

THE HUMAN RESOURCES STRATEGY FOR RESEARCHERS (HRS4R)

Basque Center for Applied Mathematics Implementation of the European Charter for Researchers

&

the Code of Conduct for the Recruitment of Researchers















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1. FOREWORD

1.1. Founding justification

Aiming to strengthen the Basque Science and Technology System, BCAM was created in **September 2008** by the Basque Government through Ikerbasque, the Basque Foundation for Science. The University of the Basque Country UPV/EHU, Innobasque (Basque Innovation Agency) joined BCAM as founding members and the Biscay Regional Government joined later as institutional member.











BCAM is part of the BERC (Basque Excellence Research Centres) network. Located in the Basque Country, it benefits from a long industrial tradition, and is linked with the French Atlantic corridor, a region of excellence tradition in Applied Mathematics. This context facilitates the task of building an excellence research center.

Starting in **2008** with 3 Professors and 1 Research Line and, up to now, with 55 Researchers (Professors, Post-doc fellows and PhD Students), a high number of visiting fellows and internships, supported by a Staff team (7 members), integrating people from more than 21 different countries, the Center has accomplished a long and intense path, full of high quality scientific activities and hard work. BCAM is a young center where the average age of researchers is lower than 35.

In **2014**, BCAM has achieved its major collective goal in a competitive call: the accreditation as a **Severo Ochoa Research center** in which BCAM, Ikerbasque and UPV/EHU researchers linked to BCAM have participated. The aim of this accreditation is to strengthen BCAM research capabilities and international scientific leadership, providing funding during the period 2014-2017, what his implying that BCAM research staff is growing quickly, in fact, BCAM research staff has increased 30% in the last year.



1.2. Mission & Vision

Mission: BCAM is a world-class research center on Applied Mathematics created with the support of the Basque Government and the University of the Basque Country, which aims to strengthen the Basque science and technology system, by performing interdisciplinary research in the frontiers of mathematics, talented scientists' training and attraction, so the excellence of our results are recognized by the Society.

Vision: Focus on interdisciplinary research in the frontiers of mathematics, attraction and training of talented scientists, development of new numerical and simulation methods, interaction with industry, health and social institutions, and promotion of scientific and technological advances worldwide. BCAM aims to generate synergies among different stakeholders working on mathematical research so as to become the reference at a national and international level in Applied Mathematics.

1.3. Governance and Management Model

BCAM's governance and management models are based on the EFQM (European Foundation for Quality Management). This model is people-centered, since our team is the foundation for the success and excellence of an organization. In fact BCAM strategy is centered in the following axis:

- Team (People): People are the key success factor of our strategy. Our organization is a whole, where researchers, managers and support personnel work together on a team based and collaborative way. We look for polyvalent and complementary profiles, so each individual can develop a successful career.
- Innovation (Processes): The base of our activity is based on creativity and innovation. We yearn for excellence in everything we do, fostering the participation of the people.
- Coherence (Excellence): The organization of the center, the people that make it possible are aware of the aims established by our governing bodies, so our infrastructures, equipment and working habits are consistent with the objectives of excellence.

Considering that researchers are the main asset of a **knowledge-intensive center**, that we are a **multi-cultural center** with researchers from about 20 different nationalities, during its initial period, BCAM has been working on the definition of the most suitable policies to support researcher's work. To achieve this goal the Center has cooperated with external consultants in the development of organizational transformation. Based on competence management diagnosis, and



aligned with BCAM strategic objectives, specific methodologies and solutions to build common values have been developed.

The general governance and management model is structured as follows:

- **Operating Model:** core and non-core processes which are oriented to support the BCAM operations based on excellence criteria.
- Organizational & Governance Model: structure of functions and necessary roles to execute the BCAM activities and operations and mechanisms to facilitate and assure decision making.

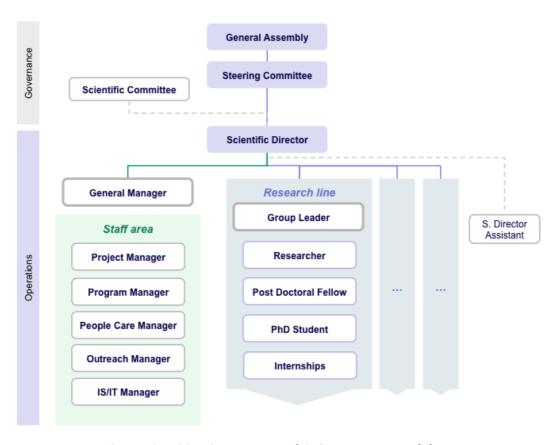


Figure 1: BCAM Organizational & Governance Model:

The main Legislation Framework (LF) related to recruitment and contracting of workers in the Science sector is defined by these laws:

- 1. Spanish Constitution: Articles 44.2, 20.1, 20.4 and 149.15
- 2. Spanish Law on Science, Technology and Innovation (14/2011)
- 3. Spanish Law on the Statute of Public Officials (7/2007)
- 4. Royal Legislative Decree 5/2000 of 4 August, approving the revised text of the Law on Offences and Sanctions in the Social Order in its Article 8.13



5. Law 31/95 of Occupational Risk Prevention

BCAM is formed by a multidisciplinary team of 62 people: 55 researchers from over 20 countries with experience in some of the most prestigious research centers on their area, and 7 members for the Administration staff.

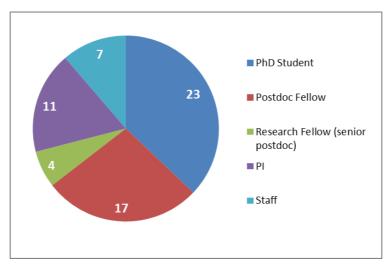


Figure 2: Personnel distribution by category

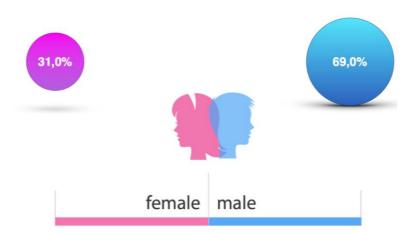


Figure 3: Personnel distribution by gender

As indicated, BCAM research staff has increased more than 30% in the last year, and as stated in BCAM strategic plan 2014 – 2017, BCAM will continue growing up to its consolidation phase in 2017.

BCAM research staff is mainly composed by researchers employed by BCAM, but there is part of the Principal Investigators that are lecturers of the University of the



Basque Country, and/or Ikerbasque Professors -the Basque Foundation for Science.

1.4. Strategies to attract and retain talent

A. TALENT ATTRACTION

Attracting talent is based on the evaluation of the merits of each submitted candidature, guaranteeing the same opportunities for all candidates, and trying to keep gender balance. These principles are also applicable to the selection of the Staff team.

The updated researchers at **BCAM** can be found at http://www.bcamath.org/people. In order to succeed and guarantee the quality level of the research, a thorough evaluation process is carried including a careful plan and the appointment of the evaluation team. Then the call is launched, published at the web page and disseminated through the BCAM network of contacts (over 10.000 email addresses) and some of the main job databases. The evaluation process continues including (depending on the candidate seniority) interviews, a seminar at BCAM to assess on candidates' suitability. Finally the selection or rejection of candidates and communication takes place.

Apart from BCAM international calls, BCAM offers 3 programs, as a first step for talent attraction; in order to establish or to continue the collaboration with other researchers around the world, the idea is a short or mid-term visit in the different levels (pre-doc / Junior researcher / Senior researcher):

- ✓ **Visiting Fellow program:** It aims to attract to BCAM leading-international scientists to cooperate with BCAM Research Lines. This program funds contracts for periods between one month and one year.
- ✓ **Internship program:** This program is aimed for young students in their final year of undergraduate studies or early PhD period and with a vocation for research, with the aim of identifying and attracting talented potential researchers to the Basque System of Science and Technology.
- ✓ **Visitors program:** Internationally leading scientists are invited to BCAM for short term visits to disseminate and convey their ideas and recent and ongoing research through seminars.



Our strategy for next period is focused on attracting **young researchers**, **with potential** to develop a promising career, and collaborating with Ikerbasque to attract Senior Reserarch Professors. In this respect, one of the actions for the next period is to develop a more **coordinated strategy with Ikerbasque**, so that the scientific goals and needs identified at BCAM can be successfully integrated within Ikerbasque Calls and programmes. Whereas the support of Ikerbasque to attract people has been very important for the Center, higher focus would allow BCAM to attract and consolidate those people and areas according to our scientific plan.

B. TALENT RETENTION & CONFLICT MANAGEMENT

In relation to **talent retention**, BCAM works on the improvement of working conditions, so as to do it, every two years we carry out the "BCAM Survey", including questions about processes, resources and working conditions in BCAM. The following pictures shows the results of the last BCAM survey, as it can be seen, the satisfaction level is above the average, but apart from the marks, we also gather additional comments and feedback from the employees, so this helps us analyse the real level of satisfaction and improvement areas.

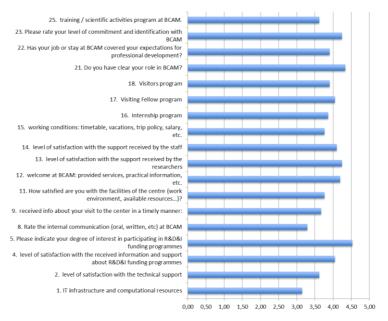


Figure 4: Results of the last BCAM survey

Based on this input, the management team reviews and defines the improvement measures to carry out in the next period, as an example, the following figure shows the actions defined based on the input from the last survey. These actions are shared with representatives of the research staff and BCAM governance bodies (SAC and Steering Board).



Based on our most recent "BCAM Survey" among researchers, we have started to put in place different activities such as budget information sharing, IT courses, improvement of IT resources, funding opportunities seminars... In this area, BCAM is also actively collaborating with Bizkaia Talent so as to ease the integration of new researchers not only from the research point of view, but also from a personal perspective.

These improvement actions defined are included in the "Well-being at BCAM Programme", whose aim is improving BCAM working conditions and making BCAM the "best place to make research".



Apart from the input gathered through the "BCAM Survey", in 2015 BCAM put into place an *Interpersonal Conflict Management Protocol*. The purpose of this protocol is to establish the action procedure to follow in the event that behaviours involving interpersonal conflict and/or harassing (moral, sexual or gender) in the workplace occur and to be able to set out the necessary requirements to prevent such conduct from occurring in the future, given that these are behaviours that violate dignity and that are harmful to the work environment and generate undesirable effects for the health, and for the confidence and self-esteem of people.

C. RESEARCHERS EXCHANGE

BCAM is very active on researcher's exchange; in fact, the Internship, Visitor and Visiting Fellow programme are key tools to promote these exchanges. Apart from that, through the agreements set up with high level international institutions, BCAM promotes different stays of its researchers abroad. A special emphasis is being done in international stays of the PhD students so as to get the international PhD degree. Regarding postdocs, BCAM has set up a plan so as to promote postdocs mobility, at present there are two postdocs in this Programme, one in Finland and another one in Norway.

At the same time, BCAM hosts co-supervised PhD students and visiting postdocs, at present BCAM researchers are co-supervising PhD students in Turkey and Brazil, and BCAM has hosted visiting postdocs from China, Poland and Turkey.

D. ESM - External Scientific Members

In 2010, BCAM launched an initiative for retaining talent as part of a stable international cooperation scheme: the External Scientific Member position. The goal of this initiative is to maintain and strengthen links with those researchers who have been actively collaborating with BCAM while staying at the Center, and/or who are expected to enhance the collaboration with the organization



where the ESM is working.

2. HR EXCELLENCE PROCESS

2.1. THE CONTEXT

As commented before, BCAM core values rely on people as its main asset. However, we are aware that BCAM is a young institution established in the Basque Country, surrounded by the high competitiveness of the international talent attraction market, where Spanish economy is a sign of uncertainty, and that the salaries and conditions we can offer are not higher than the average. In this framework, it is crucial to develop a HR excellence strategy that adds real value to the center, and makes BCAM attractive in the scientific system, that is a complex and very competitive environment

So, the continuous evolution of the HR strategy is key for the success of BCAM in order to adapt to the needs of the people, so BCAM decided to launch the HR Excellence in Research process (as the implementation of the European Charter for Researchers and Code of Conduct for the Recruitment) to enhance the efficiency, effectiveness and impact of the actions that BCAM should undertake to provide an attractive and supportive environment to researchers. In addition, BCAM will become part of a network of like-minded organisations from across Europe, providing opportunities for the exchange of experiences and the sharing of good practice with other organisations also implementing the HRS4R.

2.2. BCAM POLICIES

In relation to Human Resources Management, BCAM has set up different processes and policies in the framework of the BCAM Management Model. Our policy for recruiting scientists guarantees impartiality through the whole selection process, by prevailing competency and evidence-based qualifications. The principles of openness and fairness guide the evaluation of every individual's achievement, this leads to a personal and personalized evaluation and degree of development which may include training and mentoring. BCAM has defined its own management model based on EFQM, and guided by its definitions; we perform evaluations and revisions of the processes, in which all the staff is involved, to ensure the continuous improvement of the operations of the foundation.

The remuneration policy is set taking into account the constraints of the Basque and Spanish Science system (mainly the public University system), and is based in



personal situation, research path and performance. The BCAM Steering Board approved in 2015 the bonus assignment policy, which is applied to all BCAM employees. In relation to personal data protection, BCAM is compliant with the Spanish Data Protection Law.

In 2015, BCAM also set up the "Interpersonal Conflict Management Protocol", whose aim is to establish the action procedure to follow in the event that behaviours involving interpersonal conflict and/or harassing (moral, sexual or gender) in the workplace occur and to be able to set out the necessary requirements to prevent such conduct from occurring in the future, given that these are behaviours that violate dignity and that are harmful to the work environment and generate undesirable effects for the health, and for the confidence and self-esteem of people.

Regarding scientific production, an Open Access repository is being set, under a Creative Common License, and the IP Policy is defined and signed by all BCAM employees.

Regarding ethics, BCAM undersigns the European Charter and Code for Researchers.

Guidelines on vacations, trips, absences, predoctoral mobility... are published in the BCAM internal portal and known by all BCAM employees.

2.3. ABOUT THE PROCESS

The commitment with the professional ethics and the code of conduct for researchers comes from the Board of Trustees and the Direction (Scientific Director –SD- and General Manager –GM-) of the centre.

This has been the timeline of our implementation process so far:

Calendar of the process

| When | What | |
|------------|--|--|
| May – June | Training and Benchmarking | |
| 2015 | Staff training on Human Resources Excellence process, benchmarking | |
| | and best practices analysis | |
| September | Collect the data about BCAM Staff profiles and selection of sample for | |
| 2015 | surveying and profiles for working group | |
| November | ber Communication about the C&C implementation process reflecting the | |
| 2015 | importance of this matter, informing about the framework of the | |
| | strategy, and the next steps - surveying of a sample and requesting | |



| | collaboration and commitment | | |
|-----------|---|--|--|
| December | Surveying a sample of 20 people. The survey was sent to nearly the | | |
| 2015 | 40% of the staff of the centre, taking into account all the different | | |
| | categories, years of experience and committing with the gender balance. | | |
| | 17 responses obtained (85% of the sample) | | |
| January - | Analysis and interpretation of the answers | | |
| February | By the GM and SD, | | |
| 2016 | Actions evaluated by a team composed by 3 Principal | | |
| | Investigators, 2 Postdoctoral researchers, 2 PhD students, 1 | | |
| | administrative staff member and the GM. | | |
| November | Elaboration of the Draft of Action Plan approved internally, and subject | | |
| 2015 - | to the validated by the Board of Trustees. | | |
| February | | | |
| 2016 | | | |

Training and Benchmarking

BCAM Management team internally analysed the Human Resources Strategy for Researchers, taking into account the European Charter and Code of Conduct for the Recruitment of Researchers (signed in 2008 when the center was created). BCAM also worked on the benchmarking, and contacted with other regional and national research centers that previously implemented the process, so as to gather their input in relation to best practices.

Define sample and Survey

A previous step to carry out the survey was to collect the data about BCAM Staff profiles and selection of sample for surveying and profiles for working group. The characteristics of the sample are the following:

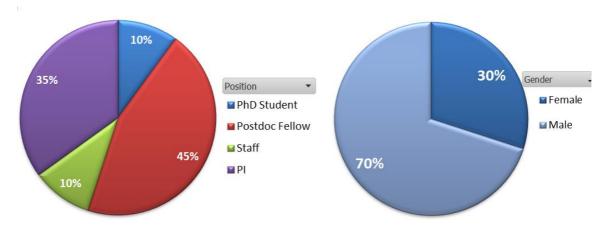


Figure 5: Distribution by category and gender of the sample



As every survey made in BCAM, a key factor so as to increase the participation rate and the frankness of the answers is that the survey is anonymous, so we used the Google platform to gather the feedback of the selected sample according to the 40 principles in two different ideas:

- How much agree you are with the principle from 0 (Nothing) to 10 (Completely)
- How far is BCAM to achieve this 0 (Very Far) to 10 (We got it)

Gap analysis and improvement actions definition

Based on the template provided by Euraxess BCAM asked for the 4 group of principles:

- 1. Ethical and professional aspects: principles 1-11
- 2. Recruitment: principles 12-21
- 3. Working conditions and social security: principles 22-35
- 4. Training: principles 36-40

The answers gathered have been processed so the Direction (Scientific Director and General Manager) could have a first glimpse at the results, and afterwards they have been analysed so as to define the action plan.

We have calculated the average score of each of the groups of principles (how much the researchers agree with the principles) and the position of BCAM in order to analyse the gap between both. This calculation helps the team to prioritize each group of principles and to prioritize the areas to deploy an Action Plan. The average marks obtained per group of principles and in total are:

| Topic | Do you agree with the principle? | How far is BCAM to achieve the implementation of this principle? |
|--------------------|--|--|
| Ethics | 9,3 | 8,6 |
| Recruitment | 9,2 | 8,3 |
| Working conditions | 9,4 | 7,3 |
| Training | 9,4 | 8,4 |
| Total | 9,3 | 8,0 |



Taking into account those figures, BCAM concludes that the centre's current HR strategy is quite well positioned (although BCAM will proceed to deploy an Action Plan to improve the principles that got the lowest scores). The main conclusions obtained are:

- The different groups of principles have been very highly scored; the average of importance of the topics has been 93%.
- The "Ethical and professional aspects" were ranked with the highest score, followed by "Training", "Recruitment" and "Working conditions".
- The average BCAM score was also very high, 80%. In fact, the 40 principles are common sense recommendations and they are, in one way or another, implemented by all the researchers participating in the sample.
- The deviation between the importance of the principle to the sample and how close they consider BCAM is to reach this principle is in average 13%, so this means the gap between the real situation and the target one could be tightened by taking actions, mainly in relation to the principles for which there is a higher gap, which are:
 - **Ethical and professional aspects**, mainly in relation to "Public Engagement".
 - Working conditions and social security. This is the group in which the deviation is higher (21%), mainly in relation to principles such as "Stability and permanence of employment" or "teaching". In this sense, we must point out that the implicit nature of BCAM and the Basque Science Network makes the centers as BCAM a step in the researcher's careers to foster their career. The Direction of the centre will use the results of the survey to collaborate with the founding partners (The University of the Basque Country and Ikerbasque) to collaborate, disseminate, validate and improvement of the practices related to the 40 principles. Other principles such as "Career development", "Access to career advice" and "Complains/appeals" will be the core of the Excellence Management Action Plan.
 - o **Training**, mainly related to "Supervision".



3. GAP ANALYSIS

1. Ethical and professional aspects

1. Research freedom

Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|--|------------------|----------|
| • Legislation Framework (LF) | - | - |
| • Endorsement of C&C (Commitment of Founding Partners) | | |

2. Ethical principles

Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectorial or institutional Codes of Ethics.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|------------------|----------|
| • LF | - | - |
| • Endorsement of C&C | | |

3. Professional responsibility

Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere. They



must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly quoted. Researchers should ensure, if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out.

| Existing Institutional | Actions required | When/Who |
|--|------------------|----------|
| rules and/or practices | | |
| • LF | - | - |
| Endorsement of C&C | | |
| EFQM model based | | |
| People Management | | |
| process | | |

4. Professional attitude

Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.

| Existing Institutional rules and/or practices | Actions required | When/Who | |
|---|------------------|----------|--|
| • (All) Communication of Strategic Plan, Strategic Objectives | - | - | |
| • (PIs) Participation in the follow-up meetings (once every semester) | | | |
| • (PIs) Annual assessment and SAC meeting | | | |



5. Contractual and legal obligations

Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc) as set out in the terms and conditions of the contract or equivalent document.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|------------------|----------|
| • LF | - | - |
| Operation processes established in BCAM | | |

6. Accountability

Researchers need to be aware that they are accountable towards their employers, funders or other related public or private bodies as well as, on more ethical grounds, towards society as a whole. In particular, researchers funded by public funds are also accountable for the efficient use of taxpayers' money. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorised audits of their research, whether undertaken by their employers/funders or by ethics committees.

Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities.

| Ex | xisting Institutional rules | Actions required | When/Who |
|------------------|--|------------------|----------|
| and/or practices | | | |
| • | (PIs) Annual assessment from BCAM and Ikerbasque | - | - |
| • | (PIs) Project management summary (quarterly) | | |
| • | Annual Audit | | |
| • | Procurement Policy | | |



7. Good practice in research

Researchers should at all times adopt safe working practices, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current national legal requirements regarding data protection and confidentiality protection requirements, and undertake the necessary steps to fulfil them at all times.

| | risting Institutional rules and/or ractices | Actions required | When/Who |
|---|--|------------------|----------|
| • | LF | - | - |
| • | Endorsement of C&C | | |
| • | Legally established Occupational Risk Prevention monitoring. <i>Interpersonal</i> Conflict Management Protocol | | |
| • | Data protection procedures (compliance with the Spanish Personal Data Protection Act) | | |

8. Dissemination, exploitation of results

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

| | isting Institutional rules d/or practices | Actions required | When/Who |
|---|--|------------------|----------|
| • | LF | - | - |
| • | Contractual framework of Ikerbasque and BCAM | | |
| • | BCAM Dissemination Process within the Management Model | | |



9. Public engagement

Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|-----------------------------|-------------|
| BCAM Dissemination Process Collaboration with Science, Technology and Innovation related forums and institutions in our | - Outreach Plan improvement | - Fall 2016 |
| region, and the media. | | |

10. Non discrimination

Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

| | isting Institutional les and/or practices | Actions required | When/Who |
|---|--|------------------|----------|
| • | LF & Endorsement of C&C | - | - |
| • | BCAM People Process | | |



11. Evaluation/ appraisal systems

Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee.

| Existing Institutional | Actions required | When/Who |
|--|------------------|----------|
| rules and/or practices | | |
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque Evaluation Policies | | |
| BCAM People Process | | |
| BCAM International Scientific Advisory Committee reviews and validations | | |



2. Recruitment

12. Recruitment

Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning at their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career. Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

| Ex | isting Institutional | Actions required | When/Who |
|----|---|------------------|----------|
| ru | les and/or practices | | |
| • | LF & Endorsement of C&C | - | - |
| • | BCAM and Ikerbasque recruitment policies | | |
| • | BCAM recruitment and evaluation portal | | |
| • | BCAM International Scientific Advisory Committee reviews and validations | | |

13. Recruitment (Code)

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and competencies required, and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

| Existing Institutional | Actions required | When/Who |
|-------------------------------|------------------|----------|
| rules and/or practices | | |



| • LF & Enc | dorsement of |
|------------|--|
| | nd Ikerbasque nent policies |
| | ecruitment and on portal |
| Scientifi | nternational c Advisory tee reviews dations |

14. Selection (Code)

Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained should be realistic.

| 50 | selection panels should be adequately trained should be realistic. | | | |
|----|---|------------------|----------|--|
| Ex | isting Institutional | Actions required | When/Who | |
| ru | les and/or practices | | | |
| • | LF & Endorsement of C&C | - | - | |
| • | BCAM and Ikerbasque recruitment panels and policies | | | |
| • | BCAM recruitment and evaluation portal | | | |
| • | BCAM International Scientific Advisory Committee reviews and validations | | | |



15. Transparency (Code)

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also be informed after the selection process about the strengths and weaknesses of their applications.

| Ex | isting Institutional | Actions required | When/Who |
|----|---|------------------|----------|
| ru | les and/or practices | _ | |
| • | LF & Endorsement of C&C | - | - |
| • | BCAM and Ikerbasque recruitment policies | | |
| • | BCAM recruitment and evaluation portal | | |
| • | BCAM International Scientific Advisory Committee reviews and validations | | |



16. Judging merit (Code)

The selection process should take into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity and level of independence should also be considered. This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria, such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.

| T | | XA71 /XA71 |
|--|------------------|------------|
| Existing Institutional rules | Actions required | When/Who |
| and/or practices | | |
| • LF & Endorsement of C&C | - | - |
| BCAM and Ikerbasque recruitment/assessment policies | | |
| BCAM recruitment and evaluation portal | | |
| BCAM International Scientific Advisory Committee reviews and validations | | |

17. Variations in the chronological order of CVs (Code)

Career breaks or variations in the chronological order of CVs should not be penalised, but regarded as an evolution of a career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which application is being made.

| Existing Institutional | Actions required | When/Who |
|-------------------------------|------------------|----------|
| rules and/or practices | | |



| • | Endorsement of C&C | - | - |
|---|---|---|---|
| • | BCAM and Ikerbasque recruitment policies | | |
| • | BCAM People Process | | |
| • | BCAM International Scientific Advisory Committee reviews and validations | | |

18. Recognition of mobility experience (Code)

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.

| Existing Institutional | Actions required | When/Who |
|--|------------------|----------|
| rules and/or practices | | |
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque recruitment policies | | |
| BCAM recruitment and evaluation portal | | |
| BCAM International Scientific Advisory Committee reviews and validations | | |

19. Recognition of qualifications (Code)

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. | | |
|--|------------------|----------|
| Existing Institutional | Actions required | When/Who |
| rules and/or practices | | |
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque recruitment policies | | |
| BCAM recruitment and evaluation portal | | |
| BCAM International Scientific Advisory Committee reviews and validations | | |

20. Seniority (Code)

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 recognised.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|--|------------------|----------|
| Endorsement of C&C BCAM and Ikerbasque recruitment policies BCAM recruitment and evaluation portal | - | |
| BCAM International Scientific Advisory Committee reviews and validations | | |



21. Postdoctoral appointments (Code)

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.

| Existing Institutional | Actions required | When/Who |
|--|------------------|----------|
| rules and/or practices | | |
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque recruitment policies | | |
| BCAM recruitment and evaluation portal | | |
| BCAM International Scientific Advisory Committee reviews and validations | | |



3. Working conditions and social security

22. Recognition of the profession

All researchers engaged in a research career should be recognized as professionals and be treated accordingly. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants).

| Existing Institutional | Actions required | When/Who |
|---------------------------------------|------------------|----------|
| rules and/or practices | | |
| LF & Endorsement of C&C | - | - |
| BCAM and Ikerbasque internal policies | | |
| BCAM People Process | | |

23. Research environment

Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work programme.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|--|--|--|
| LF & Endorsement of C&C BCAM Strategy | Research facilities: additional offices and new computational resources. | Coordinated by the |



24. Working conditions

Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, *inter alia*, to flexible working hours, part-time working, teleworking and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

| Existing Institutional | Actions required | When/Who |
|---|--|--|
| rules and/or practices | | |
| LF & Endorsement of C&C Occupational Risk Prevention Plan Interpersonal Conflict Management Protocol BCAM People Process | Training and evaluation on Psychosocial risks | Summer 2016 Coordinated by the General Manager with the internal support of BCAM administrative staff and the support of external experts |
| and | Personal Process improvement in relation to the combination of family and work | Fall 2016 / Spring 2017 Administrative staff with the input of PIs |
| | BCAM Survey improvement (aligned to HRS4R) and execution | Winter 2016Management Assistant |



25. Stability and permanence of employment

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the *EU Directive on Fixed-Term Work*.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|--|---|
| LF & Endorsement of C&C BCAM and Ikerbasque internal policies BCAM People Process | • Improve the communication of the professional career development | Fall 2016 General Manager (coordinator) with the support of PIs and administrative staff |

26. Funding and salaries

Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.

| Existing Institutional | Actions required | When/Who |
|---------------------------------------|------------------|----------|
| rules and/or practices | | |
| • LF & Endorsement of C&C | - | - |
| BCAM and Ikerbasque internal policies | | |
| BCAM People Process | | |



27. Gender balance

Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved on the basis of an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|------------------|----------|
| LF & Endorsement of C&C | - | - |
| BCAM and Ikerbasque internal policies | | |
| BCAM People Process | | |



28. Career development

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|--|--|---|
| Endorsement of C&C BCAM and Ikerbasque internal policies BCAM People Process | Improve the communication of the professional career development | Fall 2016 General Manager (coordinator) with the support of PIs and administrative staff |
| | Establish an explicit Mentorship Programme | • Direction Winter 2016 |

29. Value of mobility

Employers and/or funders must recognize the value of geographical, intersectorial, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system. This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation.

| Existing Institutional | Actions required | When/Who |
|---------------------------------------|------------------|----------|
| rules and/or practices | | |
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque internal policies | | |
| BCAM People Process | | |



30. Access to career advice

Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|------------------|----------|
| BCAM and Ikerbasque services | - | - |
| BCAM People Process | | |

31. Intellectual Property Rights

Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights. Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations, as possibly provided for under specific collaboration agreements or other types of agreement.

| Existing Institutional rules and/or practices | | Actions required | When/Who |
|---|---|------------------|----------|
| • | LF & Endorsement of C&C | - | - |
| • | BCAM and Ikerbasque contractual framework | | |

32. Co-authorship

Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or funders should therefore develop strategies, practices and procedures to provide



researchers, including those at the beginning of their research careers, with the necessary framework conditions so that they can enjoy the right to be recognised and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc, or to publish their own research results independently from their supervisor(s).

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|------------------|----------|
| • Endorsement of C&C | - | - |
| BCAM and Ikerbasque internal policies | | |

33. Teaching

Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities. Employers and/or funders should ensure that teaching duties are adequately remunerated and taken into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.

| Existing Institutional | Actions required | When/Who |
|--|---|--|
| rules and/or practices | | |
| LF & Endorsement of C&C BCAM and Ikerbasque internal policies BCAM Courses Program | Strengthen the link with the University of the Basque Country and other universities so as to provide additional teaching opportunities in Master courses | Fall 2016 – Spring 2017 Scientific Director and Governance bodies |

34. Complains/ appeals

Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of



researchers, including those concerning conflicts between supervisor(s) and early-stage researchers. Such procedures should provide all research staff with confidential and informal assistance in resolving work-related conflicts, disputes and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of the working environment.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|----------------------------------|---|
| LF & Endorsement of C&C BCAM and Ikerbasque services Interpersonal Conflict Management Protocol | BCAM (anonoymous) suggestion box | Summer 2016General Manager |

35. Participation in decision-making bodies

Employers and/or funders of researchers should recognize it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

| Existing Institutional | Actions required | When/Who |
|---|------------------|----------|
| rules and/or practices | | |
| • LF & Endorsement of C&C | - | - |
| BCAM Management and Research processes | | |
| • (PIs) Participation in the follow-up meetings (once every semester) | | |
| (PIs and young researchers) Participation in the SAC meeting | | |
| Ikerbasque Workshops | | |



4. Training

36. Relation with supervisors

Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them. This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.

| Existing Institutional rules and/or practices | | Actions required | When/Who |
|---|---|--|---|
| • | Endorsement of C&C PIs educated in the international science system | Recommendations/guidelines to PIs about supervision duties | Spring 2017PhD students, junior postdocs and supervisors |

37. Supervision and managerial duties

Senior researchers should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|--|--|--|
| Endorsement of C&C PIs educated in the international science system | Recommendations/guidelines to PIs about supervision duties | Spring 2017 PhD students, junior postdocs and supervisors |



38. Continuing Professional Development

Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and e-learning.

| Existing Institutional | Actions required | When/Who |
|--|------------------|----------|
| rules and/or practices | | |
| BCAM and Ikerbasque internal training opportunities | - | - |
| BCAM Seminars and Courses programme | | |
| Support to attendance to workshops and conferences | | |
| BCAM People Management Process | | |

39. Access to research training and continuous development

Employers and/or funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.

| Existing Institutional | Actions required | When/Who |
|-------------------------------|------------------|----------|
| rules and/or practices | | |



| BCAM and Ikerbasque internal training opportunities BCAM Seminars and Courses programme | Training plan improvement (including training on languages and other skills) | Fall 2016 Scientific Director, General Manager and research staff. |
|--|--|---|
| Support to attendance to workshops and conferences | | |
| BCAM People Management Process | | |

40. Supervision

Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.

| Existing Institutional rules and/or practices | Actions required | When/Who |
|---|--|--|
| Endorsement of C&C PIs educated in the international science system and internal group organisation BCAM People and Research Management Processes | Recommendations/guidelines to PIs about supervision duties | Spring 2017 PhD students, junior postdocs and supervisors |



4. CONCLUSIONS

BCAM has been conceived to offer an **outstanding research environment**, **where researchers** can benefit from a **dy**namic and rich agenda of activities, the visibility of an international center, resources and support for those start-up activities, possibilities to establish collaborations with industry and very well-equipped headquarters in Bilbao, offering very high quality of life within Europe.

In **2014**, BCAM has achieved its major collective goal in a competitive call: the accreditation as a **Severo Ochoa Research center** in which BCAM, Ikerbasque and UPV/EHU researchers linked to BCAM have participated. This is implying that BCAM research staff is growing quickly, in fact, BCAM research staff has increased 30% in the last year, so we are making a special emphasis on HR.

Although BCAM is a young center, we count on a high qualified research and administrative staff and a wide collaborator network, the support of internationally consolidated institutions. BCAM has put into place well-established policies and services, which provides a solid foundation for the development of an excellent environment for research and researchers' career development.

One of the main challenges for BCAM since its creation has been the attraction and retention of researchers, as the scientific environment is very competitive. The implementation of the Charter and Code provides BCAM the opportunity to foster the implementation of its "Wellbeing at BCAM" Program with new actions derived from the feedback about the 40 principles. This process is open for all research categories and administration staff, and contributes to stimulate the working environment.

In the midterm, BCAM will continue its growing phase, so the implementation of the actions defined in this gap analysis will be of vital importance to guarantee the best conditions for all new and old BCAM members. So as to include new good practices and maintain the current ones, these actions will be included in the BCAM Management model and organisation culture. We will also ensure that these processes and the HR Excellence Principles are regularly communicated, so all BCAM members are aware about them.

As this is a continuous improvement process, we will keep on periodically gathering feedback, and adapting the actions defined to the future needs of the center, so that they really contribute to the principles and consequently to the working conditions of all the employees at the centre.