

**Table 2 – Human Resource Strategy for the University of Palermo**

<u>C&amp;C</u>	<u>Actions</u>	<u>Who</u>	<u>When</u>
<b>ETHICAL AND PROFESSIONAL ASPECTS</b>			
<p>Researchers must be made aware of their role, of their responsibilities and of the operational constraints under which they work. There is the need for an ethical code which regulates and defines responsibilities in research (financial and social) also in order to avoid plagiarism and the infringement of IPR<sup>1</sup>.</p>	<p><b>Dissemination to all researchers</b> of the ethical code elaborated by the Academic Senate regarding the themes of plagiarism, violation/request of patents and the protection guaranteed to industrial secrets.</p>	<p>Communication Manager  C&amp;C Group</p>	<p><b>Short term</b></p>
<p>Information regarding the aims of research activities must be made widely available throughout the research institution. Researchers must be aware of the people to whom they must report their research activities (tutors, lead investigators or fund providers)</p>	<p><b>Dissemination to all researchers</b> of information regarding available funds for research activities and aims of the research carried out within each department.</p>	<p>Communication Manager  C&amp;C Group</p>	<p><b>Short term</b></p>
<p>Researchers must know the research institution's norms regards patents, the publication of research outputs, the development of new products....</p>	<p><b>Dissemination to all researchers of the ethical code elaborated by the University's Senate</b> regards the themes of plagiarism, the violation/request of patents and the protection guaranteed to industrial secrets.</p>	<p>Communication Manager  C&amp;C Group</p>	<p><b>Short term</b></p>
<p>Researchers must render public data regarding the ways in which research funds are used. This data may be analyzed by internal/external organizations.</p>			
<p>Wide spread internal and external dissemination of research results also to an audience which is not specialized on the research institution's activities.</p>	<p>Completion of the English version of the University's web site. Creation of a specific technical-administrative office responsible for the management of the <b>University's researchers' visibility</b>. The personnel belonging to this office should carry out the following specific activities: * regular up-date of a section of the University's web page which illustrates the most relevant research activities carried out in the University (University labs; research projects etc.); * maintain and regularly up-date the researcher's personal Italian and English web pages</p>	<p>Communication Manager  University Governance Bodies</p>	<p><b>Short/Medium term</b></p>
<p>The research institution's fund providers or governance bodies must identify mechanisms according to which <b>research outputs may be periodically evaluated</b> though a transparent process carried out by an <b>independent organism</b> (which should preferably be international for the evaluation of senior researcher activities)</p>	<p>The evaluation of research activities and outputs should always be carried out by independent committees</p>	<p>Ministry of University and Scientific Research</p>	

	<b>RECRUITMENT (Dimension 1)</b>		
<p>Research Institutions or the bodies funding research should guarantee that the pre-requisites to access the scientific research career are clearly defined.</p> <p>They should facilitate both the access to the scientific research career to disadvantaged groups and the return of faculty who is currently abroad.</p>	<p>Encourage the adoption of “open” selection procedures which must be widely advertised in English so as to permit the access to the research career (doctoral program) also on behalf of foreign students.</p> <p>Establish entrance examinations for doctoral programs in English and clearly pre-define the rules of the selection process in the call for applications.</p> <p>Publish the call for applications to the selection processes for doctoral programs on the Euraxess web platform.</p>	Governance bodies of the University	Medium term
<p>Recruitment of researchers should be carried out following procedures which are open, efficient, transparent, useful and internationally comparable. Such procedures must allow selecting the profiles required. An adequate amount of time must be guaranteed between the publicity of the public selection for researcher positions and the deadline to submit applications.</p>			
<p>Selection committees must be varied and guarantee equilibrium amongst genders; where possible they should include <b>people from different sectors (public/private)</b>. Each selection process may choose the evaluation method(s) to be adopted (interview, oral examination, external evaluations on behalf of external sector experts, etc.)</p>	<p>Where allowed by the current law (MURST regulations for PhD courses(1999) art.5 '<b>Access' and Chancellor Decree n. 4283/2009</b> – Regulations for the PhD) enrich the selection committees with members that come from other Universities and/or from other public/private research institutions (e.g. the CNR – the Italian National Research Council) and/or from firms.</p>	University Governance bodies	<b>Short term</b>
<p>Candidates should be made aware of their career prospects and their strengths and weaknesses should be communicated to them before the selection process begins</p>		Ministry of University and Scientific Research	
<p>The selection process should consider the entire background of all candidates, and take into particular consideration their potential, creativity and level of independence.</p> <p><b>Candidates' merit must be evaluated both on a quantitative and qualitative basis:</b> avoiding to limit the analysis only to the number of publications and bibliometric indices, but also teaching skills, capacity to work in groups, and ability to transfer knowledge.</p> <p>In the case of candidates who come from industrial sectors, their contribution to patents or innovations must be evaluated.</p>		Ministry of University and Scientific Research	

Interruptions or variations in career paths must not be penalizing, rather they should be considered as potentially enriching experiences for the professional development of the candidate	Elaboration of norms regarding the incompatibility with external roles and collaborations	Ministry of University and Scientific Research	
All experiences connected to the candidates' interdisciplinary, international or inter-sector mobility should be considered as a contribution to the professional development of the researcher.	Change the rules for the selection of researchers	Ministry of University and Scientific Research	
Post-doc researchers should be recruited only on a temporary basis, with the specific aim to foster further opportunities of professional development within a long term research career	Encourage the elaboration of stabilization policies  Conduct careful planning of the human resources necessary and sustainable in time	Ministry of University and Scientific Research  University Governance Bodies	<b>Short Term</b>
<b>WORK CONDITIONS AND SOCIAL SECURITY (2<sup>nd</sup> sphere e 3<sup>rd</sup> Sphere)</b>			
All researchers must be treated as professionals as of their entrance to the doctoral program	Involvement of doctoral and post-doc students in the University's' activities.	C&C Group	
The <b>research setting must be stimulating and formative</b> . Safety must be guaranteed on work premises and in research settings.	Where necessary, modify laboratories, lecture halls and research areas in order to abide current norms and rules regarding work conditions and safety.	Ministry of University and Scientific Research University Governance bodies Department Heads Laboratory Responsible	Long term
Work conditions for researchers, including the physically challenged, must be <b>sufficiently flexible to sustain positive outcomes of research endeavors</b> . Such conditions should allow rendering compatible work and family, children and career. Amongst the specific aspects to be taken into consideration there are, for example: flexible work hours, possibility to work part-time, distance working, sabbaticals...	Invest in the increase of structures aimed to support the physically disabled and female workers. Increase transport through bus services which connect the centre of town to the university structures, create nurseries, and extend parental leave rights also to post-docs.	University Governance Bodies Palermo Municipal Governance bodies	Long term
Funding agencies or research institutions should guarantee that research performance will not suffer the influence of unstable work conditions. <i>EU directive on fixed term work</i>	Stabilization of fixed term researchers	Ministry of University and research	
Funding agencies or research institutions should guarantee the attractiveness of researchers' wages and work conditions. Further, they should guarantee that work conditions and safety measures abide by law and University regulation requirements.	Increase research wages to the levels obtained by other European researchers.	Ministry of University and Scientific Research	

	<p>Connect the entity of doctoral and post-doc grants to the quality and quantity of scientific research outputs obtained by each researcher, as of the second year of the doctoral program.</p> <p>Following the example of the processes underlying the distribution of funds to enhance teaching quality adopted in Agrigento, pose an enquiry to the University consortiums regards the possibility to establish a distribution of funds based on merit on the basis of teaching performance (number of graduates, degree of placement, etc.)</p> <p>Establish an economic reward system for single researchers or groups of researchers whose scientific research outputs are of particular relevance at the national and international level.</p>	University Governance Bodies	Medium/Long term
Funding agencies or research institutions should guarantee equilibrium between genders at all levels and in all governance and management bodies.	Guarantee adequate female gender representation in the University's governance bodies	University governance bodies	Long term
Funding agencies or research institutions should engage in the elaboration of career paths for all the professional research profiles (HRS) present in the organization through the use of mentoring and tutoring.	Motivate and monitor research re-qualification and up-date at all stages of researchers' career.	University governance bodies	Medium term
Funding agencies or research institutions should consider all experiences connected to the candidates' interdisciplinary, international or inter-sector mobility as a contribution to the professional development of the researcher. Thus these types of mobility should be encouraged and be taken into specific consideration within the career progression evaluation procedures.	Open graduate degrees and doctoral programs to an international dimension (see table 3) –professors should be allowed to teach in English, Italian or French as they please, at least in those degrees in which one or more foreign language must be studied.	University governance bodies  Ministry of University and Scientific Research	<b>Short/Medium term</b>
Funding agencies or research institutions should guarantee researchers access to work opportunities at all stages of their career.	<p>Encourage and reward virtuous relationships with enterprises.</p> <p>On the basis of the experience matured by some graduate degrees included in the "Campus-like" projects, establish University Steering Committees – which should include representatives of the main public institutions (at the regional, provincial and municipal level), of the association of industrialists, of the main professional bodies, as well as headmasters of senior schools. These committees' function is to define suggestions regarding the way to modify the courses offered in each degree and the research activities pursued in order to create a stronger connection between the necessities of</p>	University governance bodies	Long term

	the labor market and higher level education.		
Funding agencies or research institutions should motivate researchers at all stages of their career in their endeavors to produce innovations and obtain patents through the guarantee of an adequate legal protection of IPRs.	Enhance the capacity of the patent office in order to increase the support offered to researchers for the protection of the IPRs they contribute to create.	University governance bodies	Long term
<b>Co-authorship should be considered positively.</b> Specific policies and strategies should be elaborated to diffuse a working environment in which being acknowledged through scientific citations (or other such signals) conveys benefits to the researcher.			
Where norms permit, procedures aimed to assist and resolve conflicts in the work place (especially for those who are at the initial stages of their careers) should be elaborated.	Recruit one administrative employee per department whose role is to offer counseling regards social security norms and to resolve work related litigations, with particular attention to the necessity of the young researchers.	University governance bodies	Long term
Teaching is an essential means to structure and disseminate knowledge and, therefore, must be considered an important aspect of a researchers' career. However, teaching duties must not be excessive or compromise research performance.	Offer teaching technique courses for the professors and researchers of the University.  Offer third level education courses – i.e. structured doctoral programs and courses (see Table 3)	University governance bodies	Medium/Long term
Researchers must have a sufficient number of representatives in all governance and management bodies of the University.	Increase the participation of doctoral and post-doc students to the governance bodies of the university.	University governance bodies	Medium term
<b>TRAINING (4th sphere)</b>			
During their education, researchers should have a structured relationship with their supervisors in order to gain full advantage from these academic ties.	Offer third level education courses – i.e. structured doctoral programs and courses (see Table 3).	University governance bodies	Medium term
Senior researchers should be aware of the multifaceted role they play and create the conditions for an effective knowledge transfer to the younger researchers.			
Researchers at all levels should <b>enhance their level of expertise and up-date their knowledge on a continual basis.</b>  Research institutions should strongly support all activities fostering research up-date.	Offer structured seminar programs for post-doc researchers and PhD students.  Encourage the development and increase the fruition of services of the University's Language Centre as well as of the other pooled resources and structures in order to up-grade the common	University governance bodies	Medium term

	knowledge base and obtain technical/linguistic support when necessary.		
Funding agencies or research institutions should control that supervisors have the sufficient time and capacity to offer effective guidance to young researchers who work with them.	Offer courses regarding the management of research activities.	University governance bodies	Long term