0	0	0	5	2
	Strongly disagree	10	9	9	0	2	0	1	0	6	4
	Disagree	18	30	40	6	14	9	8	1	30	16
	<b>Unfavourable responses</b>	<b>34</b>	<b>45</b>	<b>53</b>	<b>6</b>	<b>18</b>	<b>9</b>	<b>9</b>	<b>1</b>	<b>40</b>	<b>23</b>
	Agree	48	38	33	58	42	39	32	31	35	60
	Strongly agree	13	14	10	29	23	37	29	34	15	13
	Completely agree	3	1	3	5	13	14	23	30	10	4
	<b>Favourable responses</b>	<b>64</b>	<b>53</b>	<b>46</b>	<b>92</b>	<b>78</b>	<b>90</b>	<b>84</b>	<b>95</b>	<b>60</b>	<b>77</b>
	No opinion	2	2	1	2	3	2	7	4	0	1
2008/2009	<b>Unfavourable responses</b>	<b>63</b>	<b>71</b>	<b>29</b>	<b>12</b>	<b>14</b>	<b>12</b>	<b>9</b>	<b>4</b>	<b>9</b>	<b>19</b>
	<b>Favourable responses</b>	<b>37</b>	<b>27</b>	<b>71</b>	<b>88</b>	<b>84</b>	<b>88</b>	<b>89</b>	<b>93</b>	<b>90</b>	<b>78</b>
	No opinion	0	1	0	0	1	0	2	2	1	3

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	1	0	1	1	1	1	1	1
	Disagree	4	3	5	7	7	7	6	6
	<b>Unfavourable responses</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>7</b>
	Agree	22	23	26	27	28	28	27	27
	Strongly agree	33	29	33	30	29	30	31	33
	Completely agree	36	38	29	28	28	27	29	26
	<b>Favourable responses</b>	<b>90</b>	<b>89</b>	<b>88</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>87</b>	<b>86</b>
	No opinion	5	7	6	6	6	6	6	7
2008/2009	<b>Unfavourable responses</b>	<b>8</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>10</b>	<b>9</b>
	<b>Favourable responses</b>	<b>91</b>	<b>92</b>	<b>89</b>	<b>87</b>	<b>85</b>	<b>87</b>	<b>89</b>	<b>85</b>
	No opinion	1	2	1	2	3	2	2	6

## FUNCTIONAL AND ORGANIC SYSTEMS III

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	2	0	4	1	1	1	1	1	1	3	0
	Strongly disagree	2	3	0	9	3	2	3	2	2	3	2	1
	Disagree	5	11	3	28	11	9	14	10	16	14	9	6
	<b>Unfavourable responses</b>	<b>7</b>	<b>16</b>	<b>3</b>	<b>41</b>	<b>15</b>	<b>11</b>	<b>17</b>	<b>13</b>	<b>18</b>	<b>18</b>	<b>13</b>	<b>7</b>
	Agree	44	41	28	45	56	47	58	53	43	47	52	33
	Strongly agree	38	34	44	11	22	34	21	25	27	25	20	34
	Completely agree	12	7	25	3	5	5	2	7	7	8	15	23
	<b>Favourable responses</b>	<b>93</b>	<b>83</b>	<b>97</b>	<b>59</b>	<b>84</b>	<b>87</b>	<b>81</b>	<b>85</b>	<b>77</b>	<b>80</b>	<b>86</b>	<b>90</b>
2008/2009	No opinion	0	2	1	0	2	2	2	2	4	2	1	3
	<b>Unfavourable responses</b>	<b>5</b>	<b>9</b>	<b>6</b>	<b>23</b>	<b>20</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>4</b>
	<b>Favourable responses</b>	<b>95</b>	<b>91</b>	<b>94</b>	<b>77</b>	<b>79</b>	<b>88</b>	<b>87</b>	<b>89</b>	<b>84</b>	<b>82</b>	<b>85</b>	<b>95</b>
No opinion		0	0	0	0	1	0	1	0	2	5	4	1

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	11	10	3	1	3	1	0	0	3	3
	Strongly disagree	7	9	6	1	2	2	0	0	1	3
	Disagree	17	28	24	10	19	7	10	3	5	10
	<b>Unfavourable responses</b>	<b>35</b>	<b>47</b>	<b>34</b>	<b>12</b>	<b>23</b>	<b>9</b>	<b>10</b>	<b>3</b>	<b>9</b>	<b>15</b>
	Agree	44	31	41	41	39	35	35	28	39	45
	Strongly agree	18	20	18	38	26	37	31	41	30	31
	Completely agree	3	1	7	9	9	18	20	24	22	9
	<b>Favourable responses</b>	<b>65</b>	<b>52</b>	<b>66</b>	<b>87</b>	<b>74</b>	<b>90</b>	<b>85</b>	<b>93</b>	<b>91</b>	<b>85</b>
2008/2009	No opinion	0	1	0	1	3	1	4	4	0	0
	<b>Unfavourable responses</b>	<b>42</b>	<b>48</b>	<b>20</b>	<b>12</b>	<b>13</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>4</b>	<b>20</b>
	<b>Favourable responses</b>	<b>57</b>	<b>50</b>	<b>79</b>	<b>88</b>	<b>83</b>	<b>92</b>	<b>94</b>	<b>91</b>	<b>95</b>	<b>79</b>
	No opinion	1	2	1	0	5	3	2	2	1	1

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	1	1	1	2	2	2	1	2
	Strongly disagree	1	1	1	1	1	2	1	1
	Disagree	3	3	6	8	7	8	6	7
	<b>Unfavourable responses</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>9</b>	<b>10</b>
	Agree	25	27	30	31	31	31	30	30
	Strongly agree	33	29	32	30	28	30	31	31
	Completely agree	28	29	21	19	20	19	21	19
	<b>Favourable responses</b>	<b>86</b>	<b>85</b>	<b>83</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>82</b>	<b>80</b>
2008/2009	No opinion	9	11	9	9	10	9	9	10
	<b>Unfavourable responses</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>12</b>
	<b>Favourable responses</b>	<b>87</b>	<b>88</b>	<b>85</b>	<b>82</b>	<b>81</b>	<b>82</b>	<b>83</b>	<b>80</b>
No opinion		4	5	5	5	5	5	5	8

## FAMILY, SOCIETY AND HEALTH

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	4	2	2	1	2	5	3	2	10	1	6	3
	Strongly disagree	5	8	6	2	3	8	7	8	7	9	9	7
	Disagree	16	18	10	21	24	16	25	21	26	23	33	11
	<b>Unfavourable responses</b>	<b>25</b>	<b>28</b>	<b>18</b>	<b>24</b>	<b>30</b>	<b>29</b>	<b>36</b>	<b>32</b>	<b>43</b>	<b>33</b>	<b>48</b>	<b>22</b>
	Agree	44	48	52	44	43	41	41	46	26	41	28	40
	Strongly agree	20	19	25	19	11	17	16	11	11	16	15	28
	Completely agree	11	3	6	12	3	7	4	8	3	4	3	9
	<b>Favourable responses</b>	<b>75</b>	<b>70</b>	<b>82</b>	<b>75</b>	<b>57</b>	<b>65</b>	<b>61</b>	<b>65</b>	<b>40</b>	<b>61</b>	<b>47</b>	<b>76</b>
	No opinion	0	2	0	1	14	6	2	3	17	6	5	2
2008/2009	<b>Unfavourable responses</b>	<b>36</b>	<b>35</b>	<b>32</b>	<b>25</b>	<b>21</b>	<b>36</b>	<b>55</b>	<b>35</b>	<b>36</b>	<b>51</b>	<b>58</b>	<b>25</b>
	<b>Favourable responses</b>	<b>63</b>	<b>62</b>	<b>64</b>	<b>73</b>	<b>49</b>	<b>62</b>	<b>45</b>	<b>63</b>	<b>44</b>	<b>42</b>	<b>37</b>	<b>69</b>
	No opinion	1	2	4	2	30	2	0	2	20	7	5	6

## FOLLOW-UP OF A FAMILY I

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	2	2	4	3	3	4	3	2	4	4	4	4
	Strongly disagree	2	0	1	1	0	1	3	2	2	1	1	1
	Disagree	3	3	3	4	4	11	15	7	13	15	13	3
	<b>Unfavourable responses</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>15</b>	<b>20</b>	<b>11</b>	<b>18</b>	<b>20</b>	<b>19</b>	<b>7</b>
	Agree	42	46	32	40	37	30	36	46	39	42	42	38
	Strongly agree	29	26	36	26	25	35	28	27	22	27	26	29
	Completely agree	23	22	25	25	17	19	15	15	8	9	12	24
	<b>Favourable responses</b>	<b>94</b>	<b>95</b>	<b>93</b>	<b>91</b>	<b>79</b>	<b>83</b>	<b>79</b>	<b>88</b>	<b>68</b>	<b>78</b>	<b>80</b>	<b>92</b>
	No opinion	0	1	0	1	14	2	1	2	13	2	2	1
2008/2009	<b>Unfavourable responses</b>	<b>16</b>	<b>31</b>	<b>14</b>	<b>28</b>	<b>21</b>	<b>37</b>	<b>59</b>	<b>34</b>	<b>30</b>	<b>40</b>	<b>43</b>	<b>18</b>
	<b>Favourable responses</b>	<b>84</b>	<b>69</b>	<b>86</b>	<b>71</b>	<b>51</b>	<b>61</b>	<b>40</b>	<b>66</b>	<b>63</b>	<b>55</b>	<b>54</b>	<b>82</b>
	No opinion	0	0	0	1	27	2	1	0	7	5	3	0



## OPTION PROJECT II

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	1	1	2	2	4	3	2	2
	Strongly disagree	1	0	1	0	5	2	1	2
	Disagree	1	4	5	3	15	9	2	2
	<b>Unfavourable responses</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>5</b>	<b>24</b>	<b>13</b>	<b>5</b>	<b>6</b>
	Agree	27	40	36	38	36	17	15	21
	Strongly agree	40	30	32	28	23	27	36	32
	Completely agree	30	16	15	27	14	39	44	41
	<b>Favourable responses</b>	<b>98</b>	<b>85</b>	<b>83</b>	<b>93</b>	<b>73</b>	<b>83</b>	<b>95</b>	<b>94</b>
	No opinion	0	10	9	2	3	4	0	0
2008/2009	<b>Unfavourable responses</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>18</b>	<b>30</b>	<b>9</b>	<b>0</b>	<b>3</b>
	<b>Favourable responses</b>	<b>98</b>	<b>73</b>	<b>80</b>	<b>81</b>	<b>68</b>	<b>88</b>	<b>100</b>	<b>95</b>
	No opinion	1	23	18	1	2	3	0	2

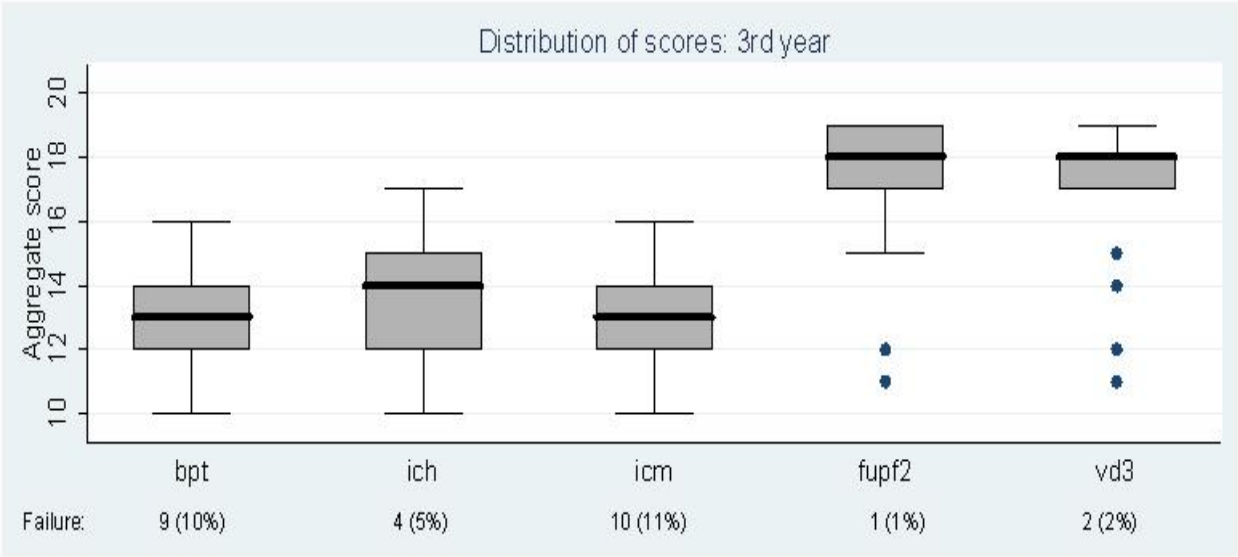
## VERTICAL DOMAINS II

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	6	4	6	5	7	-	4	3	7	-	7	9
	Strongly disagree	5	5	3	2	7	-	2	3	3	-	3	7
	Disagree	15	15	16	11	13	-	16	11	22	-	7	28
	<b>Unfavourable responses</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>17</b>	<b>27</b>	<b>-</b>	<b>23</b>	<b>18</b>	<b>32</b>	<b>-</b>	<b>17</b>	<b>43</b>
	Agree	42	50	48	48	34	-	44	50	31	-	38	33
	Strongly agree	23	18	20	20	17	-	22	20	16	-	28	18
	Completely agree	10	5	7	13	9	-	9	11	8	-	14	2
	<b>Favourable responses</b>	<b>75</b>	<b>73</b>	<b>75</b>	<b>81</b>	<b>60</b>	<b>-</b>	<b>75</b>	<b>80</b>	<b>55</b>	<b>-</b>	<b>80</b>	<b>53</b>
2008/2009	No opinion	0	3	1	2	13	-	2	2	13	-	3	3
	<b>Unfavourable responses</b>	<b>36</b>	<b>38</b>	<b>33</b>	<b>31</b>	<b>41</b>	<b>-</b>	<b>30</b>	<b>20</b>	<b>36</b>	<b>-</b>	<b>33</b>	<b>51</b>
	<b>Favourable responses</b>	<b>64</b>	<b>61</b>	<b>67</b>	<b>67</b>	<b>53</b>	<b>-</b>	<b>69</b>	<b>80</b>	<b>60</b>	<b>-</b>	<b>67</b>	<b>46</b>
	No opinion	0	1	0	2	6	-	1	0	5	-	0	3

**3<sup>RD</sup> YEAR**

**DISTRIBUTION OF STUDENT SCORES (\*)**



Legend

- BPT – Biopathology and Introduction to Therapeutics
- ICH – Introduction to Community Health
- ICM – Introduction to Clinical Medicine
- FUPF 2 – Follow-up of a Family II
- VD 3 – Vertical Domains III

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## BIOPATHOLOGY AND INTRODUCTION TO THERAPEUTICS

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	1	1	1	4	0	0	5	1	1
	Strongly disagree	0	3	0	7	3	0	4	3	4	5	3	0
	Disagree	4	8	7	20	11	7	22	8	12	26	18	4
	<b>Unfavourable responses</b>	<b>4</b>	<b>11</b>	<b>7</b>	<b>28</b>	<b>14</b>	<b>8</b>	<b>30</b>	<b>11</b>	<b>16</b>	<b>37</b>	<b>22</b>	<b>5</b>
	Agree	46	53	41	53	63	56	47	59	62	32	45	54
	Strongly agree	39	31	36	16	18	28	18	24	12	17	21	28
	Completely agree	11	5	17	3	3	7	3	4	7	9	7	11
	<b>Favourable responses</b>	<b>96</b>	<b>89</b>	<b>93</b>	<b>72</b>	<b>84</b>	<b>91</b>	<b>68</b>	<b>87</b>	<b>80</b>	<b>58</b>	<b>72</b>	<b>92</b>
	No opinion	0	0	0	0	1	1	1	3	4	5	5	3
2008/2009	<b>Unfavourable responses</b>	<b>7</b>	<b>16</b>	<b>5</b>	<b>27</b>	<b>35</b>	<b>9</b>	<b>24</b>	<b>7</b>	<b>13</b>	<b>15</b>	<b>24</b>	<b>15</b>
	<b>Favourable responses</b>	<b>93</b>	<b>82</b>	<b>95</b>	<b>73</b>	<b>62</b>	<b>91</b>	<b>75</b>	<b>93</b>	<b>84</b>	<b>80</b>	<b>71</b>	<b>82</b>
	No opinion	0	2	0	0	4	0	2	0	4	5	5	4

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	12	9	1	0	1	1	9	4	0	1
	Strongly disagree	20	15	4	1	0	1	5	1	3	4
	Disagree	17	24	14	11	12	11	21	12	5	7
	<b>Unfavourable responses</b>	<b>49</b>	<b>48</b>	<b>20</b>	<b>12</b>	<b>13</b>	<b>13</b>	<b>36</b>	<b>17</b>	<b>8</b>	<b>12</b>
	Agree	38	40	57	68	58	55	26	33	41	54
	Strongly agree	12	11	22	17	28	25	13	12	24	26
	Completely agree	0	0	1	3	1	5	3	17	26	7
	<b>Favourable responses</b>	<b>50</b>	<b>51</b>	<b>80</b>	<b>88</b>	<b>87</b>	<b>85</b>	<b>42</b>	<b>62</b>	<b>91</b>	<b>87</b>
	No opinion	1	1	0	0	0	1	22	21	1	1
2008/2009	<b>Unfavourable responses</b>	<b>27</b>	<b>45</b>	<b>17</b>	<b>15</b>	<b>5</b>	<b>15</b>	<b>13</b>	<b>4</b>	<b>16</b>	<b>38</b>
	<b>Favourable responses</b>	<b>71</b>	<b>53</b>	<b>83</b>	<b>85</b>	<b>95</b>	<b>85</b>	<b>64</b>	<b>75</b>	<b>84</b>	<b>60</b>
	No opinion	2	2	0	0	0	0	24	22	0	2

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	2	2	3	3	3	4	3	2
	Strongly disagree	2	3	3	3	3	3	3	3
	Disagree	5	7	11	13	2	12	10	10
	<b>Unfavourable responses</b>	<b>9</b>	<b>12</b>	<b>17</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>16</b>
	Agree	21	23	25	25	25	26	27	26
	Strongly agree	31	28	31	29	27	28	29	28
	Completely agree	36	34	26	25	25	25	26	25
	<b>Favourable responses</b>	<b>89</b>	<b>86</b>	<b>81</b>	<b>79</b>	<b>78</b>	<b>80</b>	<b>82</b>	<b>78</b>
	No opinion	2	2	2	2	4	2	2	6
2008/2009	<b>Unfavourable responses</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>6</b>
	<b>Favourable responses</b>	<b>94</b>	<b>92</b>	<b>90</b>	<b>87</b>	<b>88</b>	<b>87</b>	<b>89</b>	<b>88</b>
	No opinion	3	3	3	3	3	3	3	6

## INTRODUCTION TO COMMUNITY HEALTH

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	4	1	4	1	2	4	2	4	6	2	10	5
	Strongly disagree	7	12	7	4	4	11	17	9	10	10	11	7
	Disagree	10	16	24	7	12	25	31	23	30	31	36	23
	<b>Unfavourable responses</b>	<b>21</b>	<b>29</b>	<b>35</b>	<b>12</b>	<b>19</b>	<b>40</b>	<b>51</b>	<b>36</b>	<b>46</b>	<b>43</b>	<b>57</b>	<b>36</b>
	Agree	50	51	41	52	47	42	37	44	37	38	26	46
	Strongly agree	22	12	17	22	11	14	10	14	9	11	10	14
	Completely agree	7	7	6	12	2	4	2	6	2	2	1	4
	<b>Favourable responses</b>	<b>79</b>	<b>71</b>	<b>65</b>	<b>86</b>	<b>60</b>	<b>59</b>	<b>49</b>	<b>64</b>	<b>48</b>	<b>52</b>	<b>37</b>	<b>63</b>
	No opinion	0	0	0	1	21	1	0	0	6	5	6	1
2008/2009	<b>Unfavourable responses</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>9</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>23</b>	<b>9</b>	<b>11</b>	<b>11</b>
	<b>Favourable responses</b>	<b>100</b>	<b>96</b>	<b>93</b>	<b>95</b>	<b>91</b>	<b>95</b>	<b>95</b>	<b>93</b>	<b>61</b>	<b>88</b>	<b>88</b>	<b>89</b>
	No opinion	0	0	0	2	0	4	0	5	16	4	2	0

Method items		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	7	11	1	13	5	2	9	6	1	2
	Strongly disagree	6	7	0	12	4	9	13	9	1	6
	Disagree	11	22	5	20	24	21	20	16	5	10
	<b>Unfavourable responses</b>	<b>24</b>	<b>40</b>	<b>6</b>	<b>45</b>	<b>33</b>	<b>32</b>	<b>41</b>	<b>31</b>	<b>7</b>	<b>19</b>
	Agree	38	38	41	34	35	38	15	19	43	53
	Strongly agree	21	11	28	10	12	12	4	10	35	20
	Completely agree	12	6	23	6	11	10	3	4	13	7
	<b>Favourable responses</b>	<b>71</b>	<b>55</b>	<b>93</b>	<b>50</b>	<b>59</b>	<b>60</b>	<b>21</b>	<b>32</b>	<b>91</b>	<b>80</b>
	No opinion	5	5	1	5	9	7	38	37	1	1
2008/2009	<b>Unfavourable responses</b>	<b>9</b>	<b>20</b>	<b>5</b>	<b>11</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>5</b>
	<b>Favourable responses</b>	<b>91</b>	<b>77</b>	<b>95</b>	<b>84</b>	<b>93</b>	<b>91</b>	<b>27</b>	<b>41</b>	<b>100</b>	<b>95</b>
	No opinion	0	4	0	5	0	2	66	59	0	0

### Evaluation of Academic Faculty

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	1	1	1	1	1	1	1	1
	Strongly disagree	1	1	1	2	2	2	2	2
	Disagree	4	4	7	9	8	8	7	8
	<b>Unfavourable responses</b>	<b>6</b>	<b>5</b>	<b>9</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>
	Agree	23	22	27	29	30	29	29	28
	Strongly agree	31	28	32	30	28	30	30	31
	Completely agree	36	40	27	25	26	25	26	24
	<b>Favourable responses</b>	<b>90</b>	<b>90</b>	<b>86</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>86</b>	<b>83</b>
	No opinion	4	5	5	5	5	5	5	7
2008/2009	<b>Unfavourable responses</b>	<b>6</b>	<b>5</b>	<b>8</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>
	<b>Favourable responses</b>	<b>91</b>	<b>91</b>	<b>88</b>	<b>86</b>	<b>84</b>	<b>86</b>	<b>87</b>	<b>84</b>
	No opinion	3	4	3	4	4	4	4	7

## INTRODUCTION TO CLINICAL MEDICINE

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	4	2	0	1	11	2	1	1	1	1	1	0
	Strongly disagree	0	5	0	1	13	7	1	1	0	1	2	0
	Disagree	11	18	1	14	19	12	18	7	6	5	12	1
	<b>Unfavourable responses</b>	<b>14</b>	<b>25</b>	<b>1</b>	<b>17</b>	<b>43</b>	<b>21</b>	<b>20</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>15</b>	<b>1</b>
	Agree	42	43	29	40	30	42	54	53	51	42	37	32
	Strongly agree	29	25	42	34	20	30	21	29	33	28	27	40
	Completely agree	15	7	28	10	2	6	5	8	8	16	14	26
	<b>Favourable responses</b>	<b>86</b>	<b>75</b>	<b>99</b>	<b>83</b>	<b>52</b>	<b>77</b>	<b>80</b>	<b>90</b>	<b>93</b>	<b>86</b>	<b>79</b>	<b>99</b>
	No opinion	0	0	0	0	5	1	0	0	0	7	6	0
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>33</b>	<b>10</b>	<b>21</b>	<b>21</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>4</b>	<b>0</b>
	<b>Favourable responses</b>	<b>98</b>	<b>92</b>	<b>100</b>	<b>67</b>	<b>81</b>	<b>73</b>	<b>79</b>	<b>88</b>	<b>90</b>	<b>83</b>	<b>94</b>	<b>100</b>
	No opinion	0	4	0	0	10	6	0	0	4	6	2	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	1	2	1	2	3	2	2	2	2	1
	Strongly disagree	2	1	1	1	3	5	1	8	2	2
	Disagree	3	3	10	7	6	9	2	9	8	1
	<b>Unfavourable responses</b>	<b>7</b>	<b>7</b>	<b>13</b>	<b>10</b>	<b>13</b>	<b>16</b>	<b>6</b>	<b>20</b>	<b>13</b>	<b>5</b>
	Agree	20	21	15	22	20	21	21	21	15	22
	Strongly agree	33	38	34	33	23	31	32	25	28	33
	Completely agree	40	34	38	35	44	32	41	33	40	40
	<b>Favourable responses</b>	<b>93</b>	<b>93</b>	<b>87</b>	<b>90</b>	<b>86</b>	<b>84</b>	<b>94</b>	<b>79</b>	<b>83</b>	<b>95</b>
	No opinion	0	0	0	0	1	0	0	1	5	0
2008/2009	<b>Unfavourable responses</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>
	<b>Favourable responses</b>	<b>92</b>	<b>98</b>	<b>100</b>	<b>98</b>	<b>96</b>	<b>88</b>	<b>100</b>	<b>96</b>	<b>100</b>	<b>100</b>
	No opinion	2	0	0	0	0	0	0	0	0	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	Completely disagree	2	2	2	2	2	2
	Strongly disagree	2	2	2	2	2	2
	Disagree	6	7	10	9	7	10
	<b>Unfavourable responses</b>	<b>9</b>	<b>10</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>14</b>
	Agree	35	36	37	35	37	35
	Strongly agree	29	29	25	24	27	24
	Completely agree	16	15	12	11	14	13
	<b>Favourable responses</b>	<b>81</b>	<b>79</b>	<b>74</b>	<b>69</b>	<b>78</b>	<b>72</b>
	No opinion	10	10	12	18	11	14
2008/2009	<b>Unfavourable responses</b>	<b>5</b>	<b>4</b>	<b>22</b>	<b>3</b>	<b>5</b>	<b>10</b>
	<b>Favourable responses</b>	<b>94</b>	<b>92</b>	<b>74</b>	<b>49</b>	<b>93</b>	<b>85</b>
	No opinion	1	4	5	48	2	4

## FOLLOW-UP OF A FAMILY II

### Overall Evaluation of Curricular Area

Nuclear items		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	4	3	5	4	1	3	7	4	5	5	9	5
	Strongly disagree	1	5	1	1	3	7	7	7	3	4	5	4
	Disagree	12	16	12	8	11	17	16	5	3	17	22	11
	<b>Unfavourable responses</b>	<b>17</b>	<b>24</b>	<b>19</b>	<b>13</b>	<b>15</b>	<b>26</b>	<b>30</b>	<b>16</b>	<b>11</b>	<b>27</b>	<b>36</b>	<b>20</b>
	Agree	47	48	47	46	43	41	43	47	57	40	32	42
	Strongly agree	22	17	23	25	19	18	18	22	19	17	20	30
	Completely agree	13	11	11	14	8	12	8	12	9	8	5	7
	<b>Favourable responses</b>	<b>83</b>	<b>76</b>	<b>81</b>	<b>86</b>	<b>71</b>	<b>71</b>	<b>69</b>	<b>82</b>	<b>85</b>	<b>65</b>	<b>58</b>	<b>78</b>
	No opinion	0	0	0	1	14	3	1	3	4	8	5	1
2008/2009	<b>Unfavourable responses</b>	<b>8</b>	<b>14</b>	<b>18</b>	<b>4</b>	<b>6</b>	<b>25</b>	<b>27</b>	<b>8</b>	<b>12</b>	<b>8</b>	<b>40</b>	<b>28</b>
	<b>Favourable responses</b>	<b>90</b>	<b>84</b>	<b>78</b>	<b>92</b>	<b>66</b>	<b>71</b>	<b>67</b>	<b>84</b>	<b>70</b>	<b>80</b>	<b>58</b>	<b>70</b>
	No opinion	2	2	4	4	28	4	6	8	18	12	2	2



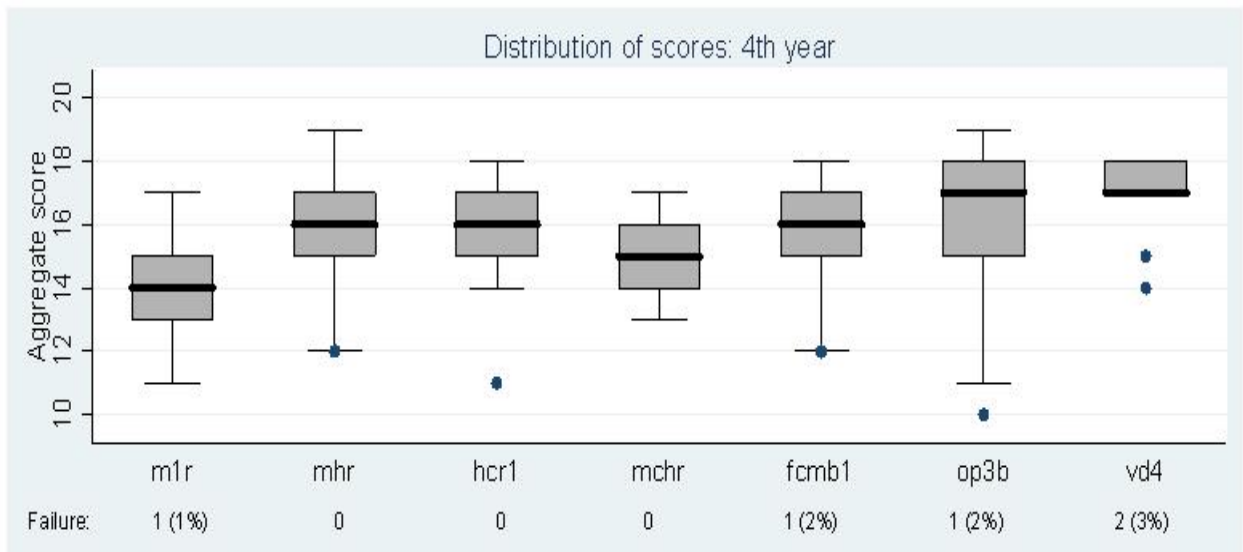
## VERTICAL DOMAINS III

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	14	15	13	10	17	-	14	15	13	-	16	24
	Strongly disagree	10	10	17	11	13	-	10	10	17	-	11	14
	Disagree	17	23	19	20	17	-	17	23	19	-	11	27
	<b>Unfavourable responses</b>	<b>41</b>	<b>48</b>	<b>49</b>	<b>41</b>	<b>47</b>	<b>-</b>	<b>41</b>	<b>48</b>	<b>49</b>	<b>-</b>	<b>39</b>	<b>65</b>
	Agree	37	32	34	34	23	-	37	32	34	-	36	10
	Strongly agree	11	8	7	10	9	-	11	8	7	-	17	13
	Completely agree	6	6	6	10	6	-	6	6	6	-	3	4
	<b>Favourable responses</b>	<b>54</b>	<b>46</b>	<b>47</b>	<b>54</b>	<b>37</b>	<b>-</b>	<b>54</b>	<b>46</b>	<b>47</b>	<b>-</b>	<b>56</b>	<b>27</b>
	No opinion	4	6	4	4	16	-	4	6	4	-	6	8
2008/2009	<b>Unfavourable responses</b>	<b>24</b>	<b>17</b>	<b>29</b>	<b>12</b>	<b>27</b>	<b>-</b>	<b>24</b>	<b>17</b>	<b>29</b>	<b>-</b>	<b>25</b>	<b>39</b>
	<b>Favourable responses</b>	<b>76</b>	<b>69</b>	<b>71</b>	<b>81</b>	<b>44</b>	<b>-</b>	<b>76</b>	<b>69</b>	<b>71</b>	<b>-</b>	<b>75</b>	<b>54</b>
	No opinion	0	14	0	7	29	-	0	14	0	-	0	7

## **4<sup>TH</sup> YEAR**

## DISTRIBUTION OF STUDENT SCORES (\*)



### Legend

M1R – Medicine I Residency

MHR – Mental Health Residency

HCR 1 – Health Centres Residency I

MCHR – Maternal and Child Health Residency

FCMB 1 – From Clinical to Molecular Biology I

OP 3 – Option Project III

VD 4 – Vertical Domains IV

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## MEDICINE I RESIDENCY

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	7	2	5	2	0	0	0	0	0
	Strongly disagree	0	0	0	7	2	5	5	2	0	2	2	2
	Disagree	2	11	3	23	12	10	18	8	6	8	8	3
	<b>Unfavourable responses</b>	<b>2</b>	<b>11</b>	<b>3</b>	<b>36</b>	<b>15</b>	<b>19</b>	<b>24</b>	<b>10</b>	<b>6</b>	<b>10</b>	<b>10</b>	<b>5</b>
	Agree	35	40	21	30	29	39	40	40	27	47	35	23
	Strongly agree	39	29	37	21	27	29	21	26	45	24	39	44
	Completely agree	16	8	31	3	5	3	3	13	10	6	3	18
	<b>Favourable responses</b>	<b>90</b>	<b>77</b>	<b>89</b>	<b>54</b>	<b>61</b>	<b>71</b>	<b>65</b>	<b>79</b>	<b>82</b>	<b>77</b>	<b>77</b>	<b>84</b>
	No opinion	8	11	8	10	24	10	11	11	11	13	13	11
2008/2009	<b>Unfavourable responses</b>	<b>35</b>	<b>55</b>	<b>16</b>	<b>75</b>	<b>78</b>	<b>45</b>	<b>70</b>	<b>35</b>	<b>35</b>	<b>48</b>	<b>49</b>	<b>16</b>
	<b>Favourable responses</b>	<b>65</b>	<b>45</b>	<b>84</b>	<b>25</b>	<b>22</b>	<b>47</b>	<b>26</b>	<b>59</b>	<b>59</b>	<b>48</b>	<b>45</b>	<b>82</b>
	No opinion	0	0	0	0	0	8	4	6	6	4	6	2

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	0	0	0	2	2	0	2	1	2
	Strongly disagree	3	2	1	2	2	5	0	6	2	1
	Disagree	7	4	4	4	7	8	2	6	6	2
	<b>Unfavourable responses</b>	<b>10</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>10</b>	<b>14</b>	<b>3</b>	<b>13</b>	<b>8</b>	<b>5</b>
	Agree	17	18	14	13	14	23	10	19	14	16
	Strongly agree	28	32	21	26	26	20	21	21	27	23
	Completely agree	44	43	58	52	48	32	63	45	46	55
	<b>Favourable responses</b>	<b>89</b>	<b>93</b>	<b>93</b>	<b>91</b>	<b>88</b>	<b>75</b>	<b>94</b>	<b>85</b>	<b>87</b>	<b>94</b>
	No opinion	1	1	2	2	2	11	3	2	5	1
2008/2009	<b>Unfavourable responses</b>	<b>4</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>1</b>	<b>7</b>	<b>7</b>	<b>2</b>
	<b>Favourable responses</b>	<b>96</b>	<b>91</b>	<b>93</b>	<b>92</b>	<b>93</b>	<b>88</b>	<b>97</b>	<b>92</b>	<b>90</b>	<b>97</b>
	No opinion	0	0	0	1	1	3	1	0	3	1

### Evaluation of Seminars/Speakers

*not available*

## MENTAL HEALTH RESIDENCY

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	0	0	0	2	0	0	0	0	0
	Strongly disagree	0	0	0	0	0	0	0	0	8	0	2	0
	Disagree	0	2	0	4	0	2	4	0	10	4	0	2
	<b>Unfavourable responses</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>18</b>	<b>4</b>	<b>2</b>	<b>2</b>
	Agree	12	14	12	18	10	10	22	16	35	14	12	8
	Strongly disagree	51	49	45	27	33	31	47	39	22	45	49	31
	Completely agree	37	35	43	51	39	57	24	41	12	33	35	59
	<b>Favourable responses</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>96</b>	<b>82</b>	<b>98</b>	<b>94</b>	<b>96</b>	<b>69</b>	<b>92</b>	<b>96</b>	<b>98</b>
	No opinion	0	0	0	0	18	0	0	4	12	4	2	0
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>4</b>	<b>19</b>	<b>2</b>	<b>6</b>	<b>2</b>
	<b>Favourable responses</b>	<b>98</b>	<b>96</b>	<b>98</b>	<b>87</b>	<b>88</b>	<b>100</b>	<b>94</b>	<b>96</b>	<b>63</b>	<b>98</b>	<b>94</b>	<b>98</b>
	No opinion	0	0	0	0	10	0	0	0	17	0	0	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	4	0	0	2	2	4	0	2	0	0
	Strongly disagree	4	4	2	0	6	2	0	4	2	2
	Disagree	6	2	0	6	2	8	4	2	4	4
	<b>Unfavourable responses</b>	<b>15</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>11</b>	<b>15</b>	<b>4</b>	<b>8</b>	<b>6</b>	<b>6</b>
	Agree	13	15	13	6	15	15	6	10	13	10
	Strongly disagree	29	17	10	19	19	15	19	21	19	19
	Completely agree	44	63	75	67	55	46	71	60	60	65
	<b>Favourable responses</b>	<b>85</b>	<b>94</b>	<b>98</b>	<b>92</b>	<b>89</b>	<b>75</b>	<b>96</b>	<b>92</b>	<b>92</b>	<b>94</b>
	No opinion	0	0	0	0	0	10	0	0	2	0
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>2</b>
	<b>Favourable responses</b>	<b>98</b>	<b>96</b>	<b>96</b>	<b>98</b>	<b>98</b>	<b>87</b>	<b>100</b>	<b>96</b>	<b>94</b>	<b>98</b>
	No opinion	0	0	0	0	0	8	0	0	0	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	Completely disagree	0	0	0	0	0	0
	Strongly disagree	1	1	1	1	0	1
	Disagree	2	3	5	3	1	4
	<b>Unfavourable responses</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>5</b>
	Agree	17	19	24	14	17	21
	Strongly disagree	41	36	32	23	32	39
	Completely agree	31	29	30	18	39	25
	<b>Favourable responses</b>	<b>89</b>	<b>83</b>	<b>86</b>	<b>56</b>	<b>88</b>	<b>85</b>
	No opinion	8	12	8	39	10	10
2008/2009	<b>Unfavourable responses</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>7</b>
	<b>Favourable responses</b>	<b>91</b>	<b>91</b>	<b>89</b>	<b>61</b>	<b>87</b>	<b>91</b>
	No opinion	3	7	6	34	9	3

## HEALTH CENTRES RESIDENCY I

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	4	0	4	2	2	0	0	0	4	4
	Strongly disagree	2	8	0	0	15	0	2	0	6	2	4	2
	Disagree	2	10	8	2	17	10	15	15	4	6	6	6
	<b>Unfavourable responses</b>	<b>4</b>	<b>19</b>	<b>13</b>	<b>2</b>	<b>35</b>	<b>13</b>	<b>19</b>	<b>15</b>	<b>10</b>	<b>9</b>	<b>15</b>	<b>13</b>
	Agree	42	46	27	31	25	46	46	42	27	43	33	27
	Strongly disagree	33	23	38	40	25	29	27	31	44	38	33	40
	Completely agree	21	13	23	27	6	13	8	13	13	11	19	21
	<b>Favourable responses</b>	<b>96</b>	<b>81</b>	<b>88</b>	<b>98</b>	<b>56</b>	<b>88</b>	<b>81</b>	<b>85</b>	<b>83</b>	<b>91</b>	<b>85</b>	<b>88</b>
2008/2009	No opinion	0	0	0	0	8	0	0	0	6	0	0	0
	<b>Unfavourable responses</b>	<b>9</b>	<b>15</b>	<b>5</b>	<b>9</b>	<b>24</b>	<b>18</b>	<b>24</b>	<b>9</b>	<b>13</b>	<b>15</b>	<b>27</b>	<b>9</b>
	<b>Favourable responses</b>	<b>91</b>	<b>85</b>	<b>95</b>	<b>91</b>	<b>69</b>	<b>78</b>	<b>76</b>	<b>85</b>	<b>80</b>	<b>84</b>	<b>71</b>	<b>91</b>
	No opinion	0	0	0	0	7	4	0	6	7	2	2	0

### Evaluation of Clinical Tutors/Service

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	2	2	2	2	2	0	2	2	0
	Strongly disagree	0	0	0	0	0	0	2	0	0	2
	Disagree	8	2	0	0	4	2	0	2	0	0
	<b>Unfavourable responses</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>
	Agree	13	6	6	6	8	13	6	4	6	6
	Strongly disagree	33	17	8	25	15	23	21	21	21	27
	Completely agree	46	73	83	67	69	60	69	71	69	65
	<b>Favourable responses</b>	<b>92</b>	<b>96</b>	<b>98</b>	<b>98</b>	<b>92</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>98</b>
2008/2009	No opinion	0	0	0	0	2	0	2	0	2	0
	<b>Unfavourable responses</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>7</b>	<b>4</b>
	<b>Favourable responses</b>	<b>95</b>	<b>96</b>	<b>96</b>	<b>98</b>	<b>98</b>	<b>95</b>	<b>96</b>	<b>96</b>	<b>93</b>	<b>96</b>
	No opinion	2	0	0	0	0	0	0	0	0	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	Completely disagree	1	0	1	0	0	0
	Strongly disagree	2	2	3	2	2	2
	Disagree	6	7	7	5	6	8
	<b>Unfavourable responses</b>	<b>8</b>	<b>9</b>	<b>11</b>	<b>7</b>	<b>9</b>	<b>11</b>
	Agree	36	37	37	31	39	39
	Strongly disagree	28	27	24	17	27	23
	Completely agree	8	7	7	4	6	5
	<b>Favourable responses</b>	<b>72</b>	<b>72</b>	<b>68</b>	<b>52</b>	<b>72</b>	<b>67</b>
2008/2009	No opinion	19	19	21	40	19	22
	<b>Unfavourable responses</b>	<b>14</b>	<b>14</b>	<b>19</b>	<b>14</b>	<b>13</b>	<b>23</b>
	<b>Favourable responses</b>	<b>80</b>	<b>75</b>	<b>71</b>	<b>32</b>	<b>74</b>	<b>68</b>
	No opinion	5	11	11	54	13	9

## MATERNAL AND CHILD HEALTH RESIDENCY

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	0	7	2	5	0	0	0	0	0
	Strongly disagree	0	0	0	5	7	2	5	2	0	0	0	0
	Disagree	0	2	2	16	21	19	26	7	7	14	14	5
	<b>Unfavourable responses</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>21</b>	<b>36</b>	<b>23</b>	<b>35</b>	<b>9</b>	<b>7</b>	<b>14</b>	<b>14</b>	<b>5</b>
	Agree	37	56	35	40	31	53	42	53	53	37	40	37
	Strongly agree	44	33	42	28	17	16	16	23	26	28	29	40
	Completely agree	19	7	21	9	5	5	5	9	5	5	12	19
	<b>Favourable responses</b>	<b>100</b>	<b>95</b>	<b>98</b>	<b>77</b>	<b>52</b>	<b>74</b>	<b>63</b>	<b>86</b>	<b>84</b>	<b>70</b>	<b>81</b>	<b>95</b>
	Without an opinion	0	2	0	2	12	2	2	5	9	16	5	0
2008/2009	<b>Unfavourable responses</b>	<b>5</b>	<b>7</b>	<b>2</b>	<b>42</b>	<b>9</b>	<b>15</b>	<b>20</b>	<b>9</b>	<b>21</b>	<b>23</b>	<b>14</b>	<b>5</b>
	<b>Favourable responses</b>	<b>95</b>	<b>93</b>	<b>98</b>	<b>58</b>	<b>91</b>	<b>84</b>	<b>79</b>	<b>87</b>	<b>71</b>	<b>75</b>	<b>84</b>	<b>95</b>
	Without an opinion	0	0	0	0	0	2	2	4	7	2	2	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	3	1	2	2	6	7	1	10	5	0
	Strongly disagree	7	6	7	5	6	5	2	12	6	4
	Disagree	14	12	8	7	14	14	0	7	11	5
	<b>Unfavourable responses</b>	<b>24</b>	<b>19</b>	<b>18</b>	<b>14</b>	<b>26</b>	<b>26</b>	<b>3</b>	<b>29</b>	<b>21</b>	<b>8</b>
	Agree	21	22	20	20	21	28	28	22	20	30
	Strongly disagree	27	26	25	25	24	16	15	16	19	21
	Completely agree	28	33	35	39	27	29	49	29	34	40
	<b>Favourable responses</b>	<b>76</b>	<b>80</b>	<b>80</b>	<b>85</b>	<b>72</b>	<b>74</b>	<b>92</b>	<b>67</b>	<b>73</b>	<b>92</b>
	No opinion	0	1	2	1	2	0	5	3	6	0
2008/2009	<b>Unfavourable responses</b>	<b>12</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>4</b>	<b>2</b>
	<b>Favourable responses</b>	<b>88</b>	<b>97</b>	<b>98</b>	<b>98</b>	<b>96</b>	<b>90</b>	<b>97</b>	<b>90</b>	<b>95</b>	<b>98</b>
	No opinion	0	0	0	0	1	1	1	1	1	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	Completely disagree	0	0	1	0	0	1
	Strongly disagree	1	1	2	1	1	2
	Disagree	6	5	8	3	5	6
	<b>Unfavourable responses</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>5</b>	<b>6</b>	<b>8</b>
	Agree	26	26	30	18	26	29
	Strongly disagree	36	36	31	21	36	32
	Completely agree	20	21	17	13	21	17
	<b>Favourable responses</b>	<b>82</b>	<b>83</b>	<b>78</b>	<b>52</b>	<b>83</b>	<b>78</b>
	No opinion	11	11	12	43	11	14
2008/2009	<b>Unfavourable responses</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>6</b>	<b>4</b>	<b>16</b>
	<b>Favourable responses</b>	<b>89</b>	<b>91</b>	<b>74</b>	<b>30</b>	<b>93</b>	<b>81</b>
	No opinion	1	3	8	64	3	3

## FROM CLINICAL TO MOLECULAR BIOLOGY I

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	12	10	10	10	17	7	7	10	10	7	24	21
	Strongly disagree	12	10	7	2	10	5	7	2	7	5	12	7
	Disagree	24	12	32	14	14	17	10	5	10	10	17	19
	<b>Unfavourable responses</b>	<b>48</b>	<b>31</b>	<b>49</b>	<b>26</b>	<b>40</b>	<b>29</b>	<b>24</b>	<b>17</b>	<b>26</b>	<b>21</b>	<b>52</b>	<b>48</b>
	Agree	29	43	32	48	33	31	45	50	40	38	31	31
	Strongly agree	14	14	10	10	14	10	19	17	19	24	14	14
	Completely agree	10	12	7	14	7	14	10	12	5	5	0	5
	<b>Favourable responses</b>	<b>52</b>	<b>69</b>	<b>49</b>	<b>71</b>	<b>55</b>	<b>55</b>	<b>74</b>	<b>79</b>	<b>64</b>	<b>67</b>	<b>45</b>	<b>50</b>
	Without an opinion	0	0	2	2	5	17	2	5	10	12	2	2
2008/2009	<b>Unfavourable responses</b>	<b>59</b>	<b>55</b>	<b>70</b>	<b>41</b>	<b>48</b>	<b>47</b>	<b>45</b>	<b>35</b>	<b>50</b>	<b>42</b>	<b>80</b>	<b>71</b>
	<b>Favourable responses</b>	<b>39</b>	<b>38</b>	<b>26</b>	<b>55</b>	<b>45</b>	<b>38</b>	<b>55</b>	<b>58</b>	<b>39</b>	<b>44</b>	<b>16</b>	<b>24</b>
	Without an opinion	2	7	4	4	7	15	0	7	11	15	4	5



## OPTION PROJECTS III

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	0	0	0	3	3	0	0	0
	Strongly disagree	0	5	2	3	3	0	0	0
	Disagree	2	15	17	5	21	2	0	0
	<b>Unfavourable responses</b>	<b>2</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>0</b>
	Agree	15	12	10	15	28	22	22	23
	Strongly agree	29	27	34	30	13	24	24	33
	Completely agree	46	27	32	45	33	49	54	43
	<b>Favourable responses</b>	<b>90</b>	<b>66</b>	<b>76</b>	<b>90</b>	<b>74</b>	<b>95</b>	<b>100</b>	<b>98</b>
	No opinion	7	15	5	0	0	2	0	3
2008/2009	<b>Unfavourable responses</b>	<b>0</b>	<b>5</b>	<b>11</b>	<b>4</b>	<b>20</b>	<b>15</b>	<b>5</b>	<b>5</b>
	<b>Favourable responses</b>	<b>100</b>	<b>80</b>	<b>80</b>	<b>95</b>	<b>75</b>	<b>85</b>	<b>95</b>	<b>91</b>
	No opinion	0	14	9	2	5	0	0	4

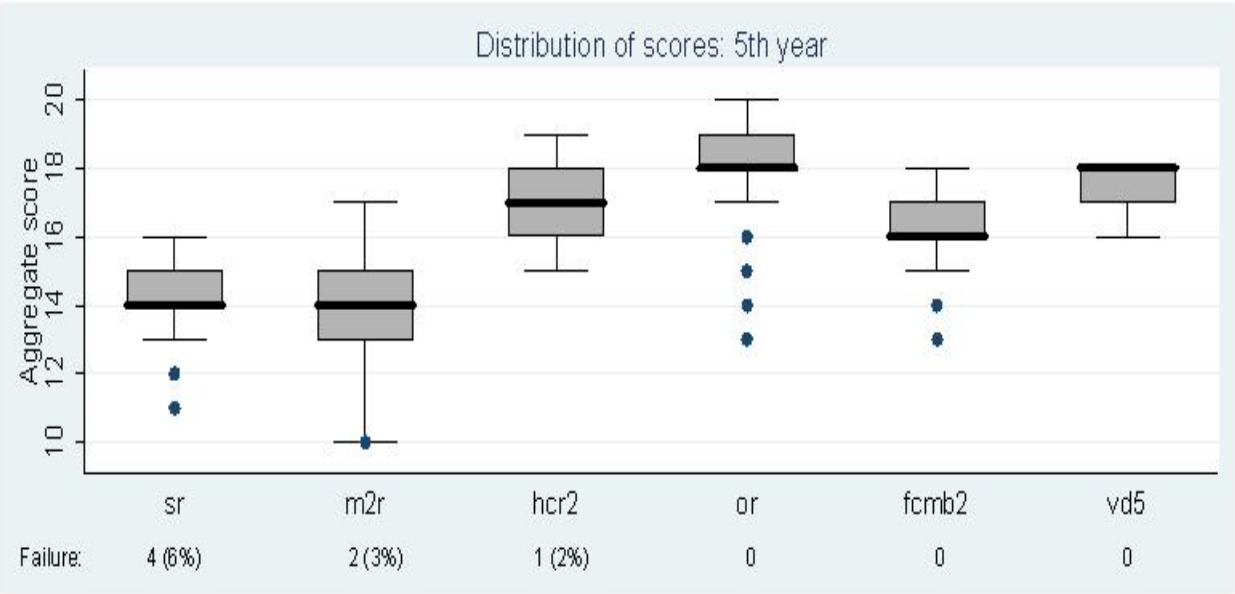
## VERTICAL DOMAINS IV

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	7	7	10	10	15	-	7	7	10	-	7	7
	Strongly disagree	12	10	7	2	15	-	5	2	2	-	7	15
	Disagree	17	20	15	7	17	-	17	7	20	-	10	24
	<b>Unfavourable responses</b>	<b>37</b>	<b>37</b>	<b>32</b>	<b>20</b>	<b>46</b>	<b>-</b>	<b>29</b>	<b>17</b>	<b>32</b>	<b>-</b>	<b>24</b>	<b>46</b>
	Agree	41	41	37	41	32	-	51	46	34	-	41	34
	Strongly agree	12	10	12	15	7	-	10	10	12	-	22	12
	Completely agree	7	5	15	15	10	-	7	12	5	-	7	0
	<b>Favourable responses</b>	<b>61</b>	<b>56</b>	<b>63</b>	<b>71</b>	<b>49</b>	<b>-</b>	<b>68</b>	<b>68</b>	<b>51</b>	<b>-</b>	<b>71</b>	<b>46</b>
	No opinion	2	7	5	10	5	-	2	15	17	-	5	7
2008/2009	<b>Unfavourable responses</b>	<b>63</b>	<b>73</b>	<b>71</b>	<b>69</b>	<b>73</b>	<b>-</b>	<b>70</b>	<b>55</b>	<b>55</b>	<b>-</b>	<b>66</b>	<b>77</b>
	<b>Favourable responses</b>	<b>38</b>	<b>25</b>	<b>29</b>	<b>25</b>	<b>16</b>	<b>-</b>	<b>29</b>	<b>42</b>	<b>25</b>	<b>-</b>	<b>32</b>	<b>23</b>
	No opinion	0	2	0	5	11	-	2	4	20	-	2	0

## 5<sup>TH</sup> YEAR

**DISTRIBUTION OF STUDENT SCORES (\*)**



Legend

- SR – Surgery Residency
- M2R – Medicine II Residency
- HCR 2 – Health Centres Residency II
- OR – Optional Residencies
- FCMB 2 – From Clinical to Molecular Biology II
- VD 5 – Vertical Domains V

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## SURGERY RESIDENCY

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	2	0	3	2	0	2	3	3	3	2	0
	Strongly disagree	2	2	0	3	0	5	0	2	0	5	0	0
	Disagree	5	7	5	17	16	17	12	5	10	9	12	7
	<b>Unfavourable responses</b>	<b>7</b>	<b>10</b>	<b>5</b>	<b>24</b>	<b>17</b>	<b>22</b>	<b>14</b>	<b>10</b>	<b>14</b>	<b>17</b>	<b>14</b>	<b>7</b>
	Agree	31	40	30	38	40	38	43	43	41	40	40	34
	Strongly agree	36	31	33	21	26	24	28	24	21	31	24	31
	Completely agree	26	17	32	17	10	16	14	19	17	12	22	28
	<b>Favourable responses</b>	<b>93</b>	<b>88</b>	<b>95</b>	<b>76</b>	<b>76</b>	<b>78</b>	<b>84</b>	<b>86</b>	<b>79</b>	<b>83</b>	<b>86</b>	<b>93</b>
	No opinion	0	2	0	0	7	0	2	3	7	0	0	0
2008/2009	<b>Unfavourable responses</b>	<b>4</b>	<b>12</b>	<b>2</b>	<b>31</b>	<b>22</b>	<b>8</b>	<b>14</b>	<b>12</b>	<b>6</b>	<b>8</b>	<b>12</b>	<b>2</b>
	<b>Favourable responses</b>	<b>96</b>	<b>86</b>	<b>98</b>	<b>67</b>	<b>78</b>	<b>86</b>	<b>86</b>	<b>84</b>	<b>88</b>	<b>88</b>	<b>86</b>	<b>98</b>
	No opinion	0	2	0	2	0	6	0	4	6	4	2	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	1	0	0	0	1	1	1	1	1	0
	Strongly disagree	1	2	1	1	2	2	1	1	1	1
	Disagree	5	4	3	2	4	4	1	3	3	2
	<b>Unfavourable responses</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>3</b>
	Agree	18	14	13	14	16	17	8	15	14	15
	Strongly agree	26	26	22	24	24	26	21	23	25	27
	Completely agree	49	55	62	58	54	50	67	56	55	56
	<b>Favourable responses</b>	<b>94</b>	<b>94</b>	<b>96</b>	<b>96</b>	<b>94</b>	<b>93</b>	<b>97</b>	<b>94</b>	<b>94</b>	<b>97</b>
	No opinion	0	0	0	0	0	0	0	0	0	0
2008/2009	<b>Unfavourable responses</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>11</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>2</b>
	<b>Favourable responses</b>	<b>91</b>	<b>98</b>	<b>99</b>	<b>98</b>	<b>91</b>	<b>88</b>	<b>99</b>	<b>94</b>	<b>97</b>	<b>98</b>
	No opinion	0	0	0	0	0	1	0	0	2	0

### Evaluation of Seminars/Speakers

*not available*

## MEDICINE II RESIDENCY

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	5	0	10	5	3	3	3	3	5	3	3
	Strongly disagree	3	3	3	8	3	8	5	3	3	5	3	3
	Disagree	10	10	5	18	26	13	13	13	8	15	23	10
	<b>Unfavourable responses</b>	<b>13</b>	<b>18</b>	<b>8</b>	<b>36</b>	<b>33</b>	<b>23</b>	<b>21</b>	<b>18</b>	<b>13</b>	<b>26</b>	<b>28</b>	<b>15</b>
	Agree	56	54	51	46	38	56	64	64	67	51	46	59
	Strongly agree	23	21	31	13	10	13	10	10	15	18	23	15
	Completely agree	8	5	10	5	3	3	3	3	5	3	3	10
	<b>Favourable responses</b>	<b>87</b>	<b>79</b>	<b>92</b>	<b>64</b>	<b>51</b>	<b>72</b>	<b>77</b>	<b>77</b>	<b>87</b>	<b>72</b>	<b>72</b>	<b>85</b>
	No opinion	0	3	0	0	15	5	3	5	0	3	0	0
2008/2009	<b>Unfavourable responses</b>	<b>2</b>	<b>16</b>	<b>4</b>	<b>44</b>	<b>26</b>	<b>25</b>	<b>27</b>	<b>11</b>	<b>7</b>	<b>25</b>	<b>19</b>	<b>7</b>
	<b>Favourable responses</b>	<b>98</b>	<b>84</b>	<b>96</b>	<b>56</b>	<b>65</b>	<b>74</b>	<b>73</b>	<b>86</b>	<b>91</b>	<b>74</b>	<b>79</b>	<b>93</b>
	No opinion	0	0	0	0	9	2	0	4	2	2	2	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	1	0	1	1	1	2	1	1	1	2
	Strongly disagree	2	2	1	1	1	4	1	2	2	1
	Disagree	6	4	4	3	7	10	1	5	4	4
	<b>Unfavourable responses</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>10</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>7</b>	<b>6</b>
	Agree	20	18	19	22	19	20	18	20	23	22
	Strongly agree	26	27	27	24	25	22	29	27	27	26
	Completely agree	45	48	49	47	46	40	49	44	43	46
	<b>Favourable responses</b>	<b>91</b>	<b>93</b>	<b>94</b>	<b>94</b>	<b>90</b>	<b>82</b>	<b>96</b>	<b>92</b>	<b>92</b>	<b>94</b>
	No opinion	0	0	0	0	0	3	0	0	1	0
2008/2009	<b>Unfavourable responses</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>10</b>	<b>11</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>4</b>
	<b>Favourable responses</b>	<b>92</b>	<b>95</b>	<b>95</b>	<b>93</b>	<b>89</b>	<b>85</b>	<b>97</b>	<b>90</b>	<b>93</b>	<b>95</b>
	No opinion	1	1	0	0	1	4	0	1	1	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	Completely disagree	1	1	1	1	1	2
	Strongly disagree	7	7	7	6	6	8
	Disagree	20	18	16	15	15	19
	<b>Unfavourable responses</b>	<b>28</b>	<b>26</b>	<b>25</b>	<b>22</b>	<b>22</b>	<b>29</b>
	Agree	41	41	40	31	45	40
	Strongly agree	15	17	17	13	15	15
	Completely agree	8	8	9	6	9	8
	<b>Favourable responses</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>51</b>	<b>69</b>	<b>63</b>
	No opinion	8	8	9	27	8	8
2008/2009	<b>Unfavourable responses</b>	<b>9</b>	<b>6</b>	<b>20</b>	<b>3</b>	<b>4</b>	<b>15</b>
	<b>Favourable responses</b>	<b>90</b>	<b>93</b>	<b>78</b>	<b>25</b>	<b>91</b>	<b>84</b>
	No opinion	0	1	2	72	5	1

## HEALTH CENTRES RESIDENCY II

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	0	2	0	0	0	0	2	2	2
	Strongly disagree	0	4	4	4	4	0	0	4	2	2	2	4
	Disagree	7	7	4	11	13	13	13	5	7	20	11	4
	<b>Unfavourable responses</b>	<b>7</b>	<b>11</b>	<b>7</b>	<b>14</b>	<b>18</b>	<b>13</b>	<b>13</b>	<b>9</b>	<b>9</b>	<b>23</b>	<b>14</b>	<b>9</b>
	Agree	40	40	36	39	36	38	42	42	45	29	43	45
	Strongly disagree	35	35	32	27	21	32	29	33	29	30	25	24
	Completely agree	16	15	25	20	16	16	15	13	18	16	18	20
	<b>Favourable responses</b>	<b>91</b>	<b>89</b>	<b>93</b>	<b>86</b>	<b>73</b>	<b>86</b>	<b>85</b>	<b>87</b>	<b>91</b>	<b>75</b>	<b>86</b>	<b>89</b>
	No opinion	2	0	0	0	9	2	2	4	0	2	0	2
2008/2009	<b>Unfavourable responses</b>	<b>11</b>	<b>31</b>	<b>4</b>	<b>15</b>	<b>34</b>	<b>9</b>	<b>23</b>	<b>15</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>9</b>
	<b>Favourable responses</b>	<b>89</b>	<b>67</b>	<b>96</b>	<b>85</b>	<b>62</b>	<b>91</b>	<b>77</b>	<b>85</b>	<b>87</b>	<b>85</b>	<b>83</b>	<b>91</b>
	No opinion	0	2	0	0	4	0	0	0	6	8	4	0

### Evaluation of Clinical Tutors/Services

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	0	0	0	0	0	0	0	0	0
	Strongly disagree	2	2	0	0	0	0	0	0	0	0
	Disagree	4	4	5	5	9	7	4	4	5	4
	<b>Unfavourable responses</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>4</b>
	Agree	9	4	2	2	2	4	2	5	5	2
	Strongly agree	22	27	16	27	15	20	22	22	18	23
	Completely agree	64	64	76	65	75	69	71	69	71	72
	<b>Favourable responses</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>91</b>	<b>93</b>	<b>95</b>	<b>96</b>	<b>95</b>	<b>96</b>
	No opinion	0	0	0	0	0	0	2	0	0	0
2008/2009	<b>Unfavourable responses</b>	<b>12</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>15</b>	<b>15</b>	<b>3</b>	<b>15</b>	<b>10</b>	<b>8</b>
	<b>Favourable responses</b>	<b>88</b>	<b>93</b>	<b>93</b>	<b>89</b>	<b>76</b>	<b>76</b>	<b>94</b>	<b>84</b>	<b>86</b>	<b>92</b>
	No opinion	0	0	1	2	9	9	3	1	4	1

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	discordo completamente	1	1	1	1	1	2
	discordo bastante	6	6	6	5	5	7
	discordo	19	18	16	15	15	18
	<b>Respostas Desfavoráveis</b>	<b>26</b>	<b>25</b>	<b>24</b>	<b>21</b>	<b>22</b>	<b>27</b>
	concordo	41	41	40	31	45	40
	concordo bastante	16	18	18	14	15	15
	concordo completamente	9	10	10	7	10	10
	<b>Respostas Favoráveis</b>	<b>66</b>	<b>68</b>	<b>67</b>	<b>52</b>	<b>70</b>	<b>65</b>
	sem opinião	8	7	9	27	8	8
2008/2009	<b>Respostas Desfavoráveis</b>	<b>86</b>	<b>92</b>	<b>75</b>	<b>17</b>	<b>86</b>	<b>81</b>
	<b>Respostas Favoráveis</b>	<b>14</b>	<b>8</b>	<b>22</b>	<b>8</b>	<b>11</b>	<b>19</b>
	sem opinião	0	0	3	75	3	0

## **OPTIONAL RESIDENCIES**

### **Overall Evaluation of Curricular Area**

*not available*

### **Evaluation of Clinical Tutors/Services**

*not available*



## FROM CLINICAL TO MOLECULAR BIOLOGY II

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	25	25	35	40	32	30	23	25	32	32	51	44
	Strongly disagree	18	18	14	11	12	16	12	14	12	11	12	18
	Disagree	18	25	25	22	16	16	16	18	16	23	18	12
	<b>Unfavourable responses</b>	<b>61</b>	<b>67</b>	<b>74</b>	<b>73</b>	<b>60</b>	<b>61</b>	<b>51</b>	<b>56</b>	<b>60</b>	<b>65</b>	<b>81</b>	<b>74</b>
	Agree	29	23	16	16	14	23	37	32	25	23	14	18
	Strongly agree	7	4	5	0	4	2	5	4	7	4	2	7
	Completely agree	4	2	4	9	4	4	2	2	2	2	2	2
	<b>Favourable responses</b>	<b>39</b>	<b>28</b>	<b>25</b>	<b>25</b>	<b>21</b>	<b>28</b>	<b>44</b>	<b>37</b>	<b>33</b>	<b>28</b>	<b>18</b>	<b>26</b>
	Without an opinion	0	5	2	2	19	11	5	7	7	7	2	0
2008/2009	<b>Unfavourable responses</b>	<b>48</b>	<b>35</b>	<b>65</b>	<b>37</b>	<b>63</b>	<b>44</b>	<b>37</b>	<b>20</b>	<b>33</b>	<b>36</b>	<b>83</b>	<b>70</b>
	<b>Favourable responses</b>	<b>48</b>	<b>56</b>	<b>33</b>	<b>59</b>	<b>28</b>	<b>37</b>	<b>61</b>	<b>74</b>	<b>57</b>	<b>55</b>	<b>15</b>	<b>24</b>
	Without an opinion	4	9	2	4	9	19	2	6	9	9	2	6

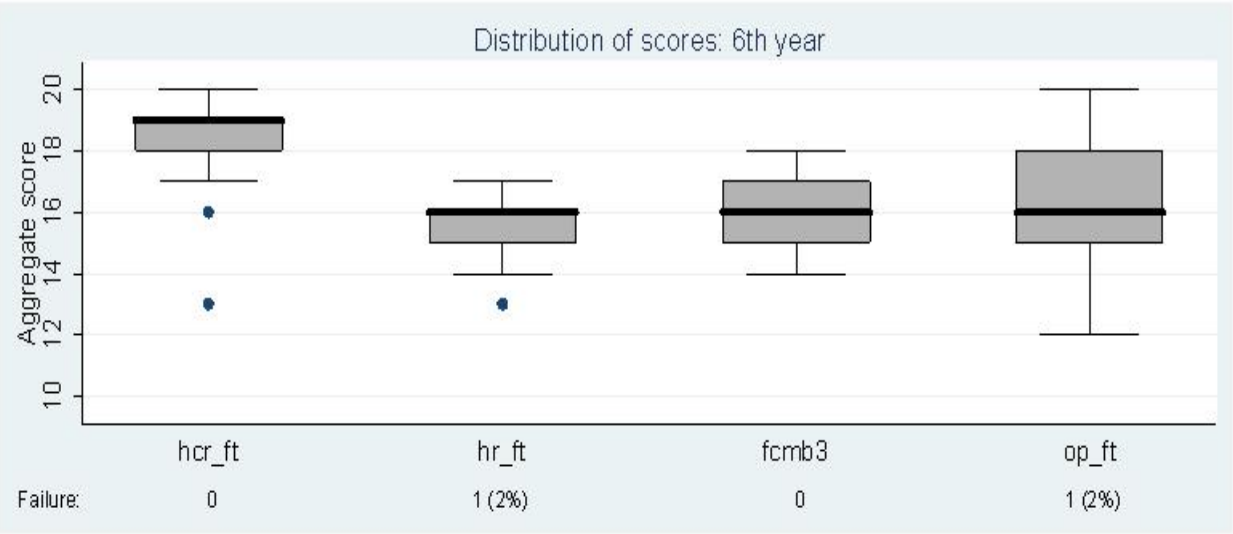
## VERTICAL DOMAINS V

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	14	13	18	20	31	–	18	16	16	–	20	23
	Strongly disagree	5	11	9	14	7	–	7	7	2	–	4	9
	Disagree	20	34	20	23	22	–	34	29	27	–	23	29
	<b>Unfavourable responses</b>	<b>39</b>	<b>57</b>	<b>46</b>	<b>57</b>	<b>60</b>	<b>–</b>	<b>59</b>	<b>52</b>	<b>45</b>	<b>–</b>	<b>46</b>	<b>61</b>
	Agree	34	21	30	21	16	–	21	27	25	–	23	18
	Strongly agree	7	5	13	9	4	–	7	9	13	–	14	5
	Completely agree	14	11	7	7	5	–	7	9	9	–	13	13
	<b>Favourable responses</b>	<b>55</b>	<b>38</b>	<b>50</b>	<b>38</b>	<b>25</b>	<b>–</b>	<b>36</b>	<b>45</b>	<b>46</b>	<b>–</b>	<b>50</b>	<b>36</b>
	No opinion	5	5	4	5	15	–	5	4	9	–	4	4
2008/2009	<b>Unfavourable responses</b>	<b>30</b>	<b>37</b>	<b>50</b>	<b>45</b>	<b>40</b>	<b>–</b>	<b>45</b>	<b>25</b>	<b>27</b>	<b>–</b>	<b>52</b>	<b>63</b>
	<b>Favourable responses</b>	<b>68</b>	<b>58</b>	<b>50</b>	<b>53</b>	<b>40</b>	<b>–</b>	<b>55</b>	<b>73</b>	<b>55</b>	<b>–</b>	<b>48</b>	<b>37</b>
	No opinion	2	5	0	2	20	–	0	2	18	–	0	0

## **6<sup>TH</sup> YEAR**

**DISTRIBUTION OF STUDENT SCORES (\*)**



Legend

- HCR\_FT – Health Centres Residency - Final Training
- HR\_FT – Hospital Residencies - Final Training
- FCMB 3 – From Clinical to Molecular Biology III
- OP\_FT – Option Projects - Final Training

(\*) Output provided by the database of SHS-UM Longitudinal Project.

## HEALTH CENTRES RESIDENCY – FINAL TRAINING

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	0	0	0	0	0	0	0	0	0	0	0	0
	Strongly disagree	2	2	2	0	4	2	2	2	2	4	2	2
	Disagree	0	4	2	4	2	5	5	4	5	4	4	0
	<b>Unfavourable responses</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>2</b>
	Agree	25	31	19	20	25	25	36	29	22	25	29	28
	Strongly disagree	51	46	44	55	47	44	40	49	45	56	49	48
	Completely agree	22	17	33	22	22	24	16	16	24	11	16	22
	<b>Favourable responses</b>	<b>98</b>	<b>94</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>93</b>	<b>93</b>	<b>95</b>	<b>91</b>	<b>93</b>	<b>95</b>	<b>98</b>
2008/2009	No opinion	0	0	0	0	0	0	0	0	2	0	0	0
	<b>Unfavourable responses</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>7</b>	<b>4</b>
	<b>Favourable responses</b>	<b>98</b>	<b>93</b>	<b>96</b>	<b>96</b>	<b>91</b>	<b>89</b>	<b>91</b>	<b>98</b>	<b>96</b>	<b>96</b>	<b>93</b>	<b>96</b>
	No opinion	0	0	0	0	4	0	0	0	0	0	0	0

### Evaluation of Clinical Tutors/Service

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	0	0	2	2	2	2	0	0	0
	Strongly disagree	0	2	0	0	0	0	0	2	2	2
	Disagree	2	0	2	0	0	4	0	0	2	0
	<b>Unfavourable responses</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>
	Agree	13	7	9	20	11	13	16	14	11	13
	Strongly agree	29	29	20	25	20	21	21	14	13	25
	Completely agree	57	63	70	54	68	61	61	70	71	61
	<b>Favourable responses</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>95</b>	<b>98</b>	<b>98</b>	<b>95</b>	<b>98</b>
2008/2009	No opinion	0	0	0	0	0	0	0	0	2	0
	<b>Unfavourable responses</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Favourable responses</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
	No opinion	0	0	0	0	0	0	0	0	0	0

## HOSPITAL RESIDENCIES - FINAL TRAINING

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	3	3	3	3	3	3	3	3	3	3	3	3
	Strongly disagree	0	0	0	3	0	6	6	3	0	0	3	3
	Disagree	3	14	3	8	8	3	11	8	8	6	6	0
	<b>Unfavourable responses</b>	<b>6</b>	<b>17</b>	<b>6</b>	<b>14</b>	<b>11</b>	<b>11</b>	<b>19</b>	<b>14</b>	<b>11</b>	<b>8</b>	<b>11</b>	<b>6</b>
	Agree	20	19	17	22	31	36	22	31	19	28	25	19
	Strongly disagree	46	42	53	47	39	36	44	33	53	42	36	47
	Completely agree	29	19	25	17	14	14	11	17	17	17	25	25
	<b>Favourable responses</b>	<b>94</b>	<b>81</b>	<b>94</b>	<b>86</b>	<b>83</b>	<b>86</b>	<b>78</b>	<b>81</b>	<b>89</b>	<b>86</b>	<b>86</b>	<b>92</b>
	No opinion	0	3	0	0	6	3	3	6	0	6	3	3
2008/2009	<b>Unfavourable responses</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>20</b>	<b>10</b>	<b>6</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>10</b>	<b>2</b>
	<b>Favourable responses</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>88</b>	<b>80</b>	<b>86</b>	<b>90</b>	<b>90</b>	<b>98</b>	<b>92</b>	<b>88</b>	<b>98</b>
	No opinion	0	0	0	0	0	4	4	4	0	4	2	0

### Evaluation of Clinical Tutors/Service

		1	2	3	4	5	6	7	8	9	10
2009/2010	Completely disagree	0	0	0	0	0	1	0	0	0	0
	Strongly disagree	0	0	1	0	1	1	1	2	2	1
	Disagree	3	9	6	6	10	13	2	14	6	4
	<b>Unfavourable responses</b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>12</b>	<b>14</b>	<b>3</b>	<b>17</b>	<b>7</b>	<b>5</b>
	Agree	20	24	19	21	23	24	18	25	22	30
	Strongly agree	31	29	25	28	23	20	26	23	24	25
	Completely agree	44	36	39	34	35	34	44	33	33	37
	<b>Favourable responses</b>	<b>96</b>	<b>89</b>	<b>82</b>	<b>82</b>	<b>81</b>	<b>78</b>	<b>88</b>	<b>80</b>	<b>79</b>	<b>92</b>
	No opinion	0	1	10	10	7	7	9	2	14	3
2008/2009	<b>Unfavourable responses</b>	<b>9</b>	<b>10</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>13</b>	<b>2</b>	<b>19</b>	<b>4</b>	<b>9</b>
	<b>Favourable responses</b>	<b>90</b>	<b>89</b>	<b>85</b>	<b>86</b>	<b>83</b>	<b>77</b>	<b>88</b>	<b>80</b>	<b>80</b>	<b>91</b>
	No opinion	1	0	8	8	9	11	10	1	15	0

### Evaluation of Seminars/Speakers

		1	2	3	4	5	6
2009/2010	discordo completamente	0	0	0	0	0	0
	discordo bastante	0	0	0	1	0	0
	discordo	2	2	3	1	2	2
	<b>Respostas Desfavoráveis</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>
	concordo	15	14	15	9	14	16
	concordo bastante	16	17	15	7	15	15
	concordo completamente	9	9	8	5	8	8
	<b>Respostas Favoráveis</b>	<b>40</b>	<b>39</b>	<b>38</b>	<b>21</b>	<b>38</b>	<b>39</b>
	sem opinião	58	58	58	77	59	58
2008/2009	<b>Respostas Desfavoráveis</b>	<b>15</b>	<b>11</b>	<b>13</b>	<b>11</b>	<b>13</b>	<b>15</b>
	<b>Respostas Favoráveis</b>	<b>83</b>	<b>86</b>	<b>84</b>	<b>86</b>	<b>83</b>	<b>82</b>
	sem opinião	2	3	3	3	4	3

## FROM CLINICAL TO MOLECULAR BIOLOGY III

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8	9	10	11	12
2009/2010	Completely disagree	14	7	16	16	16	18	5	7	5	5	27	26
	Strongly disagree	7	16	14	9	16	16	16	16	9	9	20	16
	Disagree	27	27	32	32	25	14	16	9	5	7	30	21
	<b>Unfavourable responses</b>	<b>48</b>	<b>50</b>	<b>61</b>	<b>57</b>	<b>57</b>	<b>48</b>	<b>36</b>	<b>32</b>	<b>18</b>	<b>20</b>	<b>77</b>	<b>63</b>
	Agree	32	41	32	30	39	39	55	52	50	41	20	33
	Strongly disagree	16	7	5	11	0	2	9	9	9	20	2	2
	Completely agree	5	0	2	2	2	0	0	2	7	2	0	0
	<b>Favourable responses</b>	<b>52</b>	<b>48</b>	<b>39</b>	<b>43</b>	<b>41</b>	<b>41</b>	<b>64</b>	<b>64</b>	<b>66</b>	<b>64</b>	<b>23</b>	<b>35</b>
	No opinion	0	2	0	0	2	11	0	5	16	16	0	2
2008/2009	<b>Unfavourable responses</b>	62	63	72	62	64	68	49	47	46	41	83	83
	<b>Favourable responses</b>	38	37	28	32	32	26	47	49	50	50	13	15
	No opinion	0	0	0	6	4	6	4	4	4	9	4	2

## OPTION PROJECTS - FINAL TRAINING

### Overall Evaluation of Curricular Area

		1	2	3	4	5	6	7	8
2009/2010	Completely disagree	0	8	6	2	24	10	2	2
	Strongly disagree	2	8	8	4	16	0	2	2
	Disagree	6	16	14	4	28	12	2	12
	<b>Unfavourable responses</b>	<b>8</b>	<b>32</b>	<b>28</b>	<b>10</b>	<b>68</b>	<b>22</b>	<b>6</b>	<b>16</b>
	Agree	20	20	20	30	14	28	26	42
	Strongly agree	42	26	34	30	18	18	34	24
	Completely agree	28	22	18	30	0	26	34	14
	<b>Favourable responses</b>	<b>90</b>	<b>68</b>	<b>72</b>	<b>90</b>	<b>32</b>	<b>72</b>	<b>94</b>	<b>80</b>
	No opinion	2	0	0	0	0	6	0	4
2008/2009	<b>Unfavourable responses</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>27</b>	<b>61</b>	<b>49</b>	<b>13</b>	<b>22</b>
	<b>Favourable responses</b>	<b>90</b>	<b>86</b>	<b>86</b>	<b>73</b>	<b>37</b>	<b>49</b>	<b>87</b>	<b>76</b>
	No opinion	0	0	0	0	2	2	0	2

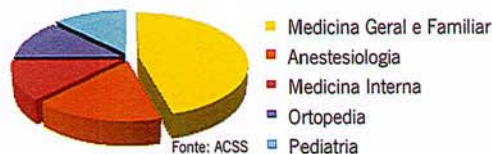


## GRADUADOS: ONDE ANDAM...

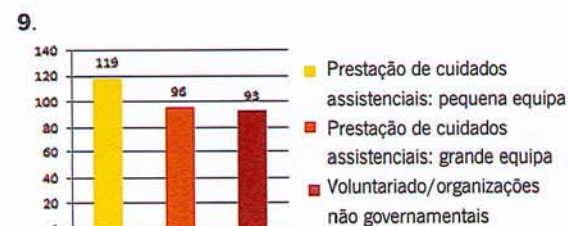
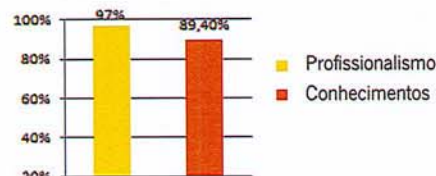


### Respostas

1. 141
2. 135
3. 2001 – 7; 2002 – 11; 2003 – 13
- 4.



5. 1º – Hospital de Braga  
2º – Centro Hospitalar do Alto Ave (Guimarães)  
3º – Centro Hospitalar Vila Nova de Gaia/Espinho, EPE
6. 26
7. 91
8. Comparativamente a todos os internos que já encontrei estão entre os 50% melhores...



10. >50 (inscritos 44)



Universidade do Minho  
Escola de Ciências da Saúde

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Universidade do Minho  
Escola de Ciências da Saúde

## MedDay

1º MEDDAY DA ESCOLA DE CIÊNCIAS DA SAÚDE



É com agrado que acompanhamos o percurso dos nossos graduados na sua carreira profissional e que continuamos a apreciar os seus sucessos.

**OBRIGADO PELA SUA PRESENÇA**

## Até Breve

8 de Maio de 2010

Organização

UEM  
ECS-UMinho



Patrocínios







## ELECS-UM

O Estudo Longitudinal da Escola de Ciências da Saúde da Universidade do MINHO (ELECS-UM) contribui para o desenvolvimento do curso de medicina através do estudo de factores que influem sobre a competência profissional dos médicos graduados na ECS-UM. Foi desenhada uma base de dados onde foram inseridos registos académicos, informação não cognitiva e demográfica e resultados de avaliações de desempenho clínico relativas a cada aluno. Também se encontra inserida informação de outra natureza como percepções retrospectivas sobre o curso e avaliações de orientadores de formação pós-graduada nos internatos médicos. A base de dados abrange todos os alunos e antigos alunos da ECS-UM.

### Equipa:

Manuel João Costa (Investigador Responsável pelo ELECS-UM)

Ana Paula Salgueira (Investigadora Associada)

António Rocha (Bolseiro de Investigação)

Elsa Gonçalves (Bolseira de Investigação)

Eunice Magalhães (Bolseira de Investigação)

## QUIZZ

Responda às seguintes questões e teste o seu *feeling*:

1. Quantos médicos se formaram na ECS até 2009?
2. Quantas vezes foram avaliados ao longo dos 6 anos do curso?
3. Quantos dos graduados entraram no curso ainda "criança" (<18 anos)?
4. Quais as 5 especialidades mais escolhidas?
5. Quais as 3 instituições onde estão mais graduados da ECS a fazer a especialidade?
6. Quantos graduados ainda não sabiam que especialidade escolher no fim do curso?
7. Quantos graduados escolheram a UM como primeira opção?
8. IAC: O que pensam os supervisores?
9. Que tipo de actividades os graduados mais gostariam de desenvolver no final do curso?
10. Quantos graduados estão aqui hoje?

(Confirme o seu *feeling* no verso)

## PUBLICAÇÕES

Eunice Magalhães, André DeChamplain, Ana Salgueira, Manuel João Costa. *Empatia Médica: Adaptação e validação de uma escala para estudantes de medicina. Actas do VII Simpósio Nacional Investigação em Psicologia*. 2010.

Ana Correia, Miguel Portela, Pedro Oliveira, Manuel João Costa. *Como identificar prospectivamente estudantes com maus desempenhos em fases avançadas de cursos no ensino superior?* Actas do X Congresso Internacional Galego-Português de Psicopedagogia. 2009.

Ana Correia, Miguel Portela, Pedro Oliveira, Manuel João Costa. *Características socio-demográficas e reprovações*. Actas do X Congresso Internacional Galego-Português de Psicopedagogia. 2009.

Manuel João Costa, Eunice Magalhães, Miguel Portela, Pedro Oliveira, Ana Salgueira, Nuno Sousa. *O estudo longitudinal da Escola de Ciências da Saúde da Universidade do Minho*. X Congresso Galego-Português de Psicopedagogia. 2009.

Cláudia Melo, Ana Salgueira, Pedro Oliveira, Manuel João Costa. *Do large increases in student intake impact negatively on the educational environment of medical schools? A study in Minho, Portugal*. Annual Meeting of the Association for Medical Education in Europe. Málaga, Spain. 2009.

Pedro Morgado, João Cerqueira, Rui Cerqueira, Nuno Sousa, Manuel João Costa. *How is the students' anatomy performance in an integrated curriculum?* Annual Meeting of the Association for Medical Education in Europe. Málaga, Spain. 2009.

Ana Salgueira, Nuno Sousa, Manuel João Costa. *Factors underlying student extra-curricular involvement: a study in a Clinical Skills Centre*. Annual Meeting of the Association for Medical Education in Europe. Málaga, Spain. 2009.

### Apresentações futuras

Glasgow – Escócia, Setembro de 2010  
Congresso Anual da AMEE - Association for Medical Education in Europe

Ana Salgueira, Eunice Magalhães, Elsa Gonçalves, Carlos Brito, Miguel Portela, Manuel João Costa. *Combination of data for quality assurance and accountability*.

Elsa Gonçalves, Miguel Portela, Manuel João Costa. *Undergraduate preclinical and bedside performances are related? A logit model*.

Eunice Magalhães, Ana Salgueira, Manuel João Costa. *When empathy is higher in senior than in first year medical students: a cross-sectional study*.

## **APPENDIX II**

### **COMPOSITION OF THE CLINICAL COORDINATION GROUPS, SUPERVISORS AND TUTORS IN THE ACADEMIC YEAR 2009/10**

**The Clinical Coordination Group** includes the following elements:

- *Nuno Jorge Carvalho de Sousa*, MD, PhD, Associate Professor/ ECS
- *António Jaime Botelho Correia de Sousa*, MD, MPh/ ECS
- *Damião José Lourenço da Cunha*, MD, PhD, Invited Full Professor / ECS

**a) The Medicine Coordination Group**

- *Nuno Sousa* (MD, PhD/ ECS)
- *Damião Cunha* (MD, PhD/ ECS)
- *Abel Rua* (MD/ Hospital de Braga)
- *Jorge Cotter* (MD, PhD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)
- *Maria do Sameiro Ferreira* (MD/ Hospital de Braga)

**b) The Woman, Mother and Child Health Coordination Group**

- *Nuno Sousa* (MD, PhD/ ECS)
- *Jorge Correia-Pinto* (MD, PhD/ ECS)
- *Domingos Jardim da Pena* (MD/ Hospital de Braga)
- *Pedro Cabrita* (MD/ Hospital de Braga)
- *Luísa Cardoso* (MD/ Hospital de Braga)
- *Almerinda Pereira* (MD/ Hospital de Braga)
- *Fernanda Tavares* (MD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)
- *Sofia Dantas* (MD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)
- *Pedro Freitas* (MD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)

**c) The Mental Health Coordination Group**

- *Nuno Sousa* (MD, PhD/ ECS)
- *João Bessa* (MD, PhD/ ECS)
- *Alberto Bessa-Peixoto* (MD/ Hospital de Braga)

**d) The Surgery Coordination Group**

- *Nuno Sousa* (MD, PhD/ ECS)
- *João Espregueira Mendes* (MD, PhD/ ECS)
- *António Mesquita Rodrigues* (MD/ Hospital de Braga)
- *Carlos Alegria* (MD/ Hospital de Braga)
- *Carlos Santos* (MD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)
- *Fausto Fernandes* (MD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)

**e) *The Community Health and Family Medicine Coordination Group***

- *Jaime Correia Sousa* (MD, MSc, Family Medicine/ ECS)
- *John Yaphe* (MD, MSc, Family Medicine/ ECS)
- *Alexandre Gouveia* (MD, Family Medicine/ ECS)
- *Helder Lanhas* (MD, Family Medicine/ ECS)
- *Mário Freitas* (MD, Public Health/ ECS)

**f) *The 6<sup>th</sup> year Hospital's Residences Coordination Group***

- *Nuno Sousa* (MD, PhD/ ECS)
- *Damião Cunha* (MD, PhD/ ECS)
- *Abel Rua* (MD/ Hospital de Braga)
- *Jorge Cotter* (MD, PhD/ Centro Hospitalar do Alto Ave – Unidade de Guimarães)
- *Maria do Sameiro Ferreira* (MD/ Hospital de Braga)

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

	HB	CHAA-Guimarães	ULSAM
<b>Introduction to Clinical Medicine</b>	<b>Maria do Sameiro Ferreira Abel Rua</b>	<b>Jorge Cotter</b>	-----
<b>Medicine I</b>	<b>Maria do Sameiro Ferreira Abel Rua</b>	<b>Jorge Cotter</b>	-----
Internal Medicine	Abel RuaJorge Cotter Maria do Sameiro Ferreira	-----	
Pneumology	João Cunha	Maria Manuel Figueiredo	-----
Cardiology	Adelino Correia Adília Rebelo	António Lourenço	-----
Gastroenterology	Carla Rolanda	José Cotter	-----
Endocrinology	Altino Frias	-----	-----
<b>Maternal-Child Health</b>			
Gynaecology	Domingos Jardim da Pena Pedro Cabrita	Fernanda Tavares	-----
Obstetrics	Luísa Cardoso	Sofia Dantas	-----
Paediatrics	Almerinda Pereira	Pedro Freitas	-----
<b>Mental Health</b>			
Psychiatry	Alberto Bessa-Peixoto	-----	Aníbal Ribeiro da Fonte
<b>Surgery</b>	<b>A. Mesquita Rodrigues</b>	<b>Carlos Santos</b>	-----
General Surgery	A. Mesquita Rodrigues António Gomes	Carlos Santos	-----
Urology	Américo Ribeiro Santos	-----	-----
Ophthalmology	Vítor Soares	Luís Gonçalves	-----
ORL	Tiago Godinho	Fausto Fernandes	-----
Orthotraumatology	Helena Vaz	Joaquim Ribeiro	-----
Neurosurgery	Carlos Alegria	-----	-----
<b>Medicine II</b>	<b>Maria do Sameiro Ferreira Abel Rua</b>	<b>Jorge Cotter</b>	-----
Internal Medicine	Maria do Sameiro Ferreira Abel Rua	Jorge Cotter	-----
Infectious Diseases	Maria do Sameiro Ferreira	Jorge Cotter	-----
Nephrology	Abel RuaJorge Cotter	-----	
Neurology	João Ramalho Fontes	Maria Lurdes Rodrigues	-----
Hemato-oncology	Rui Nabiço	Camila Coutinho	-----
Dermatology	António Marques Celeste Brito	António Ferrete	-----

### Hospital Residences – 6<sup>th</sup> year

Internal Medicine	Maria do Sameiro Ferreira	Jorge Cotter	Fernando Gomes
Gynaecology	Abel Rua		
Obstetrics	Domingos Jardim da Pena	Moisés Moreira Pacheco	José António Maia
Paediatrics	Domingos Jardim da Pena	Moisés Moreira Pacheco	José António Maia
Mental Health	Almerinda Pereira	Pedro Freitas	José Rei Amorim
Surgery	Alberto Bessa-Peixoto	Carlos Lima	Aníbal Ribeiro da Fonte
	A. Mesquita Rodrigues	Carlos Santos	Alberto Midões
	António Gomes		

### Community Health and Family Medicine

ACES (Agrupamento de Centros de Saúde) do Ave I – Terras de Basto – Luís Laranjeiro

ACES do Ave II – Guimarães/Vizela – Luís Laranjeiro

ACES do Ave III – Famalicão – Cristiana Sousa

ACES do Cávado I – Braga – Susana Oliveira

ACES do Cávado II – Gerês/Cabreira – Helder Lanhas

ACES do Cávado III – Barcelos/Esposende – Cristiana Sousa

ACES do Grande Porto V – Póvoa de Varzim/Vila do Conde – Jaime Correia de Sousa

ULS (Unidade Local de Saúde) de Matosinhos – Jaime Correia de Sousa

ULS do Alto Minho – Alexandre Gouveia

In the curricular areas of *Training in a Health Centre*, *Follow up of a Family* and *Introduction to Community Health* the students are also accompanied by clinical tutors, coordinated by Supervisors in each Health Centre. The MDs involved as Supervisors are:

<b>Training in a Health Centre</b>	Susana Oliveira	ACES do Cávado I – Braga
	Helder Lanhas	ACES do Cávado II – Gerês/Cabreira
	Cristiana Sousa	ACES do Cávado III – Barcelos/Esposende
		ACES do Ave I – Terras de Basto
	Luís Laranjeiro	ACES do Ave II – Guimarães/Vizela
<b>Follow-up of a Family I</b>	Susana Oliveira	ACES do Cávado I – Braga
	Helder Lanhas	ACES do Cávado II – Gerês/Cabreira
		ACES do Ave I – Terras de Basto
	Luís Laranjeiro	ACES do Ave II – Guimarães/Vizela
	Jaime Correia de Sousa	ULS de Matosinhos
<b>Follow-up of a Family II</b>	Alexandre Gouveia	ULS do Alto Minho
	Susana Oliveira	ACES do Cávado I – Braga
	Helder Lanhas	ACES do Cávado II – Gerês/Cabreira
		ACES do Ave I – Terras de Basto
	Luís Laranjeiro	ACES do Ave II – Guimarães/Vizela

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Jaime Correia de Sousa

ULS de Matosinhos

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

### Introduction to Clinical Medicine

Hospital	Specialty	Supervisor	Tutor
HB	Internal Medicine	Abel Rua	Guilherme Gomes
			Maria João Regadas
			Sofia Esperança
			Juan Garcia
			Rosário Araújo
			Luísa Pinto
			Maria do Céu Rodrigues
		Maria do Sameiro Ferreira	Alexandre Carvalho
			Cristina Ângela
			Narciso Oliveira
			Adelina Ferreira
			Helena Fernandes
			Ilídio Brandão
			Isabel Agonia
			Teresa Pimentel
			Manuela Rocha
CHAA-Guimarães	Internal Medicine	Jorge Cotter	Carlos Fernandes
			Sara Freitas
			Olinda Caetano
			Filipe Gonçalves
			Laura Castro
			Cristina Ramalho
			Sara Pereira
			Estefânia Bustabad
			Helena Sarmento
			Fernando Esculcas
			Natália Oliveira
			Sandra Barbosa
			Pedro Cunha
			Elisa Torres
			Glória Alves
			Margarida Rocha

## Medicine I

Hospital	Specialty	Supervisor	Tutor		
HB	Internal Medicine	Abel Rua	Sofia Esperança		
			Rosário Araújo		
			Maria João Regadas		
			Maria do Céu Rodrigues		
		Maria do Sameiro Ferreira	Cristina Ângela		
			Narciso Oliveira		
			Teresa Pimentel		
			Sofia Caridade		
	Pneumology	João Cunha	Alexandre Carvalho		
			Lourdes Iglésias		
			Beatriz Fernandes		
			Rui Rolo		
			Lurdes Ferreira		
			Manuel Macedo		
			Cardiology	Adelino Correia Adília Rebelo	Alberto Salgado
					Sérgia Rocha
Pedro Azevedo					
Sérgio Nabais					
Márcia Torres					
Sílvia Ribeiro					
Gastroenterology	Carla Rolanda	Carla Rolanda			
		Raquel Gonçalves			
		João Bruno Soares			
		Aníbal Ferreira			
		Artur Machado			
Endocrinology	Altino Frias	Catarina Matos			
		Maria Lopes Pereira			
		Filipe Mota			
		Olinda Marques			
CHAA-Guimarães	Internal Medicine	Jorge Cotter	Clarisse Neves		
			Daniela Ferreira		
			Helena Sarmento		
			Emília Lopes		
			Natália Oliveira		
			Pedro Cunha		
			Estefânia Bustabad		
			Elisa Torres		
	Pneumology	Maria Manuel Figueiredo	Maria Manuel Figueiredo		
			Maria José Guimarães		
Cardiology	António Lourenço	Olga Azevedo			
		Filipa Almeida			

		António Lourenço
		Isabel Quelhas
		José Cotter
		Ana Rebelo
		José Manuel Ribeiro
Gastroenterology	José Cotter	Maria João Moreira
		Pedro Moutinho Ribeiro
		Bruno Rosa
		Mara Barbosa
		Silvia Leite

## Mental Health

Hospital	Specialty	Supervisor	Tutor
<b>HB</b>	Psychiatry	Alberto Bessa-Peixoto	Maria Luísa Silva
			António Sousa Cepa
			Jorge Gonçalves
			Natália Fernandes
			David Jurjo
			Sónia Simões
			Patrício Ferreira
			Luís Fonseca
			Joaquim Duarte
			Joana Mesquita
			Sónia Azenha
<b>ULSAM</b>	Psychiatry	Aníbal Ribeiro da Fonte	Paula Pina
			Lucinda Neves
			Bruno Coutinho
			Maria Mercedes Marino

## Maternal-Child Health

Hospital	Specialty	Supervisor	Tutor
HB	Gynaecology / Obstetrics	Domingos Jardim da Pena Pedro Cabrita Luísa Cardoso	Pedro Cabrita
			Paula Serrano
			Etelvina Cruz
			Afonso Rocha
			Luís Carvalho
			Luísa Cardoso
			Fernando Cardoso Ricardo
			Alexandra Cadilhe
			Blandina Gil
			Luís Castro
			Neusa Teixeira
			Cátia Correia
			Diogo Cunha
			Carla Monteiro
			Cátia Abreu
			Emídio Fernandes
	Paediatrics	Almerinda Pereira	Henedina Antunes
			Ariana Afonso
			Susana Carvalho
			Isabel Cunha
			Helena Silva
			Carla Moreira
			Joana Dias
			Sandra Costa
			Arnaldo Cerqueira
			Jean Pierre Gonçalves
			Maria João Magalhães
			Clara Machado
			Joana Jardim
			Eduarda Abreu
			Carla Sá
CHAA-Guimarães	Gynaecology	Fernanda Tavares	Dária Resende
			Bernardete Fernandes
			Albina Silva
			Pedro Vieira de Castro
			Ricardo Santos
			Maria José Pires
			Fernanda Tavares
			Vivas de Freitas
			Rui Miguelote
			Luís Gonzaga

		Pedro Oliveira Manuela Mesquita Diana Coelho
		Alice Vilas Boas Horácio Azevedo Rosa Maria Fernandes António Almeida Ana Maria Andrade Rosa Sardinha Adosinda Rosmaninho Filipa Braz
Obstetrics	Sofia Dantas	Joana Neves Agostinha Costa Clara Paz Dias Cristina Ferreira Cláudia Neto Armandina Neto Ana Luísa Lobo Isolina Aguiar Carla Meireles Maria José Valle Marta Santalha Joana Macedo Diana Baptista Ana Filipe Ana Cristina Barros Filipe Sottomayor Amélia Moreira
Paediatrics	Pedro Freitas	

## Surgery

Hospital	Specialty	Supervisor	Tutor
HB	General Surgery	A. Mesquita Rodrigues	Joaquim Falcão
			Mário Reis
			Conceição Antunes
			Fernando Manso
			Javier Lamelas
			Helena Marques
			Sandra Martins
	Urology	António Gomes	Virginia Soares
			Pedro Koch
			Maia da Costa
			Dina Luis
			Carlos Gomes
			Rosa Capelo
	Ophthalmology	Vitor Soares	Teresa Carneiro
			André Quinta
			António Pedro Carvalho
			Carlos Brás Silva
			Vitor Hugo Nogueira
			Sandra Guimarães
HB	ORL	Tiago Godinho	Carla Ferreira Pinto
			Fernando Silva
			Natacha Perdomo
			Helena Cristina Almeida
			Francisco Oliveira
			Berta Rodrigues
	Orthotraumatology	Helena Vaz	Sérgio Vilarinho
			Nuno Marçal
			Joana Guimarães
			Angelino Barroso
			Helena Vaz
			Ramiro Fidalgo
HB	Neurosurgery	Carlos Alegria	António Pedro Silva
			Martins Pereira
			Juvenália Ribeiro
			Nuno Tavares
			Rui Almeida
			Afonso Almeida Pinto
	Neurosurgery	Carlos Alegria	José António Costa
			Miguel Afonso
			Nuno Morais

	General Surgery	Carlos Santos	Manuel Ferreira
			Jorge Magalhães
			João Reis
			Lima Terroso
			Rui Pinto
			Carlos Alpoim
	Ophthalmology	Luís Gonçalves	Luís Gonçalves
			António Fernandes
	ORL	Fausto Fernandes	Francisco Moreira da Silva
			Fausto Fernandes
			Carlos Matos
			Alexandre Mexedo
<b>CHAA-Guimarães</b>	Orthotraumatology	Joaquim Ribeiro	Ângelo Fernandes
			Carlos Vilela
			António Gomes Cruz
			Vitor Caetano
			Manuel Loureiro
			Joel Reis
			António Moreira



## Medicine II

Hospital	Specialty	Supervisor	Tutor
HB	Internal Medicine	Abel Rua	Sofia Esperança
			Maria do Céu Rodrigues
			Maria João Regadas
			Carla Marina
			Carlos Capela
			Frederica Coimbra
			Juan Garcia
		Maria do Sameiro Ferreira	Adelina Ferreira
			Narciso Oliveira
			Manuela Rocha
HB	Infectious Diseases	Maria do Sameiro Ferreira	Ilidio Brandão
			Isabel Agonia
			Alexandre Carvalho
	Nephrology	Abel Rua	Cristina da Angela
			Teresa Pimentel
	Neurology	João Ramalho Fontes	Rui Antunes
			Carlos Soares
			Esmeralda Lourenço
			Carla Ferreira
			Ricardo Maré
HB	Hemato-oncology	Rui Naboço	João Pereira
			Pedro Beleza
			Álvaro Machado
			Júlia Amorim
			Teresa Macedo
	Dermatology	Celeste Brito	Herlander Marques
			Catarina Portela
			António Marques
			Anabela Correia
			Madalena Calheiros
CHAA-Guimarães	Internal Medicine, Infectious Diseases and Nephrology	Jorge Cotter	Ana Paula Barbosa
			Maria da Luz Duarte
			José Carlos Fernandes
			Ana Paula Vieira
			Teresa Pereira
	Internal Medicine, Infectious Diseases and Nephrology	Jorge Cotter	Cristiana Macedo
			Helena Sarmento
			Emília Lopes
			Elisa Torres
			Sara Freitas
CHAA-Guimarães	Internal Medicine, Infectious Diseases and Nephrology	Jorge Cotter	Estefânia Bustabad
	Internal Medicine, Infectious Diseases and Nephrology	Jorge Cotter	

		Olinda Caetano
		Cristina Ramalho
		Laura Castro
Neurology	Maria Lurdes Rodrigues	Ângela Sousa
		Lurdes Rodrigues
Hemato-oncology	Camila Coutinho	Camila Coutinho
		António Ferrete
Dermatology	António Ferrete	Olga Pereira

### Hospital Residences – 6th year

Hospital	Specialty	Supervisor	Tutor
HB	Internal Medicine	Abel Rua	Rosário Araújo
			Juan Garcia
			Maria João Regadas
			Maria do Céu Rodrigues
			Sofia Esperança
			Luísa Pinto
		Maria do Sameiro Ferreira	Adelina Ferreira
			Ilídio Brandão
			Alexandre Carvalho
			Adolfo Silva
			Narciso Oliveira
			Cristina da Ângela
			Teresa Pimentel
			Manuela Rocha
	General Surgery	A. Mesquita Rodrigues António Gomes	Pedro Koch
			Carlos Gomes
			Sandra Martins
			Javier Lamelas
			Dina Luís
			Fernando Manso
			Joaquim Falcão
			Maia da Costa
			Conceição Antunes
			Sónia Vilaça
			Mário Reis
	Psychiatry	Alberto Bessa-Peixoto	Jorge Gonçalves Maria Luísa Silva
	Gynaecology / Obstetrics	Domingos Jardim da Pena	Isabel Jardim
			Gabriel Borges
			Teresa Coutinho
			Luísa Cardoso
			Lucília Araújo
			Judite Barros
			Maria José Serra
	Paediatrics	Almerinda Pereira	Eduarda Abreu
			Bernardete Fernandes
			Licínio Félix
			Teresa Pontes
			Henedina Antunes
			Isabel Cunha
			Ariana Afonso

		Carla Moreira
		Carla Sá
		Susana Carvalho
		Manuela Alves
		Albina Silva
		Helena Silva
		Ana Antunes
		Carlos Fernandes
		Sara Freitas
		Helena Sarmento
		Natália Oliveira
		Pedro Cunha
		Elisa Torres
		Sara Pereira
		Margarida Rocha
		Filipe Gonçalves
		José Miguel Sá
		Emília Lopes
		Magda Fernandes
		Sandra Barbosa
		Olinda Caetano
		Cristina Ramalho
		Estefânia Bustabad
		Laura Castro
		Paulo Ferreira
<b>CHAA-Guimarães</b>		Manuel Ferreira
		Carlos Alpoim
		Jorge Magalhães
		João Reis
		Lima Terroso
		Vitor Costa
		Rui Pinto
		Carlos Lima
		Mário Lourenço
		Sónia Ramos
		Daniela Oliveira
		Manuela Mesquita
		Maria José Pires
		Moisés Moreira Pacheco
		Pedro Vieira de Castro
		Fernanda Tavares
		José Manuel Furtado
		Lucinda da Graça

<b>ULSAM</b>	Obstetrics		José Vivas de Freitas
			Horácio Azevedo
			Pedro Oliveira
			Moisés Moreira Pacheco
			Rosa Maria Fernandes
	Paediatrics	Pedro Freitas	Ana Maria Andrade
			Alice Vilas Boas
			Carla Meireles
			Delfina Coelho
			Armandina Neto
	Internal Medicine	Fernando Gomes	Ana Luísa Lobo
			Susana Soares
			Andry Bal
			Ana Isabel Nascimento
			Paula Felgueiras
	General Surgery	Alberto Midões	Carmélia Rodrigues
			Carlos Ribeiro
			Manuel Ferreira
			Francisco Fanzeres
			Fernando Barbosa
	Psychiatry	Aníbal Ribeiro da Fonte	Maria Conceição Lucas
			Licínio Rego Oliveira
			Lucinda Neves
			Aníbal Ribeiro da Fonte
			Bruno Sá Coutinho
	Gynaecology/ Obstetrics	José António Maia	Maria de Fátima Maia
			Paula Pinheiro
			Virginia Sampaio
			Ana Catarina Carneiro
			Silvia Rodrigues
	Paediatrics	José Rei Amorim	José Rei Amorim
			Maria Helena Ramalho
			Susana Figueiredo
			Ana Rita Araújo
			Beatriz Sousa

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

### Health Centres I

Supervisor	Health Centre	Unit	Tutor
Luís Laranjeiro	Agrupamento de Centros de Saúde (ACES) do Ave I – Terras de Basto	Centro de Saúde (CS) de	Mário Castro
		Face – Unidade de Saúde	Isabel Pinto
		Familiar (USF) Fafe	Albertina Sousa
		Sentinela	Conceição Almeida
		CS Fafe – USF Novo Cuidar	Anabela Von Doellinger
			Cristina Ramos
	ACES do Ave II – Guimarães/Vizela		Sameiro Gonçalves
		CS Guimarães – USF Vimaraneses	Marco Pina
			Nuno Dias
		CS Taipas – USF Ara de Trajano	Eduarda Meneses
			Célia Nunes
			Mário Dias
			Luísa Ferraz
		CS Taipas – USF Duovida	Fernanda Rodrigues
Helder Lanhas /Cristiana Sousa	ACES do Cávado I – Braga		Alice Pérez
			Alberto Pérez
		CS Taipas – USF Ronfe	António Miguelote
			Conceição Costa
		CS Vizela – USF Novos Rumos	Fernando Carvalho
			João Cocharra
			Machado Leite
			Samuel Pedreira
		Unidade de Saúde (US) do Carandá – USF Bracara Augusta	Augusta Moura Leal
			José Machado
			Cláudia Melo
		US Carandá – USF Gualtar	Francisco Fachado
			Susana Oliveira
		US Carandá – USF S. João de Braga	Graça Vasconcelos
		US Infias – Extensão de Saúde de Ruães	Margarida Marques
		US Maximinos	Artur Freitas
			Jessi Silva
		US Maximinos – Extensão de Saúde de Cabreiros	Madalena Cerqueira

		US Maximinos – USF	Ana Filipa Pimentel
		Manuel Rocha Peixoto	
		USF + Carandá	Maria Antónia Miguel
			Milena Rouytcheva
			Tahydi Valle
		CS Amares	Estela Portela
			Mário Rui Oliveira
		CS Póvoa de Lanhoso – USF	Anabela Ferreira
		Terras de Lanhoso	Manuela Soares
		CS Vila Verde	Manuel Mariño
			Teresa Andrade
		CS Vila Verde – Extensão de Saúde de Prado	Ana Maria Lemos
			Cândida Carlos
			Isabel Martins
		CS Barcelinhos	Ana Claudina Miranda
			Aranzazu Souto
		CS Barcelos	Arlindo Guimarães
			Maria Clara Correia
		CS Esposende	Margarida Costa Reis
		CS Vila do Conde – USF	Ana Almeida
		Santa Clara	Eusébio
		CS Matosinhos – USF	Luís Silva
		Horizonte	Raquel Castro
		CS Senhora da Hora	Rosa Santos
		CS Ponte de Lima – USF	Raquel Mendez
		Lethes	

## Health Centres II

Supervisor	Health Centre	Unit	Tutor
Luís Laranjeiro	ACES do Ave I – Terras de Basto	CS Fafe – USF Fafe Sentinela	Conceição Almeida Isabel Pinto
		CS Fafe – USF Novo Cuidar	Anabela Von Doellinger Cristina Ramos
		CS Guimarães – USF S. Nicolau	Maria José Dinis Maria José Teixeira
	ACES do Ave II – Guimarães/Vizela	CS Guimarães – USF Vimaraneses	Marco Pina
		CS Taipas – USF Ara de Trajano	Nuno Dias Eduarda Meneses Susana Pereira Mário Dias
		CS Taipas – USF Duovida	Alberto Pérez Alice Pérez Fernanda Rodrigues Luísa Ferraz
		CS Taipas – USF Ponte	Alcina Pires Luísa Pinto Nelson Pereira Santiago Figueroa Sílvia Sousa
		CS Taipas – USF Ronfe	António Miguelote Carina Antunes
		CS Vizela – USF Novos Rumos	Conceição Costa Fernando Carvalho João Cocharra Samuel Pedreira
		US Carandá – USF Gualtar	Cláudia Melo Francisco Fachado Margarida Lima Susana Oliveira
		US Carandá – USF S. João de Braga	Rosário Silva
		US Maximinos	Artur Freitas Luís Franqueira
		US Maximinos – Extensão de Saúde de Ruães	Paula Marques
		US Maximinos – USF Manuel Rocha Peixoto	Maria Augusta Pereira Maria João Botelho
			Maria Antónia Miguel Milena Rouytcheva
Helder Lanhas / Cristiana Sousa	ACES do Cávado I - Braga		



		USF + Carandá	Tahydi Valle
Luís Laranjeiro	ACES do Cávado II – Gerês/Cabreira	CS Amares	Luísa Terroso Mário Rui Oliveira
		CS Póvoa de Lanhoso	Francisco Lopes
		CS Póvoa de Lanhoso – USF Terras de Lanhoso	Alfredo Couto Anabela Ferreira Manuela Soares
		CS Vila Verde	Manuel Mariño Teresa Andrade
		CS Vila Verde – Extensão de Saúde de Prado	Ana Maria Lemos Cândida Carlos Isabel Martins
Cristiana Sousa	ACES do Cávado III – Barcelos/Esposende	CS Barcelinhos – Extensão de Saúde Viatodos	Clara Correia Maria José Costa Ventura Gomes
		CS Barcelinhos	Aranzazu Souto
Jaime Correia de Sousa	ACES do Grande Porto V – Póvoa do Varzim/Vila do Conde	CS Vila do Conde - USF Santa Clara	Ana Almeida Patrícia Coelho
		CS Matosinhos – USF Horizonte	Patrícia Bernardino Raquel Castro
	ULS de Matosinhos	CS Senhora da Hora	Mónica Granja Rosa Santos
		CS Ponte de Lima – USF Lethes	Raquel Mendez
	ULS do Alto Minho	CS Viana do Castelo – Unidade de Cuidados de Saúde Personalizados	José Manuel Cunha Lurdes Matos

## Public Health

**Supervisor:** Mário Freitas

**Tutors:** Amaro Domingues (Braga)  
João Manuel Cruz (Braga)  
Mário Freitas (Braga)  
José Guilherme Ribeiro (Espinho)  
Mercedes Mendez Pardo (Fafe)  
Jaime Baptista (Matosinhos)  
Eduarda Ferreira (Porto)  
Helena Nascimento (Póvoa de Lanhoso/Vieira do Minho)  
Alice João Maia (Póvoa do Varzim)  
Ana Maria Tato Aguiar (Santo Tirso/Trofa)

Rui Jorge Costa (Vila do Conde)

José Manuel Araújo (Vila verde)

### Health Centres III

Supervisor	Health Centre	Unit	Tutor
Luís Laranjeiro	ACES do Ave I – Terras de Basto	CS Cabeceiras de Basto	Manuel Sá Nogueira Serafim China Pereira
		CS Fafe – USF Fafe Sentinela	Albertina Sousa Conceição Almeida Isabel Pinto
		CS Fafe – USF Novo Cuidar	Anabela Von Doellinger Sameiro Gonçalves
		CS Guimarães – USF S. Nicolau	Maria José Dinis Maria José Teixeira
	ACES do Ave II – Guimarães/Vizela	CS Guimarães – USF Vimaraneses	Marco Pina
		CS Taipas – USF Ara de Trajano	Célia Nunes Eduarda Menezes Mário Dias Nuno Dias
		CS Taipas – USF Duovida	Fernanda Rodrigues Luísa Ferraz Alice Pérez Alberto Pérez
		CS Taipas – USF Ponte	Alcina Pires Celina Peliz Maria João Ribeiro
		CS Taipas – USF Ronfe	António Miguelote
		CS Vizela – USF Novos Rumos	Maria da Conceição Costa
		CS Vizela – USF Physis	Henrique Machado José Baleiras Fernandes
Cristiana Sousa	ACES do Ave III – Famalicão	CS Famalicão – USF São Miguel do Anjo	Lísia Santos
Helder Lanhas / Cristiana Sousa	ACES do Cávado I - Braga	US Carandá – USF Gualtar	Cláudia Melo Cristiana Sousa Francisco Fachado Susana Oliveira
		US Carandá – USF S. João de Braga	Filomena Carvalho
		US Infias – Extensão de Saúde de Adaúfe	Patrícia Valadares
			Ana Filipa Pimentel
		US Maximinos – USF Manuel Rocha Peixoto	Manuela Macedo Maria Augusta Pereira Maria João Botelho

		USF + Carandá	Maria Palmira Carneiro
Luís Laranjeiro	ACES do Cávado II – Gerês/Cabreira	CS Amares	Maria Luísa Terroso Mário Rui Oliveira
		CS Póvoa de Lanhoso	Francisco Lopes Helena Ferreira
		CS Póvoa de Lanhoso – USF Terras de Lanhoso	Alfredo Couto
			Ana Maria Lemos
		CS Vila Verde	Cândida Carlos Teresa Andrade
Cristiana Sousa	ACES do Cávado III – Barcelos/Esposende	CS Barcelinhos	Aranzazu Souto
		CS Barcelos	Emília Roboredo
		CS Barcelos – USF Santo António	Helena Saraiva Rui Soares
		CS Esposende	Dulce Pereira Margarida Pessanha
		CS Esposende – Extensão de Saúde de Fão	Nazaré Costa
Jaime Correia de Sousa	ACES do Grande Porto V – Póvoa de Varzim/Vila do Conde	CS Vila do Conde – USF Santa Clara	Patrícia Coelho
	ULS de Matosinhos	CS Matosinhos	Cláudia Bernardo
		CS Matosinhos – USF Horizonte	Luís Silva
		CS Matosinhos – USF Oceanos	Susana Ribeira
		CS Senhora da Hora	Cristiana Silva
Alexandre Gouveia	ULS do Alto Minho	CS Arcos de Valvedez – USF Vale do Vez	Fabiola Ferreira
		CS Viana do Castelo – Unidade de Cuidados de Saúde Personalizados	Bernardete Lopes José Manuel Cunha Maria da Luz Monteiro

## **APPENDIX III**

### **REPORT OF POST-GRADUATION 2010**

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## **1. Post-graduation: Master and PhD programs**

The School of Health Sciences formally started to offer master and PhD programs, in accordance with the Bologna legislation, in the academic year 2009/2010. Specifically, the School presently offers a Master program in Health Sciences, a PhD program in Health Sciences and a PhD program in Medicine, in which 12, 11 and 11 students enrolled in the present academic year. Of notice, the PhD program in Health Sciences shares with the Medical School of the University of Coimbra and with the Faculty of Medical Sciences, New University of Lisbon an inter-institutional program in Aging and Degeneration of Complex Biological Systems, in which students from the three universities rotate for advanced courses and laboratory rotations; this program counted with 6 students, two of which from our school. The programs include a first curricular year composed of advanced courses (for which the list of 2009/2010 is specified in #2) and laboratory rotations (for which the themes proposed in the present academic year are listed in #3), which is then followed by the preparation of the thesis project and launching of the thesis project. For each laboratory rotation a specific set of skills is established. Within the MD/PhD program, 14 students from the 1<sup>st</sup> to the 4<sup>th</sup> year participated in summer laboratory rotations. One student formally registered in the MD/PhD program. Of notice, the two students that first joined the program successfully defended their PhD thesis in December 2010. This happening is to highlight since it represents the first Portuguese students to be awarded a PhD degree completing the MD degree. Of notice this was accomplished in 3 years, with publications as first authors of original articles in international recognized journals. Presently the program has 3 students developing their PhD theses.

## **2. Advanced courses**

The postgraduate offer of ECS has been diversified in recent years with a substantial increase in courses and workshops dedicated to the highly specialized training of medical doctors and researchers in the biomedical sciences. In the year 2010, the international postgraduate program offered by ECS included 26 courses, from which 7, also opened to external participation, were part of formal programs of doctoral and master's degrees. Below are listed all the courses and workshops proposed for 2010. Detailed information on the courses and workshops is available at [www.ecsaude.uminho.pt/pg](http://www.ecsaude.uminho.pt/pg).

### **RESEARCH METHODOLOGIES (1st Edition)**

Manuel João Costa

January 4-15

### **LEADING THE PATHWAY IN CATARACT SURGERY: LAST GENERATION OF ACCOMMODATIVE LENS**

Vitor Soares, Fernando Silva, Nuno Sousa

February 6

**INTERNATIONAL HANDS-ON COURSE IN FETAL AND NEONATAL ENDOSCOPIC SURGERY (2nd Edition)**

Jorge Correia-Pinto, Tiago Henriques-Coelho

March 8-10

**HANDS-ON COURSE IN GYNECOLOGICAL LAPAROSCOPY (2nd Edition)**

Jorge Correia-Pinto, João Bernardes

March 11-13

**MINIMALLY INVASIVE UROLOGICAL SURGICAL WEEK**

Estevão Lima, Riccardo Autorino, Jorge Correia Pinto

March 15-19

**DRUGS AND THE BRAIN: AN UPDATE IN PSYCHOPHARMACOLOGY**

*An European Neuroscience Schools Course (EURON)*

Joana Palha, Nuno Sousa

March 22-26

**AN INTEGRATIVE APPROACH TO CELL ANALYSIS: CELL AND TISSUE CULTURE, FLOW CYTOMETRY AND MICROSCOPY**

António Salgado, Margarida Saraiva, Paula Ludovico, Margarida Correia Neves

April 6-16

**DRUG: FROM MOLECULE TO THERAPEUTICS**

Fátima Baltazar, José Miguel Pêgo

April 9-10

**HOST-PATHOGEN INTERACTION**

Gil Castro, Jorge Pedrosa, Margarida Saraiva

April 19-23

**HOW TO DEAL WITH RADIOACTIVE MATERIAL: COURSE FOR LABORATORY RESEARCHERS**

Fátima Baltazar

May 3-5

**METHODS OF DNA ANALYSIS: STATE OF THE ART**

*In collaboration with the Department of Biology, ECUM*

Patrícia Maciel, Fernando Rodrigues, Rui Reis, Dorit Schuller, Célia Pais

May 17-28

**HANDS-ON COURSE: FUNDAMENTALS IN ARTHROSCOPY**



Rui Cerqueira, Rui Duarte, Nuno Ferreira, Ramiro Fidalgo  
May 21-22

**FUNDAMENTALS IN NEUROSCIENCE (3rd Edition)**

José M. Pêgo, João C. Sousa, João Cerqueira  
September 13-24

**MICROSURGERY ANASTOMOSIS (2nd Edition)**

Nuno Sevivas, Mário Oliveira, Pedro Leão  
September 23-25

**HANDS-ON COURSE: SULCI, GYRI, VENTRICLES AND DISSECTING FIBERS (8th Edition)**

Nuno Sousa, Carlos Alegria, Evandro de Oliveira  
September 27 - October 1

**FUNDAMENTALS IN IMMUNOLOGY AND INFECTION (2nd Edition)**

Paula Ludovico, Gil Castro  
September 27 - October 8

**FUNDAMENTALS OF GENETICS, DEVELOPMENT AND NEOPLASIA (2nd Edition)**

Jorge Correia-Pinto, Raquel Andrade, Rui M. Reis  
October 11-22

**HANDS-ON COURSE IN DIGESTIVE LAPAROSCOPY**

Novo de Matos, Jorge Correia-Pinto  
October 11-13, 2010

**HANDS-ON COURSE IN THERAPEUTIC ENDOSCOPY**

Carla Rolanda, Jorge Correia-Pinto  
October 14-15, 2010

**HANDS-ON COURSE IN BILIARY LAPAROSCOPY**

Jaime Vilaça, Daniela Sá Leão, Jorge Correia-Pinto  
October 25-27, 2010

**BIostatISTICS IN HEALTH SCIENCES (2nd Edition)**

Pedro Oliveira  
October 25 - November 5

**ENCONTROS DE ONCOLOGIA, ESTADO DA ARTE**

– *Câncer do Pâncreas* –

Rui Reis, Herlânder Marques

November 6

**LABORATORY ANIMAL SCIENCE (6th Edition)**

*(according to FELASA category C recommendations)*

Magda Carlos, Margarida Correia Neves

November 8-19

**RESEARCH METHODOLOGIES (2nd Edition)**

Manuel João Costa

November 22 - December 3

**BIOINFORMATICS IN HEALTH SCIENCES (2nd Edition)**

Raquel Andrade

December 6-17

**Courses postponed**

**DIGESTIVE ANASTOMOSIS IN ANIMAL MODEL (2nd Edition)**

António Mesquita Rodrigues, Braga dos Anjos, Sandra Martins, Pedro Leão

November 22-23

## **2.1 Sponsors**

To run the international postgraduate programme, we obtained financial support from several companies: Baptista Marques, BioPortugal, Calouste Gulbenkian Foundation, Enzifarma, Luso-Americana Foundation, Olympus, Roche, Sarstedt, Tadinense and VWR International. We are grateful to our sponsors for the helpful contribution for this international program of courses and workshops in biomedical sciences.

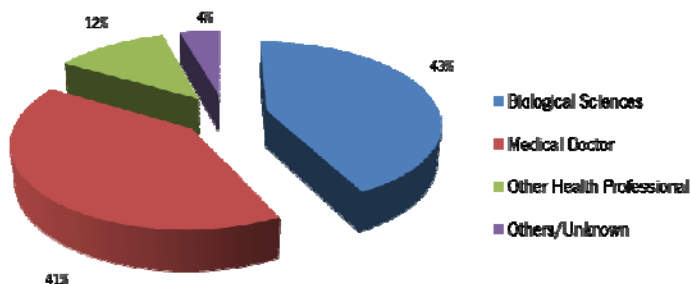
## 2.2 Global Assessment

In 2010 the International Postgraduate Programme included novel courses in diverse scientific areas and also new editions of courses that have been very successful in previous years and that continue to represent areas of demand among the participants.

The main goal of the post graduation at ECS is to offer a highly specialized training for medical doctors and investigators in biomedical sciences as well as to improve and promote the medical education, an emergent research area that aims to improve individual's abilities to teach. Therefore, we intend to continue offering training in multiple areas through the organization of novel courses every year, but also by promoting additional editions of courses for which the demand is evident.

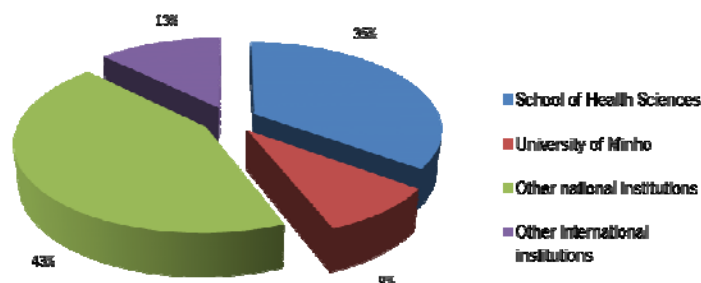
### 2.2.1 Participants Background

In 2010, we have a total of 507 participants in the courses and workshops. Figure 1 presents the participant's professional background distribution in 2010. During the year 2010 the vast majority of the participants have as background "Biological Sciences" but it is grateful to realize that the ECS courses and workshops have attracted a considerable number of clinicians, which we intend to promote further.



**Figure 1** - Background distribution of the participants ("Other Health Professionals" include participants having as background pharmacy, psychology or clinical analysis and public health; "Others" include participants having as background polymer, biotechnological, biological, food technology or chemical engineering).

The participants belong to different national and international institutions as presented in Figure 2.

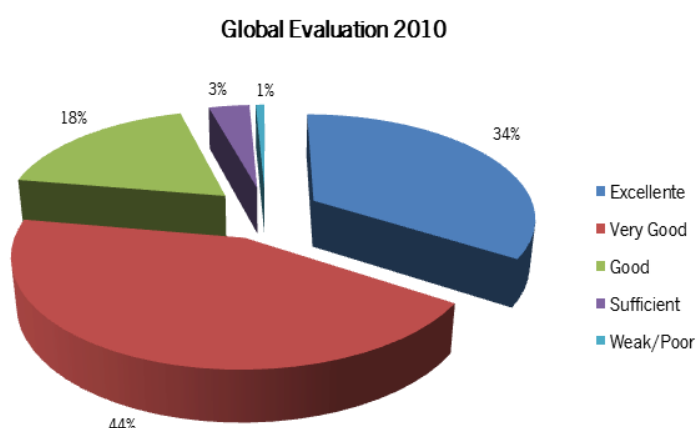


**Figure 2 – Participants affiliation.**

The vast majority of the participants belong to University of Minho and to Portuguese Institutions other than the University of Minho, which is very representative of the growing acceptance of our programme in the national biomedical research and medical communities. Of relevance, 13% of the participants originate from foreign institutions, which highlight the ability of the program to attract as well investigators and medical doctors from other countries.

### 2.2.2 Evaluation Results

A questionnaire was filled by 389 out of the 507 total participants to evaluate several aspects of each course. The overall evaluation provided the results presented in Figure 3: excellent (34%), Very good (44%), Good (18%), Sufficient (3%), Weak/Poor (1%).



**Figure 3 – Evaluation results.**

In most cases, participants considered that the courses should be repeated in years to come, and would recommend it to a peer, which represents a great incentive to continue and consolidate the programme.

### **3. Laboratory rotations**

The laboratory rotations were offered from the three research domains at the Life and Health Sciences Research Institute, which is a research unit, part of the School, rated as Excellent by the Portuguese Science Foundation evaluation panel. In justified instances, students could choose external laboratories for their laboratory rotations.

Students were given the opportunity to choose among the following options:

#### **Microbiology and infection Research Domain**

- Role of IL-17 and IL-10 in intramacrophage mycobacterial growth
- Evaluation of virulence factors among Asiatic *Mycobacterium tuberculosis* strains
- Molecular mechanisms of IL-10 gene regulation
- Impact of the lipidic toxin mycolactone in the effector mechanisms of phagocytes
- Study of the toxicity promoted by the expression of  $\alpha$ -synuclein in yeast aged cells: the role of the autophagic pathway
- Hsp90 chaperone a IRES-mediated regulator of apoptosis in mammalian and yeast cells
- Towards a molecular system in *Paracoccidioides brasiliensis*: downregulating the end-joining pathway
- Differential response to *Candida albicans* and *C. non-albicans* of human cells carrying the Asp299Gly polymorphism in TLR4
- Yeast model of Batten disease: response to stress agents
- Nitric oxide synthase expression during embryonic neurodevelopment in the *Cln3 $\Delta$ ex7/8* mouse model for Batten disease
- Infection of the thymus by mycobacteria: is the thymus able to mount an immune response?
- How (in)dependent are the effects of corticosterone and cytokines in depression?

#### **Neurosciences Research Domain**

- Choroid plexus in multiple sclerosis: neuroprotective or neurodeterimental?
- The choroid plexus as an immune-sensor for the brain
- Combinatory effect of temozolomide with anti-RTKs drugs in glioblastomas
- Influence of HOXA9 expression in the cellular response to chemotherapy
- Relevance of HOXA9 expression in the prognosis of glioblastoma patients
- Studying the specificity of nanoparticle based systems for targeted drug delivery in microglial cells
- Modulation of Schwann cell growth by FMSS based scaffolds aimed at SCI regeneration

- Effects of the secretome of criopreserved and non-criopreserved human umbilical cord stem cells on central nervous system cells
- Genetic study of X-linked mental retardation (XLMR): validation of a gene panel for diagnosis --
- Molecular determinants of ataxin-3 knockouts thermoresistance phenotype
- Phenotypical characterization of *C. elegans* Isu1-deficient animals
- C. elegans* as a model to unravel the molecular and cellular basis of epilepsy
- Insights into the pathogenesis of Machado-Joseph disease: study in a transgenic mouse model -
- Modeling Machado-Joseph disease pathogenesis in *C. elegans*: search for modifier genes
- Identification of compounds that modulate ataxin-3 aggregation and neurological dysfunction in a *C. elegans* model of Machado-Joseph disease
- Characterization of neudesin ontogenic and histological expression profile
- Neudesin impact in the nervous system – behavioural and structural studies in neudesin-null mice
- Novel mechanism of stress-induced mood and cognitive dysfunction – the path from depression to Alzheimer’s Disease
- Gender-dependent neurodegenerative role of stress: A link between stress and human tauopathies
- Antenatal exposure to dexamethasone increases susceptibility to addiction: molecular and neurochemical correlates
- Understanding the neuronal substrate of probabilistic decisions in rats
- How does cognitive stimulation work?
- Divergence and convergence on neural pathways implicated in pain processing
- The effect of chronic corticosteroid administration upon descending pain modulation mediated by the hypothalamus
- The role of hypothalamic plasticity in depression
- The cognitive role of hippocampal neurogenesis in depression

### **Surgical Sciences Research Domain**

- Endothelium-derived factors as modulators of fetal lung growth: a strategy looking for a therapy for congenital diaphragmatic hernia
- Molecular mechanisms of temporal-spatial control of embryonic lung development
- One step forward on the dissection of the embryonic molecular clock mechanism
- Role of MAPK signaling pathway activation in solid tumors
- Characterization of the metabolism in MCT positive cancer cells
- Sensitivity of cancer cells to MCT inhibitors
- Study of genetic susceptibility factors for solid cancer development