

### **MAR Health Park** Barcelona 2009

#### **A historic organisation, recently modernised**

This year, I am particularly pleased to be able to offer a few words for the 2009 report of this institution that represents so much for the city of Barcelona.

During the last year, the constitution of the Barcelona MAR Health Park Consortium has become a reality to replace the Municipal Institute of Health Care, created 27 years ago. This renewal, headed by the Generalitat and with a significant representation by the City Council, is a new milestone in promoting entrepreneur business policies in the health sector.

This Consortium not only leads the health care in its most immediate catchment area along the coast of Barcelona, but it also exercises a new leadership with more ambitious, transversal projects that grant it greater presence in the city, but above all in the immediate metropolitan environment. In this way, it adds to the far-reaching offer of its portfolio of services with an increase in mental health care, at the same time as making new strategic alliances in research, teaching and technology reality with other centres and with the universities.

The result of all this is the creation of a new care and scientific pillar, a point of reference in health not only in the most immediate community area, that of Ciutat Vella and the Barcelona Coast, but also at an overall level, because it constitutes a genuine example of leadership that Catalonia wishes to exercise in health innovation.

For this reason, we will not give up on the adaptation and improvement of the Hospital del Mar. Despite the current difficulties and the imposed, but necessary, restriction of public spending which we must accept, the extension of the main care device of the institution is an essential need for a society which aims to be healthier and more solidarity. Therefore, perhaps the work will not be able to be carried out with the envisaged celerity, but there is no looking back and the results will have a very favourable impact on the quality of life of people.

Finally, I would like to state my recognition of the professionals who are part of the MAR Health Park Consortium for their effort and dedication to maintain, at all times, the great level of the quality of the care, and to thank all of them for believing in the new project of this historic, yet updated organisation.

**Marina Geli**  
*Minister of Health*

### **The future we are preparing every day at the MAR Health Park**

Little by little, the change that will take us to a completely updated care organisation, fully able to respond to the health and social challenges of the 21st century is becoming a reality. IMAS (the Municipal Institute for Healthcare), which was created at the beginning of the 1980s, is making way for the Barcelona MAR Health Park. IMAS involved the commitment of the local administration to a health model that required the integration of all the existing resources to constitute a health network at the service of the citizens.

The projects we are dealing with today are not just to create a model of future organisation, they are precisely the confirmation of what we are constructing and of the fact that we have not rested on our laurels with regard to the main health organisations in our country, which are increasingly more integrated and with a more far-reaching offer.

The collaborations and community services with other hospitals such as the Germans Trias i Pujol, Sant Pau, Clinic or Mútua de Terrassa, show us the way to greater co-operation between centres, which is essential to be able to offer high-level services. The coordination between the Information Systems of the ICS (Catalan Health Institute) centres and of the PANEM (Institute of Medical Care Services to Municipal Workers) in the city facilitates the integration of the health network. In addition, the incorporation into the management of the Dr. Emili Mira Mental Health Care Centre is the recognition of our notable contribution in this area, in the same way as the participation in the management of new facilities in the Sant Andreu Barracks. As a tertiary centre, we would like to achieve excellence in specialisation to offer response to highly complex processes. Care and research integration, as well as the multidisciplinary nature of the teams, are behind the new units, such as those dealing with epilepsy and pulmonary hypertension.

The opening of the MAR University Campus has been one of the milestones of this year. More than one thousand students of Medicine, Biology and Nursing demonstrate its potential. However, neither the guidance towards specialisation nor the research and the integrated teaching of care will make us forget that we are also community centres, with services of great proximity and that we maintain a significant social involvement, as can be seen in the transparency and communication that we choose to provide. We should not forget the international links which, in fields such as ours, are essential both with regard to care as well as research and training; the agreement with the Johns Hopkins University to develop a joint training programme in the city of Barcelona is an example of this.

I would like my final words in this summary of 2009 to be aimed at the professionals, who are the backbone of all the effort behind the change in the new MAR Health Park in a context of economic crisis. Despite this setting, professional development and the high-quality research projects they promote are maintained and are even increasing. At a time like this we should highlight their recognition and their involvement, and results such as those of the survey carried out on professionals called "I have a say" will serve to guide the direction of the improvements that we should undertake.

**Jaume Raventós**  
*Chief executive of the MAR Health Park*

## We are increasing services to construct an integral health organisation

### Incorporation of the Dr. Emili Mira Centre

The Emili Mira Mental Health Care Centres, with more than 80 years of history to them, are in Santa Coloma de Gramenet and have a complete offer of mental health services which include all areas of care: outpatients, emergencies, hospital and social and health care. The transfer from Barcelona Regional Council to the Generalitat of Catalonia, which took place in February 2010, and the task of managing it carried out by CatSalut at the MAR Health Park means the recognition of the excellent positioning of the institution in the area of mental health and particularly of the IAPS (now transformed into the Institute of Neuropsychiatry and Addictions), guaranteeing the integral care of the patient at the same time as the coordination of different health lines, teaching and research. This move has involved the incorporation of more than 300 professionals into the MAR Health Park and is a reference population for some 900,000 inhabitants of the coast of Barcelona, Barcelonès Nord and the Baix Maresme.

### Participation in the health facilities in the Sant Andreu Barracks

In this new health area in Barcelona, consisting of 113,000 m<sup>2</sup>, a Primary Health Care Centre, mental health care centres and a social health centre were installed. The construction was put out to tender by the Consortium of the Zona Franca, while the MAR Health Park will be responsible for managing the primary health care and social health care facilities.

## Strategic alliances and collaborations make us more competitive

### Barcelona, European campus of the Johns Hopkins American University

In 2009, the first edition of the seminars which the Johns Hopkins Fall Institute in Health Policy and Medical Care jointly organised with the Hospital del Mar were held, with the collaboration of the Autonomous University of Barcelona and the Pompeu Fabra University. This educational activity was made possible thanks to the agreement signed with the Johns Hopkins University for the development of training programmes and to promote areas of debate and knowledge about current affairs in our country, such as professional values, clinical leadership and the interaction between clinical practice, research and teaching.

### New Tertiary Ictus Centre with the Hospital Germans Trias i Pujol

An agreement with the Hospital Germans Trias i Pujol in Badalona enabled the Tertiary Ictus Centre to be created, which aims to be a highly specialised point of reference in care, research and teaching which includes the entire complex area of acute cerebrovascular pathology. The centre offers the most advanced techniques, 24 hours a day, every day of the year, with a duty rota shared between doctors from both centres, alternating between the two hospitals.

## We are growing with the Barcelona MAR Health Park

The IMAS health care centres and services have constituted the Barcelona MAR Health Park Consortium, with the participation of the Generalitat of Catalonia and of Barcelona City Council. The

Consortium should allow for advancing towards an integrated health organisation in which, in addition to offering health and social and health services, knowledge and research are developed, making possible a more direct participation in programmes of promotion and rehabilitation of health and the prevention of diseases.

### Creation of the largest thoracic surgery service in Catalonia with Sant Pau and the Mútua de Terrassa

The new service covers a population of almost 2,000,000 people. The objective of the three institutions is to offer the best service to their catchment areas, particularly with regard to the treatment of lung cancer. The Hospital del Mar and the Hospital Sant Pau have experience in this model of community services as, since 2008, they have shared the Plastic Surgery Service.

### Collaborations in the Early detection programme of colon and rectal cancer

This programme of the Catalan Ministry of Health is offered to men and women aged between 50 and 69 years of age. In Catalonia, every year 4,500 new cases are diagnosed and it is the second cause of death by cancer. The Catalan Ministry of Health has entrusted the Screening Office of the Hospital del Mar-Hospital Clinic with the coordination of its catchment territories, which will mean reaching a target population of around 200,000 people.

### Grants and scientific production

Applications for grants have increased by 12%, and 108 were favourably dealt with. Among the grants received from private foundations we should highlight that of the Spanish Cancer Association and those of Fundació La Marató.

Scientific production has increased by 9.5% with regard to the previous year and a total of 844 documents were published, 76% of which were magazines listed in the *Journal of Citation Reports* (JCR-ISI), with international impact.

### Recognitions

We should mention the participation of researchers from the IMIM-Hospital del Mar in two high-level international multi-centric studies, which have identified six genetic variants related to the appearance of cardiovascular pathologies. Based on these studies, a DNA chip has been developed for detecting the risk of suffering from these diseases.

Four researchers have been awarded significant recognition, including the Carles Martí Hennebergh Award for a scientific career by the Danone Institute to Dr. Maribel Covas and the Ernest Lluch Award by the Agency of Technical Evaluation and Medical Research to Dr. Montse Ferrer for a project on quality of life and prostate cancer.

## Specialisation, the permanent challenge of a large health centre

### Setting up the Epilepsy Unit

The Hospital del Mar has set up its Epilepsy Unit, equipped with the most advanced technology, able to offer highly complex treatments and to deal with all the diagnostic and therapeutic procedures related to this pathology. The creation of this unit responds to the need to increase the offer and specialisation of the treatment of patients affected by epilepsy, resistant to pharmacological treatment.

### **Pulmonary Hypertension Unit: care, research and teaching**

The origin of this unit is based on the desire to develop a translational medicine policy with a multidisciplinary synergy. In this sense, the Pulmonology and Cardiology Services of the Hospital del Mar have created a monographic diagnostic, follow-up and treatment unit for pulmonary hypertension, the Pulmonary Hypertension Unit, which is predominantly care orientated, but which also includes research and teaching, and in which the care resources of both services are integrated.

## **Information and communication technologies that improve care and efficiency**

### **Shared medical reports, in Ciutat Vella**

A pioneering experience between various health providers of the Ciutat Vella area allows doctors and nurses to access the medical reports of patients attended at the MAR Health Park, ICS and PAMEM centres.

The fact that the information systems are different (IMASIS and e-Cap) has not been an obstacle for the care teams to be able to access relevant information about patients, including diagnoses, tests, pharmaceutical prescriptions, allergies, risk factors and medical and nurses' reports.

### **Tele dermatology**

The Hospital and the primary health care centre share medical information in real time by means of virtual clinical sessions, tele-training, tele-consultation and multi-chat rooms. There is access to electronic medical reports and to shared high-resolution medical images. In addition, tools have been designed to prioritise patients.

### **Home tele-care**

Home tele-care allows for the follow-up on patients with heart failure. The terminals in patients' homes allow their vital signs to be taken and for the data to be communicated and monitored. The system also allows remote consultations to be made, whether programmed or urgent.

### **Introduction of work stations**

Once the Medical Work Station had been established in all the centres of the MAR Health Park, it was then the turn of the Nursing Work Station. At the Hospital de l'Esperança and the Centre Fòrum they are now 100% operational, at the Hospital del Mar five hospitalisation units have been set up and their introduction is to follow.

### **Tele-rehabilitation: the Rehabitic project**

These are customised rehabilitation plans at home for patients with a knee prosthesis, as well as controlling the results by their physiotherapist, both in real time as well as in an asynchronous way. The technology is based on biometric devices, communications networks, distance education systems and video conferences through Wi-Fi connection.

### **Tele-care, the future of medical treatments**

The alliance with Telefónica R&D is promoting the development of ICTs in the health sciences and, more specifically, in health tele-care projects such as home tele-care, tele-rehabilitation and also collaborative tools for sharing medical information in real time. These advances mean a second phase of application that is more directly therapeutic after the generalisation of the applications of a more administrative nature, such as the electronic prescription or digital medical records.

## **Closer to our community and open to all the general public**

### **"Looking in from the outside", an exhibition to create awareness about AIDS**

Several places in the city, including the Hospital del Mar, are housing the works that make up the exhibition organised by the ArtAids Foundation, the purpose of which is to create awareness about the need to prevent HIV and to reflect on the sensations that people who live with this disease experience.

### **Solidarity action in the Saharan refugee camps**

The Grupo Acción Solidaria Internacional (GASI) NGO has been carrying out development cooperation projects for 23 years in places affected by a lack or destructuring of basic health systems. Today, the preferential focus of its actions is Saharan refugee camps, where they combine care activities with educational ones.

### **"To show, a button", an occupational therapy exhibition by stroke patients**

At the exhibition that was organised in December in the Hospital de l'Esperança, one could see the Christmas decorations and the drawings done by users of the Physical Medicine and Rehabilitation Occupational Therapy Service, in which one could see the changes that these patients experience in the perception of their body and their environment after suffering a stroke.

### **Mar@la xarxa, a new 2.0 Digital Magazine**

Since July 2009, a new digital communications support has taken over from the old paper newsletter *L'IMAS a la butxaca*. It is called *Mar@la xarxa* and it is designed as a webzine, a format that includes audiovisual files, links to websites, images and sound files. In addition to being an information tool, it aims to be an instrument which, by means of opinion forums and blogs, encourages the participation of all professionals, opens up to the entire health sector and brings us closer to the community.

### **Patients with serious mental disorders integrate as expert patients**

The EMILIA project, carried out in 12 countries of the European Union, has developed an ongoing training programme which helps patients with serious mental disorders in handling their disease, promoting health related to it, dealing with obstacles in the labour world and integration into their setting. In addition, after receiving the training, the patient is incorporated as an expert patient into a health institution.

### **Mandalas, sport, music and art to fight against forgetfulness**

To celebrate World Alzheimer's Day, patients, family members, professionals and volunteers celebrated a day of solidarity with the disease in the Centre Fòrum, with the aim of informing about it and promoting support to people who suffer from it as well as their immediate setting.

### **New website for stroke patients and carers**

The new website [www.parcdesalutmar.cat/ictus](http://www.parcdesalutmar.cat/ictus) is an instrument for information, training and communication between patients who have suffered a stroke, professionals, carers and the general public that aims to foster dynamics of network relationship and has the objective of improving quality of life with the promotion of a new programme of action and virtual care intervention.

## Quality, the permanent challenge

### Notification system for adverse happenings

Within the context of the initiatives related to the Alliance for Patient Safety promoted by the Catalan Ministry of Health, a system has been set up which, through the intranet, allows incidents and circumstances that have happened and that could have led to avoidable harm occurring to a patient to be notified in a confidential and anonymous way.

### ISO Quality Certifications

In 2009, the Institute of Radiation Therapy and the Sterilisation Service underwent the second ISO-9001 follow-up audit, which ensures a good quality management system. The Institute of Radiation Therapy has had its system certified since 2004, and the Sterilisation Service since 2007. At the MAR Health Park, the Transfusion and Pathological Anatomy Services and the Bonanova Institute of Professional Health Training also have this certificate

### Four new star projects for improving quality

The four quality improvement projects which received aid in 2009 concentrated on optimising the indication of red blood cell concentrate in surgical patients, the prospective assessment of informative process in patients diagnosed with advanced lung cancer, the introduction of a programme of nutritional risk assessment in patients with cancer who receive radiotherapy and the clinical route in pulmonary lobectomy.

## Research always at the service of health

This year, the Strategic Research Plan has been drawn up, the base document of the future Hospital del Mar's Institute of Health Research. This document, together with the reorganisation of research into programmes, must be the road map for research for the MAR Health Park during forthcoming years and should direct the scientific relation with the rest of the institutions of the Barcelona Biomedical Investigation Park.

It should be pointed out that during 2009, the research group in the biology of B cells has been developed, directed by Dr. Andrea Cerutti (an ICREA researcher) and the Microarrays Analysis Service (MAS) has been consolidated, to offer support to studies of a gene, cytogenetic and genomic nature. An external scientific committee has been constituted, made up of scientists of international prestige who cover the thematic areas of the five research programmes and who have been invited to assess the research done at the MAR Health Park.

## Professionals, the value of the organisation

### Ongoing training, more than 3,000 participants

The 202 ongoing training courses that were organised brought together 3,094 students and involved 2,475 hours of teaching. The budget destined to ongoing training was €388,000, 1.2% of the salary mass.

### "I have a say", the professionals' opinion

An internal survey of the professionals allowed their opinion to be given about their own work and about the organisation. 1,075 people did the survey and the results obtained were an initial phase for advancing the development of improvement actions created from the contributions and the design of human resources policies.

### Two Better Health Ideas

The new Ictus Tertiary Centre, as an efficient model in managing health resources and the new Degree in Medicine at the Hospital del Mar, as an initial state experience of an inter-university model, were the ideas awarded as the Best Health Ideas 2009 in the category of health policy, by *Diario Médico*.

### 30th anniversary of the first kidney transplant

In May, the 30th anniversary of the first kidney transplant at the Hospital de l'Esperança was celebrated, which made it the 5th Catalan centre authorised to carry out these interventions. Since then, more than 700 have been done.

### The intranet is renewed

The intranet has been improved, guiding it towards 2.0 environments. Its design has been updated, there has been a new layout for the contents and new products have been introduced that favour the participation of professionals, such as surveys and blogs.

### Series of conferences organised by the Nursing Management

"Sustainability of the Catalan Health System. A vision of the future" and "Privacy and Ethics" were the conferences organised by the Nursing Management in 2009 with the aim of promoting cultural and communication activities in the hospital environment.

### 10th anniversary of the Soledad Woessner Haematological Cytology School

The school, assigned to the Pathology Service of the Hospital del Mar organises haematological cytology courses for haematologists. These courses are recognised to be of health interest by the Institute of Health Studies and enjoy great prestige in the health sector.

### II Nursing Prize

On 11 December, the 2nd edition of the nursing prizes was held, the objective of which is to recognise and award the scientific communications of this collective. 47 posters and 21 speeches were submitted.

### Award to Professional Excellence

In the 6th edition of the awards of the Barcelona Professional Association of Doctors, Dr. Joan Abanell in the biomedical research category and Dr. Juan José Ballesteros in the category of hospital care received awards. These prizes are given to doctors with exemplary behaviour in the care, medical education, research and bioethics areas.

### Different yes, unequal no

The objectives of the 2008-2012 equality plan are to improve the conditions in the institution and contribute to a new corporate culture which favours gender balance.

## Teaching, growing in knowledge

### Programme of professional training courses for employment

The Bonanova Institute for Professional Health Training offers professional training courses for employment within the health sector and care of dependent people aimed at workers and people who are unemployed. This experience, a pioneer in Spain, is subsidised by the Catalan Employment Service and the European Social Fund. It is the first training experience integrated into the FPCat network

### **The EUIM renews and increases its presence on the Internet**

The Mar University Nursing School (EUIM) published a new web portal ([www.parcdesalutmar.cat/euimar](http://www.parcdesalutmar.cat/euimar)) for disseminating activities and information for students, which includes an area for social relations in Facebook. In addition, it has installed a Moodle platform, one of the tools that is most used in virtual campuses, for improving training and tutoring actions.

### **Aula Campus MAR, to promote the offer of teaching activities**

The objectives of the Aula Campus MAR are to improve the public projection of the institution, the preparation and dissemination of the portfolio of services for the offer of ongoing training open to the exterior, facilitating the management of teaching activities for professionals and the professionalising of managing teaching activities.

### **Inauguration of the MAR University Campus, an innovative project of inter-university collaboration**

In October, work on the first phase of the MAR University Campus was completed, a 4,500 m<sup>2</sup> area in which three teaching institutions from the health area coexist: the Pompeu Fabra University, the Autonomous University of Barcelona and the MAR Health Park. During the 2009-2010 academic year, the facilities dealt with more than 1,100 students for degrees in Medicine, Human Biology and Nursing.

### **The Bonanova Institute participates in an encounter between experts from the EU in matters of employment and training**

On 25 and 26 May, the Mutual Learning Session was held at the Bonanova Institute, an encounter of successful businesses from the European Union, in which they talked about the adaptation of the professional training system to the new needs of the skills and abilities of the labour market.

### **Assessment of the Mar University School of Nursing**

The Quality Agency for the Catalan University System assessed the Mar University School of Nursing, granting it the recognition of suitable to overcome the challenges presented by the new European Higher Education Area.

### **New Information Systems educational tool**

The Virtual Hospital of the Bonanova Institute is an educational tool that allows the teaching team to suggest hypothetical situations in a simulated real environment and for the students to take on determined roles that will help them acquire professional skills based on the staging of a reality.