



CENTRE DE RECERCA MATEMÀTICA



HR EXCELLENCE IN RESEARCH

# **Human Resources Strategy for Researchers (HRS4R)**

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**Action Plan 2018-2020**

## TEMPLATE 2: HR STRATEGY - ACTION PLAN

Name Organisation under review: *Centre de Recerca Matemàtica*

Organisation's contact details:

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Web link to published version of organisation's HR Strategy and Action Plan:

<http://www.crm.cat/en/About/General/Documentation/Documents/CRM%27S%20Action%20Plan%202018-2020.pdf>

**SUBMISSION DATE:** MAY 25<sup>TH</sup> 2018

### 1. ORGANISATIONAL INFORMATION

*Please provide a limited number of key figures for your organisation. Figures marked \* are compulsory.*

<b>STAFF &amp; STUDENTS</b>	<b>FTE</b>
<i>Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research</i>	46
<i>Of whom are international (i.e. foreign nationality)</i>	22
<i>Of whom are externally funded (i.e. for whom the organisation is host organisation)</i>	11
<i>Of whom are women</i>	12
<i>Of whom are stage R3 or R4<sup>1</sup> = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor.</i>	8
<i>Of whom are stage R2 = in most organisations corresponding with postdoctoral level</i>	17
<i>Of whom are stage R1 = in most organisations corresponding with doctoral level</i>	21
<i>Total number of students (if relevant)</i>	
<i>Total number of staff (including management, administrative, teaching and research staff)</i>	59
<b>RESEARCH FUNDING (figures for most recent fiscal year)</b>	<b>€</b>
<i>Total annual organisational budget</i>	2.372.527,52
<i>Annual organisational direct government funding (block funding, used for teaching, research, infrastructure,...)</i>	1.801.772
<i>Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)</i>	152.401,52
<i>Annual funding from private, non-government sources, designated for research</i>	418.354

<sup>1</sup> [http://ec.europa.eu/euraxess/pdf/research\\_policies/Towards\\_a\\_European\\_Framework\\_for\\_Research\\_Careers\\_final.pdf](http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf)

**ORGANISATIONAL PROFILE** (a very brief description of your organisation, max. 100 words)

The *Centre de Recerca Matemàtica* (CRM) was created in the year 1984 with the aim of promoting research and advanced training in mathematics with the collaboration and synergies of the university and other research institutes, thereby becoming a centre of international scientific reference in mathematics research.

The centre's activities are divided into two very different categories. The first category places the centre as organiser of international competitions (intensive research programmes, advances courses, conferences, etc.) and as a centre for long-term visiting researchers working in collaboration with the research community of Catalonia. Secondly, since 2008 CRM includes its own research groups, which allows it to open lines of research in different applied areas.

## 2. NARRATIVE (MAX. 2 PAGES)

The Centre de Recerca Matemàtica was established by Prof. Manuel Castellet in 1984 as a centre of the [l'Institut d'Estudis Catalans](#) (IEC, the Catalan Academy), in the premises of the [Universitat Autònoma de Barcelona](#) (UAB). Presently the CRM is a consortium between the [Generalitat de Catalunya](#) (the Catalan Government), represented by its Ministry of Economy and Knowledge (MEC), the [IEC](#) and the [UAB](#). The CRM belongs to the [CERCA](#) Agency of research centres sponsored by the Catalan Government and is a member of ERCOM ([European Research Centres in Mathematics](#)), a committee of the [European Mathematical Society](#), together with other European centres of a similar nature. It is also a member of the EPDI ([European Post-Doctoral Institute for the Mathematical Sciences](#)) for the promotion of postdoctoral mobility and the [International Mathematical Sciences Institute](#). The CRM is the managing institution of the [Barcelona Graduate School of Mathematics](#) (BGSMath) and a promoting institution of [Bioinformatics Barcelona](#) (BIB). The CRM is also a node of the [Instituto Español de Matemáticas](#) (IEMath).

Since 2009, the CRM's budget is part of the public budget of the Catalan Government. Core funding is provided by MEC through yearly contracts. Other funding is obtained through competitive calls of the European Union, the Spanish Ministries or the Generalitat. The CRM was awarded in the year 2000 with the Narcis de Monturiol Plate Award to Scientific and Technological Merit ([Picture](#)). The Centre de Recerca Matemàtica signed the [letter of commitment](#) to the *Charter & Code* in February, 2014, thereby committing to follow the European Commission initiative towards promoting and improving the centre's recruitment policy, the working environment and the careers of researchers while also actively participating in the development of the European Research Area. Since July 2015, the CRM has held the HR Excellence in Research award. This updated and revised Action Plan, depicting the current strengths and weaknesses of the CRM's HR strategy, is the result of the interim assessment conducted in 2017.

The actions outlined in the previous version of the Action Plan (2015-2017) in relation to **Ethical and professional responsibility of researchers** have been almost completely implemented. Two of the actions included in this section are aimed at improving the awareness about health & safety policies currently in place at the CRM. This will be done both by disseminating the relevant documents and offering online training on the matter. One of the most important targets that has been put forward by the centre's stakeholders is the need to set the basis to develop a policy regarding Open Science and Open Access, since that is seen as a strategic development for the future of the centre. Another of the actions deemed as imperative is the creation of a web-based platform to ease the communication and exchange of information among research teams.

When it comes to the actions planned under the principles on **Recruitment & Selection**, the main action planned have been motivated by the new strengthened HRS4R process, which includes the *Open, Transparent and Merit-based Recruitment* principles. This principles have been compared

against the current recruitment policies at the CRM thanks to the checklist provided by the European Commission. With the information collected from that analysis, we will elaborate and implement the CRM's OTM-R institutional policy. This new policy must include not only the procedure when establishing the selection/evaluation committee and the guidelines to evaluate merits, but also the dissemination of the openings both at the local and international level (i.e. publishing them on the Euraxess portal). The HRS4R Steering Committee is looking at establishing mechanisms to secure that there is no discrimination when assessing candidates for a position and that gender balance is one of the priorities of the CRM's recruitment policy. Even though we are aware that this actions may not suffice to address the noticeable imbalance in senior positions at the centre, the Steering Committee, along with the Team of Directors, strongly believe that this ground work will help improve gender balance in the future.

Regarding **Working Conditions & Social Security**, we are aiming at solving several issues. The most notable weakness in our centre is, without a doubt, gender balance. Our senior research staff is predominantly male, while our junior researchers show more diversity but far still from parity. New initiatives to help ease the conciliation of a career in research and family responsibilities are needed, since it has been noted that it could be one of the barriers female researchers have to face when developing their careers. The participation of the CRM's research community in the decision making needs to improve as well, since it has been proved difficult to communicate the importance of what the Charter & Code principles stand for. One of the actions that are going to be incorporated to the centre's operation is the creation of a yearly assembly where all the researchers and administration will have the opportunity to speak their minds freely about how they evaluate the CRM's HR Strategy. This can be done due to the fact that the Centre de Recerca Matemàtica is a relatively small centre, and it should complement the other means of participation already established.

The Team of Directors and the Manager would also like to improve the communication channels to handle complaints and internal conflicts, since that is done directly through the CRM's Director. Language barrier is also one of the issues that we are tackling in the revised Action Plan. Firstly, we are working on the translation into Spanish, Catalan and English of all the relevant information published on the centre's HRS4R webpage, so no researcher is discriminated on a language basis. We are also looking at ways to improve the integration of international researchers beyond the centre's activity. Language is usually the most noticeable barrier when settling in a new country. In Catalonia, two languages are used for official matters and everyday life, Spanish and Catalan, and it has been observed that most researchers coming from abroad have difficulties learning either or both of them.

Finally, **Training & Career Development** is one of the pillars of the CRM Strategic Plan. The Doctoral Training Unit is working in coordination with the HRS4R Steering Committee to strengthen the opportunities offered at the centre for young researchers so they can have access and interact with visiting senior researchers. The CRM invites every year international experts in different fields to participate and conduct research stays during the Intensive Research Programmes organised at the centre. During these programmes, there are conferences, seminars and advanced courses that can help enhance the training for our PhD students. In that regard, we will encourage and facilitate their involvement on these activities so they can maximise their training with us. Mentoring is another focus point for the Doctoral Training Unit, since a more structured relationship between junior and senior researchers would help boost the career development at the CRM.

A more detailed look at the actions that have been proposed for the next three years can be found on the following section.

### 3. ACTIONS

Please provide a list of all actions to be undertaken in this HR strategy. The list must be accompanied by an extended version in which the actions are described in more detail. The overview must contain at least the following headings: Title action – timing – Responsible Unit – Indicator(s) / Target(s).

<i>Title action</i>	<i>Timing</i>	<i>Responsible Unit</i>	<i>Indicator(s) / Target(s)</i>	
<b>Ethical and professional responsibility of researchers</b>				
<b>1</b>	Approval and dissemination of the <i>CRM's Equality &amp; Diversity Plan</i> .	Q4 2018	<i>HRS4R Steering Committee</i>	Publication of the approved version of the plan on the <i>Researcher's Documentation Package</i> and dissemination through working groups and mailing.
<b>2</b>	An <i>Open Science and Open Access Strategy</i> has to be developed, discussed and implemented at the CRM.	Q1 2019	<i>CRM's Team of Directors</i>	The <i>CRM's Open Science and Open Access Strategy</i> will be posted on the <i>Researcher's Documentation Package</i> and statistics about its implementation will be kept.
<b>3</b>	Offer online training sessions on health and risk prevention in English for international researchers working at the CRM.	Q2 2019	<i>CRM's Manager</i>	Number of people requesting the online training in English.
<b>4</b>	Creation of a platform within the CRM's website to facilitate communication between researchers and groups, encouraging the exchange of information.	Q4 2019	<i>CRM's IT Department</i>	Setting- up the platform and dissemination of its purpose among researchers at the CRM.
<b>5</b>	Publish Health & Safety documents online so that they are easily accessible	Q1 2020	<i>CRM's Manager</i>	Publication of the relevant documentation on the <i>Researcher's Documentation Package</i> . Periodic courses about the prevention of labour risks.

<b>Title action</b>		<b>Timing</b>	<b>Responsible Unit</b>	<b>Indicator(s) / Target(s)</b>
<b>Recruitment &amp; Selection</b>				
<b>6</b>	Improve communication and feedback to non-selected applicants.	Q3 2018	CRM's Manager	Number of applications received for each call and minutiae of the selection process.
<b>7</b>	All job openings should be published in Spanish, Catalan and English, and also posted on the EURAXESS portal.	Q3 2018	CRM's Manager	Percentage of international candidates vs. Local candidates for openings.
<b>8</b>	Development and implementation of the CRM's Open Transparent and Merit-based Recruitment policy and endorsement by the Governing Board.	Q2 2019	HRS4R Steering Committee	Endorsement by the Governing board and publication of the resulting document on the HRS4R webpage.
<b>9</b>	In order to ensure the gender equality of the selection committees, an external expert may be invited to be part of the committee.	Q4 2019	CRM's Team of Directors	Minutiae on the composition of the selection committees for all job openings.
<b>10</b>	Improve the gender balance among the research community by ensuring the selection processes are carried out openly and with equal opportunities for all candidates.	Q2 2020	CRM's Team of Directors	Statistics on the ratio of male/female candidates for each position advertised and the resulting selected candidates.
<b>Working conditions &amp; social security</b>				
<b>11</b>	Dissemination of the CERCA's <i>Gender Bias in Research Institutes</i> video among the CRM researcher's community and the administration staff.	Q4 2018	CRM's Manager	Publication of the link to the video on the centre's website and dissemination.
<b>12</b>	There is no established mechanism at CRM to evaluate the degree of satisfaction regarding working conditions.	Q4 2018	HRS4R Steering Committee	Approval of the poll designed by the HRS4R Steering Committee and dissemination among the CRM's research community. Publication of the results.



<b>Title action</b>		<b>Timing</b>	<b>Responsible Unit</b>	<b>Indicator(s) / Target(s)</b>
<b>13</b>	Increase the number of female researchers participating and attending activities organized by the CRM.	Q4 2018	CRM's Team of Directors	Statistics about the participants in the activities organised at the CRM divided in gender, age and country of origin.
<b>14</b>	Creation of the CRM's Assembly, where once a year all the members from the research and administration staff will get together to discuss the state of the centre and present the actions that have been implemented through the Human Resources Strategy.	Q4 2018	CRM's Manager	Minutiae of the Assembly with attendance statistics.
<b>15</b>	No specific reference is made to the <i>Charter &amp; Code</i> in the existing agreements with the hosting institutions for the PhD and postdoctoral researchers that conduct their activity outside the centre.	Q1 2019	CRM's Team of Directors	Review and strengthening of the agreements with hosting institutions to ensure that the actions implemented under the HRS4R principles reach all CRM researchers carrying out their research outside the CRM.
<b>16</b>	Publication of a comprehensive list of the software available for researchers at the centre.	Q2 2019	CRM's IT Department	Addition of the software list in the CRM's Welcome Guidebook.
<b>17</b>	Renovation and updating of the CRM's website to enhance the dissemination and visibility of the centre's research activity.	Q3 2019	CRM's IT Department	Publication of the new website.
<b>18</b>	Publish all the relevant information regarding the legal aspects of the working conditions in Catalonia and Spain (i.e. Health care, working permits, VISA...)	Q3 2019	CRM's Manager	Publication of the relevant documentation on the HRS4R webpage and dissemination among the research community at the CRM.

<b>Title action</b>		<b>Timing</b>	<b>Responsible Unit</b>	<b>Indicator(s) / Target(s)</b>
<b>19</b>	Researchers coming from abroad should have access to languages courses on Catalan and Spanish to smooth both their labour and social integration.	Q4 2019	CRM's Manager	Statistics on the number of researchers taking language courses during their time at the CRM.
<b>20</b>	Creation of a mechanism to communicate and deal with complains, boosting the input from the research community to strengthen the synergy among its members.	Q1 2020	CRM's Team of Directors	Publication of the protocol in the <i>Researcher's Documentation Package</i> .
<b>Training &amp; Career Development</b>				
<b>21</b>	The CRM, through its Intensive Research Programmes (IRP), hosts international researchers. This provides the opportunity for junior researchers to collaborate with renowned researchers. We can encourage and facilitate this exchange by removing registration fees for CRM junior researchers interested in attending the activities (conferences, workshops, etc...) organized within the IRPs.	Q4 2018	Doctoral Training Unit	Number of seminars and meetings chaired by visiting researchers at the CRM. Statistics on the participations of CRM's junior researchers on activities organized within the Intensive Research Programmes.
<b>22</b>	Introduction of compulsory meetings between PhD students and their supervisors, as a tool to detect problems during the PhD development, review objectives and, if needed, establish corrective measures.	Q3 2019	Doctoral Training Unit	Creation of a form that must be filled out by both the tutor and the PhD student during the meeting, to be handed to the Doctoral Training Unit.

As the establishment of an Open Recruitment Policy is a key element in the HRS4R strategy, please also indicate how your organisation will use the Open, Transparent and Merit-Based Recruitment Toolkit and how you intend to implement/are implementing the principles of Open, Transparent and



Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this implementation.

If your organisation already has a recruitment strategy which implements the principles of Open, Transparent and Merit-Based Recruitment, please also list the web link where this strategy can be found.

*Actions addressing the implementation of Open, Transparent, Merit-Based Recruitment principles:*

We have completed the *Open, Transparent and Merit-based Recruitment checklist* (see [here](#)) and during the period encompassed by this Action Plan we are going to work on addressing the weaknesses identified according to the recognized priorities. The centre's HRS4R Steering Committee, together with the centre's Director and Manager, has already started discussing the actions presented in this Action Plan regarding Recruitment & Selection that will be tackled in the short to medium term. The first step in the process will be the dissemination of the principles of OTM-R and the set up of consulting mechanisms to gather the necessary feedback from the all the centre's stakeholders.

The most relevant action that we are now working on is the development of the centre's first OTM-R policy, which will have to be drafted and brought in front of the Governing Board in order to be approved. The other actions that have been planed are related to the manner openings and calls are advertised, evaluated and notified. Posting the openings on the EURAXESS portal, for instance, is seen as an opportunity to help the CRM reach a broader research community in order to secure a more international selection process. While the need for more gender balanced selection committees has been also detected and will be addressed with the addition of external experts. Communication with candidates, both at the level of the information that is posted on advertised calls and after the selection process is concluded, is also another aspect that is in need of improvement.

The main issue that we are facing at the moment is differentiating those recruitment processes where we have the opportunity and weight to apply the OTM-R principles and those that, being funded and/or managed together with other institutions, are beyond the centre's control because these external funding agencies already have their own evaluation systems. We are also analysing those aspects where the Spanish employment legislation may overlap or conflict with the actions that are being discussed in terms of recruitment.

The OTM-R principles that are already met by the centre will also be evaluated as a secondary priority (the emphasis being on working on the weaknesses addressed on this Action Plan), in order to prepare for future actions beyond the timeline established in this Action Plan.

#### **4. IMPLEMENTATION (MAX. 1 PAGE)**

*Please provide an overview of the expected implementation process. You can use the following questions as a guideline in your description:*

The implementation of the CRM's Revised Action Plan is currently underway. The first objective that has been set is to make up for the delays suffered in the last few months, with the first lines of action already devised by the HRS4R Steering Committee, which is the organism in charge of shepherding the process. This committee is formed by representatives from all the collectives within the Centre de Recerca Matemàtica, in order to ensure that the implementation of the actions is carried out with

as much plurality and transparency as possible. The HRS4R Steering Committee meets quarterly, but its members keep constant communication and can also meet upon request. Its role is to ensure that the actions proposed are correctly implemented in the timeframe established and incorporate any collateral actions to address any deviation detected from the original plan.

The actions described in this revised version of the Action Plan have been based on the Internal Assessment conducted after the first Action Plan ran its course, and sprung from the resulting Gap Analysis. This plan has also been created on the basis of the feedback gathered from the CRM's research community and administration staff, and will be worked over in tune with their concerns and periodic input. The *Human Resources Strategy for Researchers* and the principles described on the *European Charter for Researchers* and the *Code of Conduct for the Recruitment of Researchers* (the so called Charter & Code) are considered key elements of the CRM's overall strategic plan, which is evaluated periodically by the *Centres de Recerca de Catalunya* institution, with the participation of the relevant stakeholders. Each action has been entrusted to the pertinent responsible unit, according to the resolution reached by the Steering Committee and the CRM's stakeholders. Progress will be constantly evaluated by the Steering Committee, and any delay identified will be rectified and rescheduled within the timeframe of the revised Action Plan, in agreement with the relevant responsible unit.

The CRM's research community needs to be widely involved as well. This will be done by means of periodical meetings and through the CRM's Yearly Assembly, taking advantage of the fact that the CRM is a small centre and face to face communication is feasible. The CRM's Revised Action Plan and its implementation will be presented at the Assembly and disseminated using internal memos, as well as the regular updates of the centre's webpage. The CRM's Governing Board will be informed by the Director and the Manager during their meetings, and all the related documents produced as a result of the HRS4R implementation plan will be presented for their approval. It is important to keep working on the awareness of the cultural transformation that this process implies, without losing sight from the need of consensus and agreement by the research community at the CRM when implementing the action described in this plan. We need to ensure that all the actors involved are committed to the continuous improvement that the HRS4R actions imply and encourage collaboration.

The Centre de Recerca Matemàtica is an institution with a focus on bringing in international talent, both to join its permanent research staff and also conduct short research stays at the centre, encouraging an exchange environment. In that regard, the principles addressed by the Charter & Code align with the overall strategy of the CRM.