University of Palermo

# Human Resources Strategy for Researchers Incorporating the Charter \& Code 

Final Report - Internal analysis and actions for the University of Palermo
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## 1. Internal analysis

### 1.1. Introduction

In July 2005, the University of Palermo together with the other Italian universities is in charge with the implementation of the principles of the European Recommendation 2005/251. The latter Recommendation rules, in a European perspective, the relations among researchers, funders and research institutions in a view of responsibility and transparency. The cited Recommendation finds an efficient synthesis in the principles of the 'European Charter for Researchers The Code of Conduct for the Recruitment of Researchers'. In 2008, the University of Palermo has joined a network of Italian universities that are promoters of the Charter and Code's principles. Subsequently, in 2009, the university of Palermo has joined the pilot project of the European Commission 'Human Resources Strategy Forum', which should lead to the acknowledgement of those institutions that will devise, approve and publish a set of specific actions aiming at the implementation of the European Charter and Code. Many prestigious research and higher education institutions (very diverse one from the other in terms of size, structure and institutional aims) have joined this project.

### 1.2. Working methodology

The path leading to the identification of measures for the implementation of the principles of the European Charter and Code at the University of Palermo has started with an internal analysis. In this way, it has been possible to identify the main weakness points compared to the statements of the European Charter and Code. Such analysis was carried out by giving a survey, in 29 questions divided into 4 dimensions, to all the education, research and technical staff involved into research issues. Each participant was required to express its own 'agreement' level about each of the statements, as well as a judgment about the priority of the same statement.
The University of Palermo is a multidisciplinary public institution having as institutional aims high education and research. It also includes a large general hospital.
The staff constituting the structure is composed of:

- 1978 among professors and researchers with a permanent position;
- 507 limited time researchers;
- 1298 PhD students;
- over 2000 people in the technical and administrative staff.

The structure has an extremely varied composition and not all the staff, as it is evident, is concerned about research issues. According to the European Recommendation 2005/251, the University of Palermo has decided to carry out a survey, made available by the University of Camerino, in order to conduct an internal analysis on the major gaps between the current Human resource policy and the Human Resource strategy proposed by the European Charter and Code. The staff interviewed was composed of teaching and research units both with a permanent position and with a temporary position as well as administrative units. Moreover, in order to deliver information about the European Charter and Code the University of Palermo has promoted a conference on September 30th 2009 inviting the Chancellor of the University of Camerino, Prof. Fulvio Esposito, and some political local administrators directly involved in the promotion of the local industrial research activity.

### 1.3. Analysis of the results

As a whole (see Table 1) the participation to the survey has ranged between $20 \%$ and $31 \%$ for research, teaching and administrative units with a permanent position while for limited time researchers, it has fallen between $7 \%$ and $17 \%$. This limited participation to the activities promoted by the institution to improve the quality of the research can be justified by various elements:
a) the scarce involvement of limited time young researchers in the decision processes of the university (i.e.: limited participation in decision councils, limited possibility of research funds attribution; no possibility of research groups' coordination);
b) the limited circulation of information important to them (i.e.: institutional human resources strategies, pension rights and possible integrations of pension, calls for national and international positions, etc...);
c) the recognition of the limited value given to the scientific results for the stabilization of their working position as researchers.
It must be here underlined that most PhD students do not have the possibility to access the institutional intranet and thus proceed to the on-line compilation of the survey. They are most of the times not aware of the procedures required to attain the access to the intranet. These elements have emerged during the time in which the on-line survey was open and witness the limited involvement of PhD students in the life of the institution (see Table 1 - Percentage of response to the survey by PhD students).
In detail, Figure 1 shows the average values of agreement on the entire sample for each of the statements proposed in dimension 1 "Content and transparency of calls: selection and methods for the evaluation of candidates". From the results it seems that calls are well evidenced at national level (number of available positions, time terms, selection criteria, required skills, etc) but not at international level. The presence of external members into the selection committees is instead considered low. Such presence, due to the national current regulatory frame is most of the times not possible.
Figure 2 shows the results relevant to the statements contained into Dimension 2 "Stability and permanence of employment, social security". The results show a high value of agreement about the availability of pension rights and secure working conditions, while lower values of agreement can be registered in terms of information circulation with regard to integrative pensions, and support policies.
Figure 3 summarizes the results concerning the issues posed in dimension 3 "Professional recognition; non-discrimination factors; research environment". From the results comes up the attention of our institution towards discrimination (sex, race, religion, etc.) as well as the guarantee of participation of researchers to decision assemblies. On the other hand, some important critical aspects come up in the activities of researchers, such as: 1) the loss of measures to combine job and family; 2) an excessive teaching workload; 3) the limited evaluation of the professional skills; 4) an insufficient autonomy and creativity; 5) a not stimulating working environment (mostly departments).
Figure 4 shows the data concerning the statements posed in dimension 4 "Professional development - training \& mobility - mentoring \& supervision - teaching". The evaluation given by the researchers of their mentors is good, while a bad judgment is given towards institutional training activities for research and teaching, and institutional support to mobility.
The graph in Figure 5 shows the general average of 'agreement' compared to the individual average values in the 4 dimensions. It can be observed that the aspects mainly unattended concern selection mechanisms (dimension 1) and the attention towards training for research and teaching (dimension 4). As it was said before, else than the 'agreement' on each statement, each person was asked to express a judgment about the priority of the statement within each dimension.
The results are summarized in Figure 6, in which, compared to each statement, the number of people that have expressed a judgment of priority is indicated.

As it can be observed, the statements concerning dimensions 1 and 4 are those considered most important, as well the statement about the economical treatment of researchers: "2.01: Appropriate and attractive conditions and incentives, in terms of salary, are guaranteed to researchers - at all stages of their career and regardless of the type of contract (permanent or fixed-term)".
The same thing can be said for the transparency of the mechanisms that allow career progression for researchers as well as training for teaching and research:
4.03: Proper plans for increasing researchers' skills and competence, needed for their career progression, are regularly designed by the R.I..
4.01: Measures and internal regulations are drawn by which the University guarantees researchers adequate training for teaching activities.
4.02: Possibility for researchers to experience geographical, intersectional, inter-and transdisciplinary, and also mobility between public and private sectors is guaranteed and actively promoted.
In the graph shown in Figure 7 the average agreement on each statement versus the number of judgments of priority expressed is reported. This element confirms the picture already described by Figures 5 and 6. The higher left quadrant shows the most important and unsatisfied statements.
In the upper left quadrant, else than the already cited statements (2.01, 4.01, 4.02. 4.03) also statement 1.05 saying: The IR makes sure that the overall potential of candidates as researchers, in particular their creativity and their degree of independence, are properly considered by the selection committees.
Therefore the interviewed sample has considered that the candidates are not selected properly considering their degree of independence nor their creativity.
A similar data can be attained (see Figure 8) if we consider the data in disaggregated form taking into account the technical and administrative staff (TA), the Limited Time research units (LT) and the Permanent Position teaching and research units (PP).

## 2. Actions for the University of Palermo - PART A

### 2.1. Introduction

The University of Palermo has recently promoted a lot of initiatives for the re-organization, the development and the integration of research activities putting into evidence the importance of innovation and of increasing the value of human resources. Through actions involving the cooperation of the university research centers, public and private entities, a policy for knowledge support and technological development has been promoted. The University of Palermo in this way co-operates for the development of an attractive European labor market (European Research Area), open and sustainable for researchers, in which the basic conditions allow to hire high quality researchers in a favorable environment in terms of performance and productivity.
The main objectives are in line with the ethical principles contained in the European Charter and Code. In this aim, the University of Palermo wants to strongly support the resources employed in research, allowing cultural exchanges with other countries, appraising mobility, and investing in education an in hiring young, independent and creative researchers. Also the scientific production that have impacts on productivity and that contribute to the improvement of quality of life, as indicated in the European Charter and Code, will be strongly supported: the Faculties and the departments will be appraised based on results, which will determine their possibility of structural and cultural growth.
The first actions of the University of Palermo have been devoted to the re-organization of the available human resources, to the improvement of the circulation of information across the institution and to the increase of the value of the excellences of the University.
The information flow is the guarantee of a more fair and efficient distribution of resources, while the re-organization of the human resources allows from one side to make more efficient the services of the University and, on another side, to motivate the employees increasing the sense of membership to the institution.
In the aim of usefully carrying on this important strategy at the University of Palermo, it is also required a new distribution of the available resources, in order to keep high the quality of the research environment, regarding departments as places in which the research groups are considered, encouraged and benefit from material and immaterial support. All these things are indeed necessary to attain high quality institutional objectives as well as to work in a relaxed environment. It is also important to extend the sense of membership to the technical and administrative staff as well as the limited time researchers, making them conscious about the institutional aims of the University they are employed in.
With reference to limited time researchers, it can be said that, in a close future for reasons connected to the changing National legislation, the public universities, as well as in other countries, will have to leave research tasks mostly to young researchers with limited time contracts. This means that this category will have to undertake decision and address tasks in the main policies of the institution.
Table 2 shows the Human resources strategy for the entire University of Palermo, preceded by a brief description of the methodology followed to define it. The following part of this report (Part B) is devoted to a program specifically addressed to young researchers (Limited time researchers including PhD students). The program is reported in Table 3.

### 2.2. Working methodology

At the University of Palermo, between November 2009 and January 2010, an internal analysis has been carried out (see section 1). The survey has put into evidence the limited involvement of limited time researchers (including PhD students) into the life of the institution.
The internal analysis has also raised some other major issues for which have been set out some short-time measures ${ }^{1}$, to be implemented with no budgetary commitment. Other measures instead require budgetary commitment or are referred to issues that from the respondents have not been considered as priorities; for these reasons, these measures have been considered as 'medium term, ${ }^{2}$ or 'long-term' ${ }^{3}$ actions.
The work carried out has been completed by the analysis of the current National legislation as well as of the internal regulations and 'good practice' of our institution, comparing these norms with the principles of the European Charter and Code (Appendix A).
In Table 2, the Human Resources Strategy for the University of Palermo is reported. In the first column are summarized the principles of the European Charter and Code; in the second column, the measures hypothesized by the European Charter and Code group, in the third column, the division or people who are in charge of the specified action. Finally the fourth column cites the time by which such actions should be implemented. If the actions should be carried out by the national government or by other external administrative entities the dimension referring to the time of implementation is not exposed. If instead some of the principles are considered to be already implemented; the line is left totally empty.

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## 3. Actions for young researchers at the University of Palermo - PART B

### 3.1. Introduction

In what follows, in Table 3, some actions specifically devoted to young researchers needs are summarized. The specified actions should be carried out considering the different scientific fields and the different roles within the institution. It is indeed clear that researchers have different skills and needs compared to PhD students although both can be considered in general as 'Limited Time researchers'. In Table 3 - Human Resource Strategy for the University of Palermo - Young researchers special program, the first column shows the European Charter and Code principles, the second column the actions planned, the third column the measures hypothesized and finally the fourth column the time by which such measures should be implemented.

Table 1 - Participation to the survey

| Survey participation by cathegory |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Total | Total by <br> category | \% by category |
| category | 137 | 550 | $25 \%$ |
| Full professor* | 115 | 564 | $20 \%$ |
| Associate professor* | 245 | 864 | $28 \%$ |
| Researcher* | 88 | 507 | $17 \%$ |
| Limited time researcher | 97 | 1298 | $7 \%$ |
| PhD student |  |  |  |
|  | Technical and administrative staff | 28 | 90 |
| Overall total | $\mathbf{7 1 0}$ | 3873 | $31 \%$ |

*permanent position employment

Figure 1 - Content and transparency of the announcements (calls); selection and method for evaluating the candidates (dimension 1)
Average value of agreement on the sample (710) for each statement.


Figure 2 - Stability and permanence of employment, social security (dimension 2)
Average value of agreement on the sample (710) for each statement.


Figure 3-Professional recognition; non-discrimination; research environment (dimension 3)
Average value of agreement on the sample (710) for each statement.

## Sufficient, specific measures are in place to encourage both women and men to

 combine family and work, children and career (eg part-time, tele-working sabbatical leaves, nurseries, etc.).Teaching duties do not prevent researchers, especially at the beginning of their career, from performing their research activities

An effective evaluation of the professional activities (research, teaching...) of all researchers is regularly performed
Complaints/appeals of researchers and the conflicts between supervisors and early career researchers are fairly and efficiently handled

Researcher's participation in the R.I. bodies/boards, including those involved in decision-making and communication activities, is guaranteed
R.I. research departments provide a stimulating, pleasant to work-in environment, supporting research activities

Gender balance (equal opportunity) is actively searched for at all levels of staff, including those whose duties include supervision and management
Autonomy and creativity of all researchers, including the early stage \& early career researchers is actively promoted
Sufficient attention is paid to avoid discrimination on the basis of gender, age, ethnic origin - national or social - religion or belief, sexual orientation, language, disability, political opinions, and social/economic conditions

Professional recognition; non-discrimination; research environment


Figure 4 - Professional development - Plans for training and mobility - Mentoring and/or supervision - Teaching (Dimension 4)
Average value of agreement on the sample (710) for each statement.


Figure 5 - Average agreement on the sample for the four dimensions


Figure 6 - Ranking of priorities expressed for each statement (710)


Figure 7 - Priorities expressed per statement versus average agreement


Figure 8 - Priorities expressed per statement versus average agreement by category (Limited time, LT, permanent position, PP, Technical and Administrative staff)


Table 2 - Human Resource Strategy for the University of Palermo

| C\&C | Actions | Who | When |
| :---: | :---: | :---: | :---: |
| ETHICAL AND PROFESSIONAL ASPECTS |  |  |  |
| 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 ${ }^{1}$. | Dissemination to all researchers 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. | Communication Manager C\&C Group | Short term |
| 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) | Dissemination to all researchers of information regarding available funds for research activities and aims of the research carried out within each department. | Communication Manager C\&C Group | Short term |
| Researchers must know the research institution's norms regards patents, the publication of research outputs, the development of new products.... | Dissemination to all researchers of the ethical code elaborated by the University's Senate regards the themes of plagiarism, the violation/request of patents and the protection guaranteed to industrial secrets. | Communication Manager C\&C Group | Short term |
| Researchers must render public data regarding the ways in which research funds are used. <br> This data may be analyzed by internal/external organizations. |  |  |  |
| Wide spread internal and external dissemination of research results also to an audience which is not specialized on the research institution's activities. | Completion of the English version of the University's web site. Creation of a specific technical-administrative office responsible for the management of the University's researchers' visibility. The personnel belonging to this office should carry out the following specific activities: <br> * 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.); <br> * maintain and regularly up-date the researcher's personal Italian and English web pages | Communication Manager University Governance Bodies | Short/Medium term |
| The research institution's fund providers or governance bodies must identify mechanisms according to which research outputs may be periodically evaluated though a transparent process carried out by an independent organism (which should preferably be international for the evaluation of senior researcher activities) | The evaluation of research activities and outputs should always be carried out by independent committees | Ministry of University and Scientific Research |  |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | RECRUITMENT (Dimension 1) |  |  |
| Research Institutions or the bodies funding research should guarantee that the pre-requisites to access the scientific research career are clearly defined. <br> They should facilitate both the access to the scientific research career to disadvantaged groups and the return of faculty who is currently abroad. | 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. <br> Establish entrance examinations for doctoral programs in English and clearly pre-define the rules of the selection process in the call for applications. | Governance bodies of the University | Medium term |
| 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. | Publish the call for applications to the selection processes for doctoral programs on the Euraxess web platform. |  |  |
| Selection committees must be varied and guarantee equilibrium amongst genders; where possible they should include people from different sectors (public/private). Each selection process may choose the evaluation method(s) to be adopted (interview, oral examination, external evaluations on behalf of external sector experts, etc.) | Where allowed by the current law (MURST regulations for PhD courses(1999) art. 5 'Access' and Chancellor Decree n. 4283/2009 - 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. | University Governance bodies | Short term |
| Candidates should be made aware of their career prospects and their strengths and weaknesses should be communicated to them before the selection process begins |  | Ministry of University and Scientific Research |  |
| The selection process should consider the entire background of all candidates, and take into particular consideration their potential, creativity and level of independence. <br> Candidates' merit must be evaluated both on a quantitative and qualitative basis: 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. <br> In the case of candidates who come from industrial sectors, their contribution to patents or innovations must be evaluated. |  | 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 <br> Conduct careful planning of the human resources necessary and sustainable in time | Ministry of University and Scientific Research <br> University Governance Bodies | Short Term |
| WORK CONDITIONS AND SOCIAL SECURITY ( $2^{\text {nd }}$ sphere e $3^{\text {rdd }}$ Sphere) |  |  |  |
| 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 research setting must be stimulating and formative. 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 sufficiently flexible to sustain positive outcomes of research endeavors. <br> 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. <br> 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. $E \cup$ directive on fixed term work | Stabilization of fixed term researchers | Ministry of University and research |  |
| Funding agencies or research institutions should guarantee the attractivity 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 |  |


|  | 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. <br> 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.) <br> 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. | 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 governances 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 though 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 <br> Ministry of University and Scientific Research | Short/Medium term |
| Funding agencies or research institutions should guarantee researchers access to work opportunities at all stages of their career. | Encourage and reward virtuous relationships with enterprises. <br> 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 | 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 |
| Co-authorship should be considered positively. <br> 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. <br> However, teaching duties must not be excessive or compromise research performance. | Offer teaching technique courses for the professors and researchers of the University. <br> 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 |
|  | TRAINING (4th sphere) |  |  |
| 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 enhance their level of expertise and up-date their knowledge on a continual basis. <br> Research institutions should strongly support all activities fostering research up-date. | Offer structured seminar programs for post-doc researchers and PhD students. <br> 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 <br> necessary. |  |  |
| :--- | :--- | :--- | :--- |
| Funding agencies or research institutions should control <br> that supervisors have the sufficient time and capacity to <br> offer effective guidance to young researchers who work <br> with them. | Offer courses regarding the management of research activities. | University governance bodies | Long term |

Table 3 - Human Resource Strategy for the University of Palermo - Young Researchers Strategy Plan

| C\&C | Actions | Who | When |
| :---: | :---: | :---: | :---: |
| To involve young part-time researchers in the University's activities <br> 'Researchers must be conscious of their status, their responsibility and of the constraints imposed by the working environment. An ethical code is required to define research boundaries, in order to avoid plagiarism and the infringement of intellectual property rights (IPR)' | Establish meetings aimed at different researchers categories (Ph.D. students, post-doc research fellows) to stimulate internal debate about the peculiar needs of different research areas (e.g. Social sciences vs. natural sciences) and about the problems of different job positions. <br> Effective disclosure of European Charter of Research principles and C\&C survey results <br> Disclosure of data on doctoral students in Europe (e.g. Post-doc employment rate) and on post doc opportunities (with reference to institutions like the European University Association). <br> Dissemination among the researchers of the significance and importance of research evaluation tools, taking in account different research areas peculiarities <br> Dissemination of information about pension rights and complementary pension systems | University Communication Staff <br> C\&C Group | Short-term |
| Funding agencies and research institutions should reward geographic, inter-sector and interdisciplinary mobility for the development of scientific and professional career paths. <br> Mobility should also be supported and recognized in career evaluation systems. | Modify doctoral student selection criteria in order to allow interested private sponsors to participate in the process. <br> Link doctoral courses' research themes to industrial and commercial needs of the region <br> Establish a compulsory research period abroad in public or private research institutions during Ph.D. courses. <br> Consider research periods abroad in the researchers' selection process and for career path developments | University Governance Bodies <br> National Ministry for University and Scientific Research (MIUR) | Short-term |


|  | Cut costs for researchers visiting Palermo University. Draw up an agreement with ERSU to allow Ph. D. students to receive campus services, without additional fees: e.g. campus room and board, shop discounts computer use. They should also get discounts on university registration fees. <br> Create a dedicated website where researchers who have worked abroad can share their experience and help the ones who are going to spend a research period abroad. <br> Reform the University Mobility Department in order to satisfy the needs of both foreign and Italian students who are considering moving to the University of Palermo. | University Governance Bodies | Medium-term |
| :---: | :---: | :---: | :---: |
| Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies | Plan lectures (involving both doctoral students and post-doc research fellows) on interesting general topics about research (bibliometrics, intellectual property rights and plagiarism) <br> Some of the lectures should include several topics aimed (primarily) at Ph.D. students: bibliographic research and state-of-the-art description; how to write a scientific paper; how to write a monograph; conference presentation techniques; etc. <br> Other lectures should include several topics aimed (primarily) at post-doc research fellows: lecturing techniques; student examination techniques; how to write a research project; research funding opportunities in Sicily, Italy and Europe. | University Governance Bodies <br> University Communication Staff <br> C\&C Group | Medium-term |
|  | Plan doctoral courses according to "Processo di Bologna" principles by assigning 180 compulsory credits for three years courses. The credits should be verified by periodic examination and by a final dissertation. The rearrangement of the doctoral courses should also influence lecturers and professors institutional duties (e.g. by weighting teaching assignments with number of students). <br> Present doctoral students to both local and national private and public institutions in order to promote the competencies they have acquired during the course. This should support formal acknowledgement of doctoral degrees. <br> Involve post-doc research fellows by supporting them in research | University Governance Bodies <br> University Communication Staff <br> C\&C Group | Medium-term |


|  | funding acquisition with a dedicated University department. <br> Include in doctoral courses: <br> a) Final examination in English or French <br> b) An English or French professor should be included in the final examination committee <br> Once established, the Board of Ph.D. schools will decide Ph.D. student's evaluation criteria both during the course and at the final stage. <br> Ph.D. Schools external evaluation committee should also be instituted. <br> Doctoral courses final examination results should be primarily considered for post-doc job assignment at the research institution. |  |  |
| :---: | :---: | :---: | :---: |
| Research evaluation and reward | Post-doc research fellows and part-time assistant professor performance should be evaluated on a regular basis and that should affect their career development | University Governance Bodies | Short-term |

Appendix A: The European Charter for researchers in the new national regulatory frame

| Internal regulations and 'good practice' of the University of Palermo | National legislation | C\&C |
| :---: | :---: | :---: |
| ETHICAL AND PROFESSIONAL ASPECTS |  |  |
| 13.05.2008: <br> SA draw up a code of ethics to regulate the research activity (plagiarism, IPR ...) | Law proposal for the organization of the university system, in October 2009, art. 2 paragraph 5: <br> 'For the purposes envisaged by the law and also to identify conflicts of interest and develop appropriate measures to eliminate them, the universities have adopted within one hundred eighty days from the entry into force of this law 'a code of ethics.' | 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 ${ }^{1}$. |
| It takes place through procedures that are neither standardized nor regulated. |  | 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) |
| June 2009: <br> The new regulation on patents is available on the website of the University |  | Researchers must know the research institution's norms regards patents, the publication of research outputs, the development of new products.... |
| Verification of cash flow statements | Verification of cash flow statements | Researchers must render public data regarding the ways in which research funds are used. <br> This data may be analyzed by internal/external organizations. |
| Various initiatives: Night of research, Print advertisements, Univercittà, New definition of the University Website (still ongoing), Publications about the research activity carried out in the Institution,... | Art. 3 quater del DL 180/2008: Advertising of research in universities. Each year the chancellor shall submit to the Academic Senate and the Administration Board a report summarizing the results of research, training and technology transfer, and a report on the funding achieved by public and private sources. The report must also be sent to University and Research Ministry (2). | Wide spread internal and external dissemination of research results also to an audience which is not specialized on the research institution's activities. |
| Online register archive for research |  |  |
| April 2009: <br> The University of Palermo is at the $14^{\text {th }}$ place out of the 87 universities in Italy for on line dissemination of its own research results and activity. |  |  |

## ("Ranking web of world Universities", edited by

 CSIC, the major National research centre in Spain)February 2010:
The Academic Year opening ceremony becomes a conference on the University status
The evaluation of the research is carried out every year

For professors
-by special committees within the University on the basis of each individual's research evaluation For departments

- based on the positioning CIVR/ANVUR and the number of national projects PRIN


## For PhD students

- by the evaluation committee and the Academic Senate

Since 2007 the University of Palermo is part of the EUA European University Association, the Academic Senate approved to join the Institutional Evaluation Program (IEP) and has prepared a self-assessment report (RAV2008)

Merit assessments are assigned to Special Committees for holders of research grants for their renewal every two years.

L 421/1992 Art. 2 g ): ... check the results through appropriate evaluation groups composed of senior officials and experts, or through agreements with public or private entities with special qualifications in management control;

## LAW PROPOSAL governance

a) The evaluation group of the university will guest a larger number of external members to ensure an objective and impartial judgment.
b) Strengthen the measures announced in the Ministerial Decree 180 regarding the biennial assessment of the research for professors. In case of negative evaluation by the academic authority, the click of salary is lost and it is no more possible to participate in competitions as commissioners

## MIUR guidelines:

a) Structure and duration of doctoral studies should be related to the achievement of scientific objectives
b) The activation of PhD courses should be connected to an assessment similar to that performed by the CIVR / ANVUR

Law proposal in issues of organization. and qualification of the university system, October 2009
a) introducing a system of periodic evaluation by ANVUR, of the efficiency and achievements in teaching and research by universities and by their internal articulations;
b) empowering of the self-.assessment system for quality and efficiency of its own activities by each university, also using its own evaluation committees and the contributes deriving from the joint commissions

The research institution's fund providers or governance bodies must identify mechanisms according to which research outputs may be periodically evaluated though a transparent process carried out by an independent organism (which should preferably be international for the evaluation of senior researcher activities)

|  | \|'.. May have access to the doctorate, without limitations of age and citizenship, those who have a degree or equivalent qualification obtained abroad, previously recognized by academic authorities, also within the interuniversity agreements of cooperation and mobility ... 'In Article 5 the functions are delegated to the universities through the selection committees' ... composed of three members chosen from among university professors and researchers of the role, which can be added at most two experts, including foreign institutions selected under and public and private research; <br> L 421/1992 Art. 2 u ): ... to provide for the protected categories under Title I of the Law of 2 April 1968 No 482, the recruitment by State, businesses and public bodies, for calling number of students enrolled in the placement lists based on the rankings determined by the provincial offices of work and full employment; <br> DL 180/2008 art.1bis: Within its budgetary availabilities ... perform direct call of renowned people at the university. | to access the scientific research career are clearly defined. <br> They should facilitate both the access to the scientific research career to disadvantaged groups and the return of faculty who is currently abroad |
| :---: | :---: | :---: |
| 07.04.2009: <br> A committee is established to write a code of ethics for the University to ensure transparency and equal opportunities for all | Law proposal governance: <br> It is required in the universities to adopt a code of ethics that ensures transparency in recruitment to avoid incompatibilities and conflicts of interest. <br> Guidelines MIUR: <br> It's... urgent a broad analysis ... to ... align with best international practices and encourage the mobility <br> Law proposal in issues of organization. and qualification of the university system, October 2009 <br> (Art. 8 comma 3 lett.e)) <br> Law proposal organization and quality of the university system, academic staff and the right to study <br> (Art. 8 par. 3)) <br> e) creation, for each scientific-disciplinary sector and without additional burdens for public finance, of a single two-year national commission for the recruitment/progression procedures for professors (associate and full), by drawing four commissioners within a list of full professors made under subparagraph g) and by drawing a commissioner in a list, prepared by the ANVUR, of scholars and peer level experts working at universities in a OCSE | 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. <br> An adequate amount of time must be guaranteed between the publicity of the public selection for researcher positions and the deadline to submit applications. |

$\left.\begin{array}{|l|l|l|}\hline & \text { country' } \\ \text { (Art.9 part 2): } \\ \text { Universities cover the positions of associate and full professors and fixed-term } \\ \text { researchers....... in accordance with the principles enunciated by European } \\ \text { Charter for Researchers and specifically with the following criteria: } \\ \text { publication of calls on the University website and the sites of the Ministry and } \\ \text { the European Union ....... } \\ \text { (Art. 10 part 1) } \\ \text { Universities, within their available budget, may confer benefits for conducting } \\ \text { research. The calls also published electronically on the websites of the University, } \\ \text { the Ministry and the European Union; contain detailed information on specific } \\ \text { functions, rights and obligations regarding the position and the emoluments and } \\ \text { benefits accruing. } \\ \text { (Art.10 comma 7) } \\ \text { Ministry yearly allocates a share of ordinary funding to finance research grants ... } \\ \text {.. The selection of winners shall be entrusted to one or more committees whose } \\ \text { members are appointed by the Ministry based on a proposal of the ANVUR in } \\ \text { compliance with the requirements of Art 8, part 3, letter g), and they shall, for } \\ \text { the assessment of qualifications and scientific publications and research } \\ \text { programs, make use of the opinion of highly qualified Italian and foreign expert } \\ \text { auditors, without additional burdens of public finance..... }\end{array}\right\}$

|  | Universities cover the positions of associate and full professors and fixed-term researchers........ in accordance with the principles enunciated by European Charter for Researchers and specifically with the following criteria: <br> ... ... calls give detailed information on specific functions, rights and duties relating to the position and the emoluments and benefits accruing; <br> The selection processes for the academic staff are regulated by specific legislation and are subject to a national public competition. This strongly influences career prospects. | should be communicated to them before the selection process begins |
| :---: | :---: | :---: |
| Regulations for the establishment of Limited time research contracts art. 5 | DL 180/2008 Article 7: ... The comparative evaluation is done on the basis of qualifications, illustrated and discussed before in front of the committee and of publications of candidates .. also using some bibliometric indices (DM 89/2009 'Assessment of qualifications and scientific publications' Art. 3 part 4) The committee must assess the overall value of the candidate's scientific production, intensity and temporal continuity, except periods of involuntary removal from research activity (DM 89/2009 art. 3 par. 3) | The selection process should consider the entire background of all candidates, and take into particular consideration their potential, creativity and level of independence. <br> Candidates' merit must be evaluated both on a quantitative and qualitative basis: 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. <br> In the case of candidates who come from industrial sectors, their contribution to patents or innovations must be evaluated. |
|  | DM 89/2009 art. 2 par. 1) Evaluation of qualifications: research activity ... in Italy or abroad ..,.. at public or private institutions | 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. |
|  | DM 89/2009 art. 2 par. 1) Evaluation of qualifications: research activity ... in Italy or abroad .., .. at public or private institutions <br> MIUR Guidelines: encourage mobility of those who study and make 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. |


|  |  | Employers and/or funders should provide for appropriate assessment and evaluation of the academic and professional qualifications, including non-formal qualifications, of all researchers, in particular within the context of international and professional mobility. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels. <br> The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained. As professional qualifications may be gained at an early stage of a long career, the pattern of lifelong professional development should also be recognized. |
| :---: | :---: | :---: |
|  | Law proposal for the organization and quality of the university system, academic staff and the right to study Art. 10 par 6: <br> The universities, in accordance with Art. 9, par. 3, and in accordance with appropriate quality standards identified by the University Regulations under the criteria established by decree of the Ministry, may make a direct call for a second three-year contract, see part 4; they by no later than the expiration of that contract, should be qualified to associate professor, see Art. 8. Those that are called in this case, at the end of the second contract, are framed in the role of associate professors. | 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. |
| WORK CONDITIONS AND SOCIAL SECURITY |  |  |
|  | PhD Students are not employees are students. Legislation to protect the public work is not 'applicable. | All researchers must be treated as professionals as of their entrance to the doctoral program. |


|  | Current legislation on safety in the workplace, D. Lgs. 81-08 | The research setting must be stimulating and formative. Safety must be guaranteed on work premises and in research settings. |
| :---: | :---: | :---: |
| Establishing of the nursery for university employees children (oct.2006) <br> There is a University Center that cares of students with disabilities. | $\begin{aligned} & \text { I. 104/1992 } \\ & \text { DPCM } 9 \text { april } 2001 \end{aligned}$ | Work conditions for researchers, including the physically challenged, must be sufficiently flexible to sustain positive outcomes of research endeavors. <br> 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... |
|  | Law proposal for the organization and quality of the university system, academic staff and the right to study <br> Art. 10 par 6: <br> The universities, in accordance with Art. 9, par. 3, and in accordance with appropriate quality standards identified by the University Regulations under the criteria established by decree of the Ministry, may make a direct call for a second three-year contract, see part 4; they by no later than the expiration of that contract, should be qualified to associate professor, see Art. 8. Those that are called in this case, at the end of the second contract, are framed in the role of associate professors. | Funding agencies or research institutions should guarantee that research performance will not suffer the influence of unstable work conditions. EU directive on fixed term work |
|  |  | Funding agencies or research institutions should guarantee attractive researchers' wages and work conditions. Further, they should guarantee that work conditions and safety measures abide by law and University regulation requirements. |
|  |  | Funding agencies or research institutions should guarantee equilibrium between genders at all levels and in all governance and management bodies. |
|  | MIUR Guidelines: <br> consider the overall layout of the academic career, with particular reference to the role at entry and the different characterizations that it may take | Funding agencies or research institutions should engage in the elaboration of career paths for all the professional research profiles (HRS) present in the organization though the use of mentoring and tutoring. |
|  | MIUR Guidelines: | Funding agencies or research institutions should |

17/03/09: Regulations governing Program LLP / Erasmus and recognition for study periods abroad (Visiting Students).

The University has a group that deals with EU and international policies and mobility (ERASMUS,)
-promote the internationalization of the teaching staff;
-encouraging the universities to hire researchers with PhD degree taken in other universities;
-stimulate the international character of doctoral programs and mobility between universities.

Law proposal organization and quality of the university system, academic staff and the right to study (Art. 5 part 4 lett. g) h) o)):
g) provision of procedures for mobility of professors and university researchers and introduction of incentive mechanisms designed to promote it; if a transfer occurs, permanent professors and researchers as well as limited time researchers in charge of research projects funded by entities different from the university to which they belong, retain the ownership of projects and funding;
h) availability of procedures for professional mobility of professors and researchers to carry out activities, after placement on leave, at public or private entities;
o) attribution of a share of the ordinary funding of universities related to evaluation mechanisms directed to the evaluation of recruitment policies, based on the scientific output of professors after their employment tenure, the percentage of limited time researchers that have not spent the whole PhD course or post-doctorate in the same university, the proportion of professors and researchers leading international scientific research projects and the degree of internationalization of the faculties.
consider all experiences connected to the candidates' interdisciplinary, international or intersector 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.

Funding agencies or research institutions should guarantee researchers access to work opportunities at all stages of their career. 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.

DL 180/2008 Art.7:... The comparative assessment is made on the basis of qualifications, explained and discussed before in front of the Committee, as well as the publications of the candidates .. also using bibliometric indices (DM 89/2009 'assessment of qualifications and scientific publications' Art. 3 comma 4)

The workers that are not under national contract (including university employees,

## Co-authorship should be considered positively.

 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.|  | teaching staff and Limited time researchers) for conflicts are addressed to the administrative court | and resolve conflicts in the work place (especially for those who are at the initial stages of their careers) should be elaborated. |
| :---: | :---: | :---: |
|  | L. 210/1998: Universities can, under appropriate regulations, commit doctoral researchers to a limited subsidiary or supplementary teaching activity that in any case should not undermine their research training. | Teaching is an essential means to structure and disseminate knowledge and, therefore, must be considered an important aspect of a researchers' career. <br> However, teaching duties must not be excessive or compromise research performance. |
| Researchers are represented in the Senate, the Board of Directors, are present in the Faculty Council, the graduation Studies Councils and the teaching Permanent Observatories, Department Councils; they are also represented in the Executive Department council (Statute of the University of Palermo). <br> Post doctoral grants holders are represented in the Department Council <br> PhD students are represented in the Department Council. | DPR 382 del 1980: The researcher is also required to ensure its commitment to collegial activities in universities, where required. | Researchers must have a sufficient number of representatives in all governance and management bodies of the University. |
|  | TRAINING |  |
|  | MIUR guidelines: <br> 'Rationalize and reorganize the research doctorate schools' | During their education, researchers should have a structured relationship with their supervisors in order to gain full advantage from these academic ties. |
|  |  | Senior researchers should be aware of the multifaceted role they play and create the conditions for an effective knowledge transfer to the younger researchers. |
|  | MIUR guidelines: <br> 'development of continuing training over the course of work-life, indispensable in an advanced and rapidly changing economy' | Researchers at all levels should enhance their level of expertise and up-date their knowledge on a continual basis. <br> Research institutions should strongly support all activities fostering research up-date. |
| New funding mechanisms of the university research (evaluations of individual's productivity based on |  | Funding agencies or research institutions should control that supervisors have sufficient time and |

## Reference legislation

- DPR 382 del 1980:
- Legge $421 / 1992$
- Legge 210/1998 (Berlinguer)
- D Lgs 165/2001
- Legge 230/2005
- DL 180, nov 2008 "Urgent measures for the studying rights, the valorization of the merit and the quality of the university and research system"
- DM 89/2009 28.7.2009
- MIUR Guidelines
- Law proposal in issues of organization. and qualification of the university system, October 2009
(1) Intellectual Property Right
(2) MIUR


[^0]:    ${ }^{1}$ within 12-18 months
    ${ }^{2}$ within 18-36 months
    ${ }^{3}$ within 36-48 months

