

The background of the page features a large, faint watermark of the seal of the University of Trier. The seal is circular and contains a central shield with a red and white checkered pattern and a sunburst. Above the shield are two wings. The Latin text 'UNIVERSITAS TRIPONTENSIS' is written around the perimeter of the seal.

**Strategic Plan**  
**of the**  
**Faculty of Medicine**  
**2012-2014**



**Executive Summary of the Strategic Plan of the Faculty of Medicine 2012-2014**

**Introduction**

This document contains the Strategic Development Plan of the Faculty of Medicine Complutense University of Madrid (UCM) for the period 2012-2014. It arises from the need and willingness to establish guidelines by which to govern our Faculty in the coming years.

Some hundred years ago Ramon y Cajal claimed: *Today we worry about university independence. That is fine ... The main problem of our university is not independence, but the radical and complete transformation of the aptitude and ideals of the teaching community.*"

Therefore, it is desirable that ways and means be established to judge the teaching and research quality of universities both internally and externally on a regular basis. With this in mind, this strategic plan has arisen.

For the development of this strategic plan it was considered appropriate to set up a working group coordinated by the Vicedeans of Postgraduate Studies and Institutional Relations and also a commission formed by representatives from all the departments and from the administrative and services staff. The group began working on the plan in June 2010.

This is an open and dynamic plan, which can incorporate the necessary changes as and when the circumstances of the Faculty demand.

The document contains the master lines of what we consider should constitute the first strategic plan of our Faculty. It incorporates all the conclusions reached by the participants in its preparation, in the form of objectives, strategies and courses of action.

The work involved an analysis of the strengths, weaknesses, opportunities and threats (SWOT analysis) that at the present moment must be considered by our Faculty. As a result of this analysis, a set of realistic objectives have been defined, aimed at improving the quality and efficiency of the Faculty. In order to reach these objectives a set of basic lines of action, implementation dates, outcome indicators and resource requirements have been defined. Each objective has a responsible person.



This plan will be reviewed annually in order to assess whether the objectives set remain relevant, whether the strategies are still adequate and whether the lines of action are viable considering the resources available.

### **Current Situation**

The Faculty of Medicine is a centre of the UCM, created by a Royal Decree of 8<sup>th</sup> of July of 1845. It was formerly called Faculty of Medical Sciences, created by a Royal Decree of 10<sup>th</sup> of October 10 of 1843, and linked then to the Royal College Surgery of San Carlos, which was itself established in 1780 by a Royal Decree of Charles III. However, the Faculty of Medicine has a much older origin dating back to the medical studies which existed at the time of Cardinal Cisneros (Francisco Jimenez Cisneros), in the late 15<sup>th</sup> or early 16<sup>th</sup> century, most likely being founded in 1499. At that time it was to be found in the city of Alcalá de Henares. Its current location is in the Moncloa Campus, in the city of Madrid, boasting excellent access by public transport (bus and metro) and having a public car park close by. It is currently governed by the university legislation in force, by the statutes of the UCM, by the regulations of centres and other structures and by the rules developed to implement them as well as by the internal regulations of the Faculty of Medicine.

The Faculty of Medicine has conferred powers under Article 13.1 of the Regulation of Institutions and Structures of the UCM. It is responsible for the administrative management and organization of studies leading to the obtention of the following degrees:

1. Degree and Master's Degree in Medicine
2. Degree in Medicine (former)
3. PhD
4. Degree in Occupational Therapy
5. Diploma in Occupational Therapy
6. Degree in Human Nutrition and Dietetics
7. Diploma in Human Nutrition and Dietetics
8. Master's Degree in Biomedical Sciences Research
9. Master's Degree in Applied Human Nutrition and Dietetics
10. Master's Degree in Health, Integration and Disability



11. Master's Degree in Immunology Research
12. Master's Degree in Health Expertise
13. Master's Degree in Vision Science Research
14. Master's Degree in Cardiac Imaging

In addition, the teaching staff participates (at a personal level and with prior approval of the Departments and the Faculty) in the teaching of other courses of the Universidad Complutense and other universities and higher level education institutions.

The Faculty of Medicine is currently composed of the following departments and departmental sections:

1. Department of Pathology
2. Department of Anatomy and Embryology I
3. Department of Anatomy and Embryology II
4. Department of Cell Biology
5. Department of Biochemistry and Molecular Biology III
6. Department of Surgery
7. Department of Pharmacology
8. Department of Physiology
9. Department of Medicine
10. Department of Physical Medicine and Rehabilitation. Medical Hydrology
11. Department of Preventive Medicine, Public Health and History of Science
12. Department of Microbiology I
13. Department of Obstetrics and Gynecology
14. Department of Ophthalmology and Otorhinolaryngology
15. Department of Pediatrics
16. Department of Psychiatry and Medical Psychology
17. Department of Radiology and Physical Medicine
18. Department of Toxicology and Health Legislation
19. Departmental Section of Statistics and Operations Research



The Faculty building also houses a number of schools and institutes that not only participate in teaching and research, but also have professional competencies in the community:

- Forensic Medicine
- Occupational Medicine
- Medical Hydrology and Hydrotherapy
- Medicine for Physical Education and Sport (Sports Medicine)
- Institutes
  - University Institute of Embryology
  - University Institute of Health Assessment
  - University Institute of Ophthalmology "Ramón Castroviejo"
  - University Institute of Neurochemical Research
  - University Institute of Drug Addiction
  - University Institute of Morphological and Functional Sciences

The building also houses the Central Animal Housing Facility and the Central Radioactive Facility, both of which are central services of the UCM.

### **Courses offered**

#### **Undergraduate courses**

Studies leading to the new Medical degree, adapted to European Higher Education Area, began in 2010 and were followed in 2011 with the Occupational Therapy and Human Nutrition and Dietetics degrees.

- Degree in Medicine, six years, with an enrollment of approximately 350 students per year.
- Degree in Occupational Therapy, four years, with an enrollment of approximately 100 students per year.
- Degree in Human Nutrition and Dietetics, four years, with an enrollment of approximately 100 students per year.



**PhD programmes (adapted to the Royal Decree 1393/2007)**

- Neuroscience
- Biochemistry, molecular biology and biomedicine
- Biomedical Sciences
- Vision science
- Psychopharmacology and drugs of abuse

Currently, in the Faculty of Medicine, in the academic year 2011-2012, there are 5,358 students enrolled. Of these, 3,280 are undergraduate students (degree) and 2,078 are graduate students.

Of the undergraduate students, 2,451 are enrolled in the new Medical degree, 365 are newly registered students, 168 are students of the former Medical degree (Licenciatura), 181 are enrolled in the Degree in Occupational Therapy (of which 101 are new entry students), 131 are enrolled in the Diploma in Occupational therapy, 169 are enrolled in the Degree in Human Nutrition and Dietetics (of which 99 are new entry students) and 180 are enrolled in the Diploma in Human Nutrition and Dietetics. Of the undergraduate students, 130 are students from the Erasmus and SICUE exchange programmes.

At the end of the last year (2010-2011) the number of students who graduated was: 259 from the Medical program (Licenciatura), 71 from the Human Nutrition and Dietetics programme (Diploma) and 88 from the Occupational Therapy programme (Diploma).

Of the 2,078 graduate students, 103 are enrolled in Master's degree programs taught in the Faculty, 1,264 are enrolled in other Faculty graduate programs and 711 are PhD students. In the last year (2010-11) 131 projects corresponding to the Advanced Studies Diploma (DEA) have been presented and 129 Doctoral theses have been defended.



The teaching responsibilities of the above-mentioned programs are fulfilled by the following staff:

- 1,018 full-time teaching staff, of whom 79 are University Professors, 163 are Senior lecturers and 18 are Junior Lecturers. There are also a total of 670 part-time lecturers and 18 Emeritus Professors.
- 169 employees are administrative and services staff.

In addition, there are a further 2,825 teaching staff without contractual relationship to the University (Honorary Professors, Practical Training Assistants, etc).

### **Research**

The Faculty of Medicine is a leading biomedical research centre. Research is carried out by both basic or preclinical researchers, located mainly in the Faculty building, and clinical researchers, located mainly in the associated hospitals (Hospital Clínico San Carlos, Hospital Universitario Gregorio Marañón, Hospital Universitario 12 de Octubre, Hospital Universitario Infanta Sofía, Hospital Universitario Infanta Cristina and Hospital Universitario Infanta Leonor).

The only two Spanish Nobel Prize winners in scientific disciplines formed part of the teaching staff of the Faculty of Medicine: Santiago Ramon y Cajal (Nobel Prize in 1906), Professor of Histology, Histochemistry and Pathology, and Severo Ochoa de Albornoz (Nobel Prize in 1959), Professor of Physiology and Biochemistry. Other major awards received by professors of the Faculty of Medicine are the Prince of Asturias Award (Pedro Lain Entralgo and Enrique Moreno González) and the Rey Jaime I Prize (Carlos Macaya Miguel).

### **Scientific productivity and bibliometric indicators**

The following table shows the scientific productivity registered in the ISI Web of Science database with the affiliations Facultad de Medicina and the 3 main University hospitals, using the search terms: 1) AD=((med\* same complut\*) or (med\* same UCM)) not AD=anim\*, 2) AD=(hosp\* same (univ\* or clin\*) same (S. Carlos or San Carlos)) , 3) AD=(hosp\* same maranon) and 4) AD=(hosp\* same (doce or 12) same oct\*) or the combination of #1 or #2 or #3 or #4 (total).



**Table 1 Articles and reviews (2004-09)**

	Total	Faculty of Medicine	Hosp. Clínico San Carlos	Hosp. Univ. Gregorio Marañón	Hosp. Univ. 12 de Octubre
Articles (cites)	<b>3670</b> <b>(37330)</b>	816 (7274)	1017 (11029)	1103 (11770)	1078 (10802)
Revisions (cites)	369 (5004)	80 (996)	82 (557)	112 (1281)	128 (2600)

In the table the Faculty of Medicine figure reflects, nearly exclusively, the productivity of preclinical researchers. The figures for the 3 hospitals represent the productivity of clinical researchers, many of whom are also teaching staff but also include that of others who do not have a contractual relationship with the Faculty.

According to the report on scientific productivity of the Comunidad Autónoma de Madrid 2004-2008 published by the Institute for Scientific and Technological Document Studies (CCHS-IEDCYT), the Faculty of Medicine occupies first place in terms of scientific output (number of publications) in the areas of Pharmacology and Pharmacy and of Endocrinology, second place in the areas of Neurosciences and Public Health and third place in the area of Psychiatry. The Hospital Clínico San Carlos occupies first place in Cardiology, second in Oncology and third in Clinical neurology. The Hospital Universitario Gregorio Marañón occupies the first position in Urology and Nephrology, the second in Cardiology and the third in Microbiology, Immunology and Internal Medicine. The Hospital Universitario 12 de Octubre in first place in Immunology, Clínica Neurology and Surgery and in third place in Gastroenterology. This information is available at:

[http://digital.csic.es/bitstream/10261/20591/1/PIPCYT\\_2004-2008%5b2%5d.pdf](http://digital.csic.es/bitstream/10261/20591/1/PIPCYT_2004-2008%5b2%5d.pdf)

### **Internationalization**

Several researchers coordinate European research projects, participate in evaluation boards or are editors of international journals.

The Faculty of Medicine also welcomes a large number of foreign researchers and researchers from other national universities as visiting researchers, postdoctoral





researchers and graduate students. The following table shows the number of publications arising from international collaborations.

**Table 2 Number of publications (2005-2009) arising from collaborations with international groups classified by country (data from ISI Web of Science)**

Faculty of Medicine (n=816)	N	Hosp. Clínico San Carlos (n = 1016)	N	Hosp. Univ. Gregorio Marañón (n = 1103)	N	Hosp. Univ. 12 de Octubre (n =1078)	N
USA	55	USA	106	USA	128	USA	102
ENGLAND	47	FRANCE	51	ITALY	67	ITALY	64
ARGENTINA	28	ITALY	51	ENGLAND	40	GERMANY	58
FRANCE	25	ENGLAND	48	GERMANY	38	FRANCE	57
GERMANY	25	GERMANY	45	NETHERLANDS	36	ENGLAND	47
ITALY	25	NETHERLANDS	45	CANADA	22	NETHERLANDS	37
NETHERLANDS	24	BELGIUM	26	BELGIUM	21	BELGIUM	33
BRAZIL	11	AUSTRIA	23	AUSTRALIA	18	SWEDEN	17
BELGIUM	10	CANADA	20	ENGLAND	40	SWITZERLAND	16

### Research projects

Researchers from the Faculty of Medicine participated during the period 2005-2009 in 8 projects belonging to the VI and VII European Framework Programmes and in 137 projects belonging to the V and VI National Research Plans.

### Research groups

At present there are 44 UCM-validated research groups led by researchers from the Faculty of Medicine.

### Institutes of Health Research

The three main affiliated hospitals have created, in association with the UCM, their own Institutes of Health Research. The Institute of the Hospital Universitario 12 de Octubre (I+12) has been accredited by the MICINN and the Institutes of the Hospital Clínico San Carlos (IDISSC) and the Hospital General Universitario Gregorio Marañón



(IISGM) are in the process of accreditation. The creation of these institutes is aimed at giving due recognition to scientific and technological excellence so as to strengthen the scientific and technical infrastructure that supports research in order to improve the quantity and quality of equipment and lines of research. These Institutes include not only researchers with teaching positions linked to the hospital but also a large number of basic researchers from the Faculty of Medicine.

### **Campus of international excellence**

UCM has been acknowledged as Campus of International Excellence. The project aims to transform the campus of Moncloa into international reference area in education, research and innovation. Many of the research groups form part of the Innovative Medicine cluster of the Campus.

### **Research Networks**

Several preclinical and clinical research groups have joined the Networked Centres for Biomedical Research (Ciber) and the National Research Networks (Retics and Consolider).

### **Historical Background**

The origins of the Ciudad Universitaria Campus, which evolved around the Faculty of Medicine, date back to 1920, when the General Courts approved the award of an 11-acre plot in the Moncloa for the construction of a new School of Medicine with its University Hospital. The African war had accentuated an already increasing necessity to improve hospital services.

It was in the summer of 1924 that King Alfonso XIII presented his idea to a group of architects attending the National Congress of Architecture in Santander: "I think there a need to undertake the construction of the buildings of a great University ...". Thus was born the idea of providing the capital of the Kingdom with a University City (Ciudad Universitaria), an exciting academic enterprise and urban development which the King himself qualified as "the work of my reign" which viewed today, with historical perspective, undoubtedly represents one of the most important cultural indicators of the previous century.



The idea of establishing a large university complex in Madrid, on a surface of approximately 320 hectares, located in an area of attractive landscape and complying with an integrated plan, involved the radical transformation of the organizational and architectural concepts that the University had had up until then, hidden in old and in most cases, obsolete buildings scattered throughout the old city centre.

The project began to materialize on May 17, 1927, in honour of the 25<sup>th</sup> anniversary of the reign of Alfonso XIII, with the signing of the Decree-Law by which the Construction Board of Ciudad Universitaria was established, a body that brought together the most prominent authorities and intellectuals of the time. Crucial to the conviction displayed by the monarch was the influence of D. Florestan Aguilar, a doctor and dentist and personal friend of the King. His deep knowledge of the American model led him to seek advice on the project from the Rockefeller Foundation. Thus, the Ciudad Universitaria project was born under a clear international influence.

In the autumn of 1927 a committee of advisers of King Alfonso XIII, led by the architect D. Modesto López Otero, left for the United States after visiting various health and teaching institutions around Europe, in order to investigate the American model as a reference for the design of the Ciudad Universitaria of Madrid. Although the initial aim was only to create a core hospital linked to the teaching of medicine, the discovery of the American campus transformed the whole philosophy of the approach. What was chosen was a model of functional integrity, with a comprehensive offering of academic programmes. In search of inspiration and models, they visited several North American universities including those of Washington, Harvard and Montreal, especially relevant due to their reference value and formal similarity to our Ciudad Universitaria.

The result of this fruitful trip was the birth, in the capital of Spain, of the first university park designed in the style of the American campus, leading to the appearance of a model of university life designed around the abundant recreational areas, teacher and student halls of residence, an active role of women and an emphasis on physical education. That is, a radically different model from that which had been represented by the dilapidated building structures of the UCM.

It was, in short, the traditional Anglo-Saxon formula of "college + sport", permeated by a philanthropic and elitist spirit of the emerging American prototype.



However, the architectural style with which the buildings were decorated reflected more closely the the avant-garde currents of European twenties rationalism than the historical models used, perhaps excessively, in Northamerican campuses.

Gradually, between 1928 and 1932, but at an intense pace the various architectural blocks were designed and built: Medical area, Hospital Clinico, Science area, etc.

The building work did not stop with the coming of the Second Republic, which seamlessly took up the baton of the initiated enterprise. In 1931, D. Niceto Alcalá Zamora, the then President of the Republic, was appointed as the new President of the Construction Board, who declared in his taking-up of office the intention of the Board to avoid superfluous and grandiose buildings, for the sake of functionality.

The Civil War dramatically interrupted the development of the ambitious academic enterprise. As a result of its transformation from campus to battlefield, the Ciudad Universitaria was almost completely obliterated; by the end of the war in 1939 the damage was estimated to have affected 40% of buildings and produced the total loss of the tree plantation which consisted of 40,000 specimens.

After the end of the war the rehabilitation of the Ciudad Universitaria was undertaken under the Reconstruction Plan, which restored the Construction Board, chaired by General Franco, who appointed as technical directors the architects Lopez Otero, returning him thereby, to his former position, and Peter Muguruza Otaño.

The 50s brought, with the onset of the developmental stage, an important event: the temporary or permanent granting, of a series of plots for the accommodation of the various institutions, agencies and public or private entities not directly related to teaching. This resulted in a destructuring of the concept of "University Park" in Ciudad Universitaria and of its generic design as an asset with the specific purpose of teaching.

### **Description of the building**

The Faculty of Medicine building, with its 90,000 m<sup>2</sup>, becomes one of the largest buildings, not only of the Ciudad Universitaria, but also of the country. It was built in a privileged enclave of the Ciudad Universitaria and has several grandiose steps leading to the main entrance, giving access to the Central Pavilion. On the outside, to the right of the Central Pavilion it is adorned with a bust in honour of the late Nobel Prize in



Medicine in 1959, "Prof. Severo Ochoa" and on its left by a bust in honor of "Prof. Gregorio Marañón".

The Central Pavilion houses the "Ramon y Cajal Grand Amphitheatre"(Nobel Prize for Medicine in 1906), with a capacity for 810 people, four lecture theatres: "Prof. Schuller Hall", "Prof. Botella Hall" "Prof. Lain Entralgo Hall" and "Prof. Moya Hall" and the Library, which houses more than 186,000 volumes, and is currently being subjected to structural reform work. In the basement of the central area are the dining rooms for students and staff, which together have a capacity for 700 guests. On the ground floor is the Student Registration and Services Office and "Lecture theatres 1, 2, 3 and 4" with a capacity for 400 students each. These are in a state of severe neglect, since from the date of their construction they have not been renovated despite their stunning design.

Finally, the Central Pavilion also contains, on the second floor, the Dean's office - also in need of a major update - Academic Services, Administrative and Management Services, Human Resources, Economic Affairs, and Conference Organization Services.

This Central Pavilion is surrounded by eight symmetrical pavilions that house the Departments of the Faculty.

The Faculty of Medicine, also has a journal room, a depository of old books, a photocopying service, a skills laboratory, a computer room and 18 lecture theatres, each seating between 40 and 180, reaching a total capacity of 1,448 people. In addition to these, there are practical rooms, body dissection rooms, a crematorium and laboratories which are described below in the sections on the respective departments.

In the Faculty of Medicine there is also an anatomical museum of wax figures (XIX Century) and the "Prof. B. Lorenzo Velázquez" Animal House.

### **Legislation and university organization**

The Spanish university, an autonomous body under the Spanish Constitution (Article 27.10), is governed by the University Law 6/2001 of December 21, and by the regulations of the State and the Autonomous Communities.



### **The Universities Act**

The University Reform Act (LOU) provides, in its first article, that the university serves society, and that its functions are:

- a. Technical and cultural.
- b. The training for the exercise of professional activities that require the application of knowledge and scientific methods and for artistic creation.
- c. The diffusion, exploitation and transfer of knowledge to serve culture, quality of life and economic development.
- d. The dissemination of knowledge and culture through university further education and life-long learning

The LOU also regulates the principles of academic freedom, which include academic freedom, freedom of research and freedom of study. In its second article it regulates the rights and duties of teachers, researchers and students, who must fulfill their respective responsibilities.

### **The Bologna process**

The Sorbonne Declaration of 1998 and the Bologna Declaration of 1999, signed by European Ministers of education, mark the beginning of the process of convergence towards a European Higher Education Area, which should have been completed by the year 2010.

The main objectives of the Bologna Declaration include the harmonization of the national systems of qualifications, to be based essentially on two core academic cycles: undergraduate and post-graduate. In addition, it is based on the establishment of a set European Credit Transfer System, called ECTS, and the establishment of a European Diploma Supplement to all degrees issued by the Higher Education Institutions.

The University Act 6/2001 of December 21, Articles 87 and 88 entrusts the Government with the adoption of the measures within its competence necessary for the full integration of the Spanish system in the European Higher Education Area. These measures include the assurance that the official degrees issued by Spanish universities are accompanied by those elements of information that ensure transparency about the level and content of the teachings certified by the degree, that



is, the so-called European Diploma Supplement, in order to promote national and international mobility of Spanish students and graduates.

This has led to the development of several decrees and the adoption of the framework document: the integration of the Spanish university system in the European Higher Education Area (10 February 2003):

- Royal Decree 1393/2007 of 29 October, establishing the organization of official university education. It repeals RD 55/2005 and Royal Decree 56/2005 (without prejudice to the transitional period until 2015).
- Issuance of official Master degrees and Doctorates. Royal Decree 1044/2003 of 1 August, establishing the procedure for the issue by the universities of the European Diploma Supplement.
- Royal Decree 1125/2003 of 5 August, establishing the European Credit and Grading system for all official degrees.
- Royal Decree 55/2005 of January 21, establishing the structure of university education and regulating official university undergraduate studies (amended by Royal Decree 1509/2005).
- Royal Decree 56/2005 of January 21, regulating official university postgraduate studies.

In April 2008 the European Council and European Parliament approved the so-called European Qualifications Framework for lifelong learning (EQF), which is a recommendation to member states and sets 2010 as the deadline for countries to make adjustments between their qualification systems and the EQF, and 2012 the date of full implementation.

The EQF is a tool to promote so-called lifelong learning. It aims to link the different national qualification systems through eight levels of common reference across Europe ranging from primary education certificates to the doctorate.

The European Higher Education Area entails the development of new teaching methods at the expense of traditional ones. These are essentially the following:

**Continuous assessment:** daily monitoring of the work of the pupil through continuous assessments. To carry out this continuous assessment two main tools



are suggested: the use of all possibilities offered by the Internet and new ICT skills and personal tutoring.

**Practical teaching:** the active involvement of students through exercises, group work, placement, etc.

### **The statutes of the Universidad Complutense de Madrid**

The Royal Decree 861/1985 of 24 April, approved the statutes of the UCM, which were complemented by Royal Decree 534/1986 of 14 March, and amended by the Royal Decree 1555/1991 of 4 November.

The approval of the University Act 6/2001, which was modified by the Act 2/2007 of 12 April, resulted in the modification of the statutes of universities in order to adapt their regulations to that law, which in the case of the UCM took place under Decree 58/2003 of 8 May, of the Governing Council, which approved the new statutes (BOUC 11 February 2010).

In them, the UCM is defined as a public institution, with legal status and having its own assets, with autonomy of governance, teaching, research, selection and promotion of its members as well as in the administration of its assets. In its structure, the departments, consisting of one or more areas of knowledge, are the essential components of teaching and research. Among its powers are those of the organization, development and evaluation of teaching activities on the curriculum, as well as those of doctoral programs, specialization courses, and continuing education courses. Likewise, the organization and development of research in their fields of competence is also the concern of the departments.

Regarding the curriculum, the UCM statutes provide for the development of several procedures, among which stand out those that culminate in the obtention of official degrees and diplomas, with validity for the whole country, structuring such studies in cycles.

### **Agreement between the UCM and the National Health Institute**

The Ministerial Order of June 21, 1989 approved the agreement between the UCM and the National Institute of Health. The bases for this agreement are defined in the Royal Decree 1558/1986 of 28 June, and in the General Health Act. They establish





a framework policy leading to increased collaboration between universities and health institutions, ensuring the achievement of the teaching, health care and research objectives of the institutions. The primary purpose of the agreement is to enable: a) the proper practical teaching of some of the subjects in the first cycle of medicine and of all the subjects of the second cycle, b) the practical and clinical training of postgraduate studies in medicine and other courses related to health sciences.

The agreement provided for the creation of the **UCM-Health Institutions Joint Commission**, responsible for ensuring the correct application of the agreement, while respecting the departmental structure of the Faculty of Medicine, UCM and the functional structure of the associated health institutions. This committee is responsible for the scheduling of the practical training of the undergraduates and postgraduates, with the coordination of a commission created for this purpose. It is also the responsibility of this committee to establish the teaching needs and to provide the number of clinically-linked positions and associate professorships required to meet the educational needs of the Faculty of Medicine.

During the 2009-2010 academic course, the new curriculum of the Faculty of Medicine, UCM began to be implemented, tailored to the requirements of the European Higher Education Area but with the experience of previous curricula. There is a special emphasis on practical training that the students will receive. On the one hand, there is an increase in practical teaching which, furthermore, is intended to be as personalized as possible, since we are aware that within the framework of the European Higher Education Area, a high quality degree is essential in order to compete.

An agreement for the clinical teaching of health sciences was signed on July 21, 2009 and published in the BOCM number 238 of October 7, 2009, to which, in 2010, an addendum was added in order to incorporate three new hospitals (Infanta Sofia, Infanta Cristina and Infanta Leonor), due to the fact that in the last three years there had been a gradual increase in the number of students entering this faculty to pursue medical studies. Until that moment, it had not been possible to increase the number of teaching staff and units of the Faculty of Medicine in the same proportion as the increase in students and the university hospitals previously assigned to the UCM



(Hospital Universitario 12 de Octubre, Hospital Clínico San Carlos and Hospital General Universitario Gregorio Marañón) were overwhelmed by the influx of students.

### **Director plan**

The **mission** of the Faculty of Medicine or the UCM is twofold. On the one hand, *to train health professionals, with criteria of excellence, in science and human areas, encouraging the development of their skills and adapting them to the needs of society* and on the other, *to promote the generation of scientific knowledge through research*.

Teaching should be directed at training to serve as a doctor, occupational therapist, nutritionist or dietitian in the community, at the development of scientific thought, at acquiring competence in the diagnosis, treatment and rehabilitation of patients, at working in a group and at training in all aspects needed to be the best professional (including economic aspects).

Students must actively acquire the knowledge, skills, attitudes and values necessary for future professional competence in all types of care environments. It is intended that the Faculty of Medicine develop quality research allowing the generation and transmission of knowledge to all society.

The **vision** of the Faculty of Medicine is to be *a leader in teaching and research in the field of health sciences*.

The Faculty of Medicine sees itself as a teaching and research centre of very long historical tradition, committed to scientific research and innovation, and oriented towards the student, the patient and society.

The Faculty of Medicine is committed to society and therefore takes on quality as a primary objective for the coming years. This concept should be understood as a factor for the progress and continuous improvement of all its University functions and activities: teaching, training and research quality, quality in its infrastructures, its teaching staff and its service management.

**Values** define the set of principles, beliefs and rules that regulate our organization and which constitute the institutional philosophy. These are:

1. Leadership



2. Teamwork
3. The strive for excellence
4. Communication
5. Entrepreneurial and innovative attitude
6. Academic freedom
7. Honesty and integrity
8. Professional ethics and humanism
9. Social commitment
10. Respect for Human Rights

### **Analysis of the strengths, weaknesses, opportunities and threats (SWOT)**

This technique was designed over twenty years ago and allows the identification of the strengths and weaknesses in relation to the opportunities and threats in our environment. Threats are considered to be all those environmental factors that may affect teaching and research and opportunities to be those environmental factors that, if known and exploited, may provide advantages and benefits. Strengths are understood to be the internal aspects of the organization, which allow the opportunities to be exploited and the threats to be overcome. The weaknesses are internal threats.

### **Strengths**

The following strengths have been identified

- A long historical tradition and prestige.
- Extensive teaching and research experience.
- Strong demand for the programmes offered compared with other universities.
- Gradual improvement in the success rate in the state examination of residents (MIR) (high % in the first MIR places).
- Leadership in adaptation to the European Higher Education Area (undergraduate and master).
- Leadership in the training of researchers (PhD).
- Translational research of high impact factor.



- Numerous established and emerging Complutense research groups.
- Many groups which form part of the “cluster” of the Campus of Excellence.
- Highly skilled teaching and research staff.
- Strong involvement of the administration and services staff.
- A library accredited by ANECA and equipped with the most outstanding collection of specialized scientific literature and information, essential for teaching and research.
- Good communication and accessibility by public and private transport (metro, bus and parking).
- Facilities for both national and international events such as meetings, conferences and scientific activities.
- Excellently equipped laboratories for basic and applied research.
- Highly qualified graduates who are in demand both in the domestic and international professional market.
- Large clinical and scientific prestige of the six partner hospitals.
- Broad and excellent portfolio of continuing education.
- Wide range of student exchange programmes.
- Leadership in university-specific degrees: Masters, specialists and other continuous education.

### **Weaknesses**

Among our weaknesses are:

- Serious economic situation of the UCM.
- Lack of independence in the management of the centre.
- Inadequate distribution of teaching staff with respect to educational needs.
- Inverted pyramid in the distribution of teaching staff; large numbers of retirements expected in the coming years.
- Low autonomy in the management of school resources.
- Lack of capacity for the selection and admittance of students.
- Lack of systematic mechanisms for the assessment of the quality and validity of the educational content.
- Low imprint of research on teaching.



- Groups too large for theoretical and practical teaching.
- Limited and uneven motivation for the innovation of teaching methods.
- Low teaching staff mobility.
- Lack of interaction between clinical and preclinical departments.
- Difficulty in incorporating and implementing new techniques.
- Lack of technical expertise for the support of teaching activities.
- Inadequate and inefficient infrastructure and difficulties for improvement.
- Weak interaction between the departments, centres, institutes, research units, etc., and other existing organizations on campus and elsewhere in the Community of Madrid.
- Shortfall in internal and external communication.
- Lack of synergy in the planning, management, coordination and sharing of material and instrumental resources (libraries, lecture halls, instrumentation, etc.).
- Poor visibility of research.
- Absence of a support unit for the management of research and the raising of resources.
- Lack of resources for funding doctoral theses, which are now mostly dependent on the funds raised by the supervisors themselves.

### **Threats**

- Insufficient funding to ensure the quality of teaching and the adaptation to the European Higher Education Area.
- Insufficient funding to ensure research quality.
- Excessive centralization of decision-making power for university services (teaching, research and management).
- Difficulty in attracting and managing funding and donations.
- Increasing levels of competition in health sciences, both national and international.
- Insufficient level of education of the students accessing the university from schooling.
- Double dependency on decisions made by both the UCM and the Department of Health of the CAM.



- Loss of autonomy in the management of PhD studies with the possible emergence of doctoral schools.

### **Opportunities**

- Reorganization of the alumni association as a management and reinforcing tool for the identity of the Faculty of Medicine.
- Proposal of new degrees adapted to the European Higher Education Area.
- Wide range of tools aimed at teaching innovation ensuring its quality and excellence.
- External image of excellence in qualifications and research of the Faculty of Medicine.
- Wide range of tools aimed at improving internal communication.
- Existence of tools to improve external communication of results.
- Demand for continuing medical education with officially recognized accreditation.
- Offer of research groups and research funding.
- Establishment of agreements with other educational and research institutions, and companies.
- Integration of the associated hospitals.
- Creation of its own Graduate school.
- Wide range of exchange programs for teacher staff and students.
- Physical location on the campus of Moncloa.
- Coordination of library resources.
- Social and economic context as an opportunity for improvement.
- Image of leadership among the other Spanish medical schools.

### **Strategic lines and derived potential targets**

In response to the results of analysis of the strengths, weaknesses, opportunities and threats in this strategic plan the following strategic lines have been identified:

#### **1. Ensuring the quality and innovation of academic activity**

- Generate mechanisms for updating the plans and educational programmes



- Promote teacher training.
- Promote and report on the participation in the *Docentia* programme.
- Communicate to the responsible lecturer of each of the subjects taught by the centre the need to properly manage the records.
- Promote the improvement and dissemination of the academic management book of qualifications issued by the Faculty of Medicine ("Yellow Book").
- Promote the use of the virtual campus as an educational platform of widespread use for the teaching of the centre.
- To encourage and promote the implementation of teaching in English.
- To foster and promote distance learning.

## **2. Adaptation and improvement of infrastructures for the optimal development of the activity of the Faculty of Medicine**

- Strengthen the IT infrastructure and wireless coverage of the Faculty.
- Improve and enhance the infrastructure of the library.
- Improve the study rooms.
- Address the reorganization of the spaces within the library.
- Implement the self-check out for books.
- Implement radio frequency systems "RFID".
- Coordinate with associated university hospitals for the improvement and profitability of all library resources.
- Promote accessibility from mobile devices to the resources of the library and virtual campus while promoting accessibility to specific scientific content by e-manuals.
- Adapt the services of the Faculty of Medicine (staff, heating, etc.) to the needs of teaching and research outside the official time (weekends, holiday periods, etc.).



### **3. Promoting teacher mobility**

#### **4. Create mechanisms for the coordination and effective management of departments**

- Promote relations between the departments with joint clinical sessions, seminars, etc.
- Promote the corporate image by promoting the presence of the logo of the Faculty of Medicine at presentations, authorship of articles, the labelling of the documents used by the Faculty, etc.
- Place a noticeboard of events at the entrance to the Faculty.
- Promote the use of common suppliers and costs.

#### **5. Encourage the development of coordinated research projects between departments, faculties, other universities and other institutions**

- Meetings of graduate students.
- Seminars among departments.
- Promote the external dissemination of research activity (information on the web, talks, seminars research activities, press releases, etc.).
- Promote the establishment of agreements with other institutions.
- Publicize the existence of and coordinate the application for funding through the specific office designed to that end in the Rector's Office.
- Encourage the alumni association.

#### **Operational Plan**

The different courses of action are divided into processes and these, in turn, into concrete actions that have been prioritized according to their relevance.

#### **Specific strategic actions in the academic area**

It aims to promote quality education through the use of new techniques and methods by teachers. At the same time systems to improve student performance should be promoted.





To achieve this goal it is important to set the maximum number of students per group, according to our limitations in personnel and infrastructure. In the case of teaching staff lifelong learning is a key element:

- New technologies (use of the Web, virtual platforms, etc.).
- Implementation of the tutorial system.
- Design, prepare and develop teaching guides adapted to the European Higher Education Area.
- Promote and facilitate that the teaching staff complete their curriculum in ACINCO or in whichever management tool for personal curriculum is adopted by the UCM.
- Promote and facilitate faculty participation in the *DOCENTIA* programme and in GEA.

### **1. Teaching in the medical degree**

1.1.1. Evaluate the results of adaptation to the European Higher Education Area: quality reports

1.1.2. Degree-Masters of Medicine (assess the need for changes in ANECA, once completed by the first graduates).

1.1.3. Suggestions for improvement (minor annual changes)

1.1.4. Implement training with classes in English

**Responsibility: Vicedean of Academic Affairs and the Teaching committee**

### **2. Teaching in the degree of occupational therapy**

2.1.1. Evaluate the results of adaptation to the European Higher Education Area: quality reports

2.1.2. Degree in Occupational Therapy (assess the need for changes in ANECA, once completed by the first graduates).

2.1.3. Suggestions for improvement (minor annual changes)

2.1.4. Implement training with classes in English

**Responsibility: Vicedean of Academic Affairs and Delegate of the Dean**



### **3. Teaching in the degree of human nutrition and dietetics**

- 3.1.1. Evaluate the results of adaptation to the European Higher Education Area: quality reports
- 3.1.2. Degree in Human Nutrition and Dietetics (assess the need for changes in ANECA, once completed by the first graduates).
- 3.1.3. Suggestions for improvement (minor annual changes)
- 3.1.4. Implement training with classes in English

**Responsibility: Vicedean of Academic Affairs and Delegate of the Dean**

### **4. Postgraduate teaching**

- 4.1.1. Implementation of official Master in Biomedical Science Research; Master in Health, Integration and Disability; Master in Applied Nutrition and Dietetics
- 4.1.2. Master in Immunology Research
- 4.1.3. Master in Health Expertise
- 4.1.4. Master in Cardiac Imaging
- 4.1.5. Master in Vision Science Research

**Responsibility: Vicedean of Postgraduate Studies and the Postgraduate committee**

### **5. Continuing education and University-Specific degrees**

- 5.1.1. Study of current status and viability of the university-specific degrees

**Responsibility: Vicedean of Postgraduate Studies, the Postgraduate committee and the Directors of the University-Specific degrees.**

### **Specific strategic actions in the scientific and research area**

- 1. Assess and update the bibliometric index of the Faculty of Medicine.
  - 1.1. Author affiliation....
- 2. Improve the visibility of research
  - 2.1. Internally by organizing lectures, seminars, conferences, ...
  - 2.2. Externally with press releases, ....
- 3. Enhance the collaboration with associated hospitals.
- 4. Facilitating access and presentation to funding calls (Vice-rector's Office...)



4.1. Create a section for announcements of funding calls on the website of the Faculty of Medicine

**Responsibility: Vicedean of Research and the Research committee**

#### **Specific strategic actions in the organization, institutional and communication areas**

One goal is to create a sense of belonging to the Faculty of Medicine that will invite everyone to participate in its growth. Therefore, the attendance at committees, meetings and seminars will be enhanced and facilitated. The organization of meetings, lectures, conferences will be promoted.

1. Strengthen the alumni association

1.1. Increased visibility

1.2. Improve communication

1.3. Association of Friends of the Faculty of Medicine

1.4. Patronage

2. Increase in the number of sponsored chairs and collaborative agreements

2.1. Create closer ties with the pharmaceutical industry, with health technology companies, etc.

3. Maintain the presence of national and international meetings in the areas of medicine, medical education, etc..

4. Promote and enhance the student congress

5. Improve collaboration with other faculties and the rector

6. Promote attendance at meetings and committees and to encourage their consideration as academic activities.

7. Increase collaboration with other universities and institutions.

#### **Strategic actions in the infrastructure area**

Adapt and create space for the European Higher Education Area, improve computer facilities, improve signalling of the building, lecture theatres, etc..

To the extent that is possible, gradually adapt the facilities to the regulations for the prevention of occupational hazards (architectural barriers, emergency and evacuation signalling, etc.).



**Annexes**

University-hospital agreements (BOCUM 238/2010).

Teaching organization of various degrees.

EHEA Regulations.

Internal regulations of the Faculty of Medicine.

