

Human Resources Strategy For Researchers (HRS4R)

Monitoring report 2024

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1. Introduction

1.1. The Center

BCAM -Basque Center for Applied Mathematics, is a research centre of excellence that promotes research in applied mathematics through an interdisciplinary approach. Founded in 2008 by the Basque Government in collaboration with Ikerbasque, the centre is located in the heart of Bilbao and was born with the aim of strengthening the Basque Science and Technology System. Since then, its network of alliances has expanded significantly, incorporating the University of the Basque Country (UPV/EHU), Innobasque (Basque Innovation Agency), the Provincial Council of Bizkaia, Petronor Innovation and Bilbao City Council. BCAM is currently part of the BERC (Basque Excellence Research Centres) network, which brings together the most outstanding research centres in the Basque Country.

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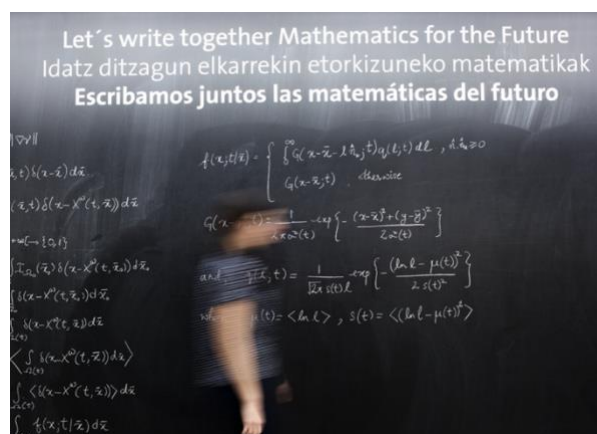


The Centre's mission is to '*write the mathematics of the future*', i.e. to advance mathematical knowledge and its applications to the real world. To this end, the focus is on attracting and training high-level scientific personnel, promoting cutting-edge numerical and simulation techniques, and establishing close collaborations with industry, healthcare and the social sphere.

The center's successes are the result of the commitment and dedication of those who shape BCAM on a daily basis. On the one hand, the research staff, whose passion and expertise drive scientific progress, as well as organising events, knowledge transfer activities and outreach initiatives, and on the other hand, the dedicated administrative team, whose support is essential to achieve this mission, continue to push the boundaries of mathematical research and its applications. The future is full of new challenges and opportunities, but as Mirzakhani rightly said, *'the beauty of mathematics belongs to those who persist.'*

One of the most relevant milestones in the centre's trajectory has been the award of the Severo Ochoa Centre of Excellence distinction in 2014, a renewal that was repeated in 2018 and again in 2021. This triple accreditation places BCAM among the only 12 centres in Spain to have achieved this recognition on three consecutive occasions, consolidating its prestige both nationally and internationally.

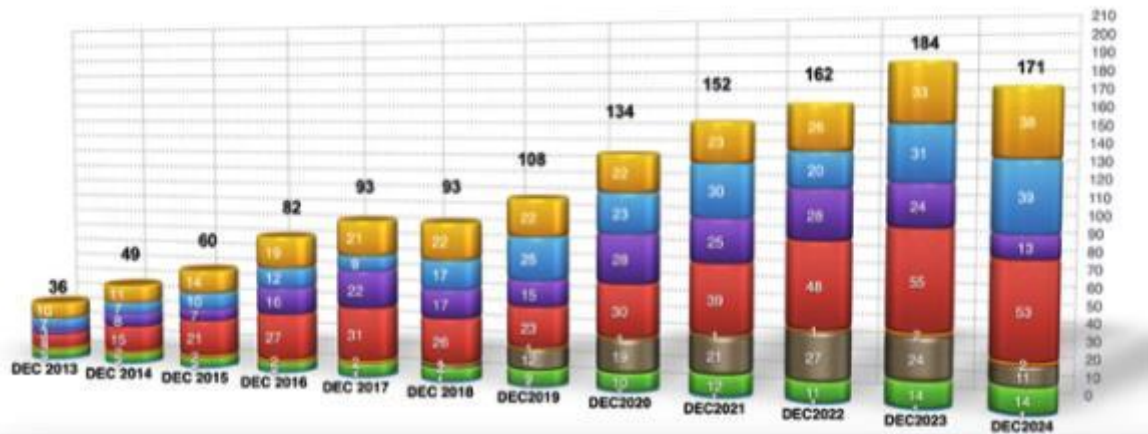
In the realm of mathematical inquiry, the late Fields Medalist Maryam Mirzakhani once remarked: "The beauty of mathematics only shows itself to more patient followers". These words encapsulate not only the ethos but also the journey of the Basque Center for Applied Mathematics (BCAM) as it continues to push the boundaries of mathematical research and its applications.



1.2. Employee Structure

In the last decade, BCAM's growth has been remarkable. As shown in the following graph, the number of staff has increased fivefold, ending 2024 with a total of 191 people, 171 of whom are research and administrative staff, and 20 people occupying temporary positions of Internships and Visiting Fellow. This increase has been driven, among other factors, by the achievement of Severo Ochoa accreditation and the success in regional, national, and international calls for proposals.

Since its creation, BCAM has experienced remarkable growth. This expansion speaks volumes about the vitality of our institution and underscores our commitment to fostering a vibrant intellectual environment where ideas flourish and collaborations thrive.



With an average age of less than 35 years and professionals from more than 36 nationalities, BCAM has established itself as a dynamic and international environment that fosters innovation and excellence.

BCAM continues to develop its research through the established groups and lines of research, organised thematically into 5 areas in relation to its scientific field:

During 2024, BCAM continues to develop its research through the established research groups and lines of research, organised thematically in 5 areas in relation to its scientific field.

01. CM Computational Mathematics	02. M3A Mathematical Modelling with Multidisciplinary Applications	03. MP Mathematical Physics	04. APDE Analysis of Partial Differential Equations	05. DS Data Science & Artificial Intelligence
001 MATHDES D. Pardo M. Barton Mathematical Design, Modeling and Simulations	001 MSLMS E. Akhmetkaya Modelling and Simulation in Life and Materials Sciences	001 STAG J. Fdez de Bobadilla Singularity Theory and Algebraic Geometry	001 WAVE L. Vega Linear and Non-Linear Waves	001 ML J.A. Lozano Machine Learning
002 CFMDS M. Ellero CFD Modelling and Simulation	BCAM Severo Ochoa Strategic Lab on Modelling with Partial Differential Equations in Mathematical Biology* (Oxford University)	BCAM Severo Ochoa Strategic Lab on Singularity Theory (Rényi Institute)	BCAM Severo Ochoa Strategic Lab Analysis of PDEs (ETH Zürich)	BCAM Severo Ochoa Strategic Lab on Trustworthy Machine Learning (University of Sussex)
	002 MTB M. Aguiar Mathematical and Theoretical Biology	002 SP G. Pagnini Statistical Physics	002 HA L. Roncal Harmonic Analysis	002 CAS V. Elvira Computational and Applied Statistics
	003 MCEN S. Rodrigues Mathematical, Computational and Experimental Neuroscience	003 QM J.-B. Bru Quantum Mathematics	003 AA A. Zarnescu Applied Analysis	003 CO C. Coello Combinational Optimization

The reality is that gender equality in scientific research has not yet been achieved, as scientific disciplines are masculinized and are far from achieving parity. This reality in the world of science is reflected in BCAM's workforce. That is why, starting with the analysis of the composition of the workforce by gender, we can see that the center is still dominated by men.

Graph nº1: Employees disaggregated by gender:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER					
	FEMALES	%	MALES	%	TOTAL
TOTAL	44	23,04%	147	76,96%	191

	FEMALES	MALES	TOTAL
Scientific Director	0	1	1
STAFF	10	4	14
RT	1	10	11
IT	0	2	2
PhD	10	43	53
Postdoc Junior	4	9	13
Postdoc Senior	10	29	39
RL & BCAM Researcher	7	31	38
Internships	2	12	14
VF	0	2	2
V Postdoc	0	1	1
V PhD	0	3	3

Graph nº2: Employees disaggregated by gender average:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER FTE AVERAGE					
	FEMALES	%	MALES	%	TOTAL
TOTAL	48,36	25,70%	139,81	74,30%	188,17

	FEMALES	MALES
Scientific Director	0	1
STAFF	9,83	3,65
RT	3,65	13,32
IT	0	2
PhD	8,83	43,82
Postdoc Junior	4,96	8,18

Postdoc Senior	10,62	29,64
RL & BCAM Researcher	7	26,15
Internships	2,55	8,3
VF	0,5	2,02
V Postdoc	0,33	0,42
V PhD	0	1,39
TOTAL	48,36	139,8

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER AND PROFESSIONAL CATEGORY						
	FEMALES	%	MALES	%	TOTAL	% TOTAL
INTERNSHIPS	2,55	5,27%	8,31	5,94%	10,86	5,77%
RT	3,65	7,55%	13,32	9,53%	16,97	9,02%
PHD	8,83	18,26%	43,82	31,34%	52,65	27,98%
POSTDOC	15,58	32,22%	37,82	27,05%	53,40	28,38%
SENIOR RESEAR. / GROUP LEADER	7,00	14,47%	26,15	18,70%	33,15	17,62%
VISTING	0,92	1,90%	3,74	2,68%	4,66	2,48%
SCIENTIFIC DIRECTOR	0,00	0,00%	1,00	0,72%	1,00	0,53%
STAFF+IT	9,83	20,33%	5,65	4,04%	15,48	8,23%

Graph n°3: Employees disaggregated by gender and contract type:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER AND CONTRACT TYPE						
	FEMALES	%	MALES	%	TOTAL	%
INDEFENITE	21,33	10,71%	46,5	23,34%	67,83	34,04%
TEMPORARY	29,59	14,85%	101,83	51,11%	131,42	65,96%

Graphs n°4: Employees disaggregated by gender and areas:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER AND AND AREAS						
	FEMALES	%	MALES	%	TOTAL	%
STAFF	10,5	20,62%	5,67	3,82%	16,17	8,12%
RESEARCH	40,42	79,38%	142,67	96,18%	183,09	91,89%

As can be seen in the graphs, despite being a center in which our research staff accounts for 90% of the total number of employees, we have a male-dominated workforce in terms of research. And feminized in administrative positions, which corresponds to the reality of the labor market.

Graph nº5: Employees disaggregated by gender and type of workday:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER AND WORKDAY						
	FEMALES	%	MALES	%	TOTAL	%
FULL TIME	47,58	23,88%	144,92	72,73%	192,5	96,61%
PART TIME	3,33	1,67%	3,42	1,72%	6,75	3,39%

REDUCTION OF WORKING HOURS FOR CHILDCARE		
	FEMALES	MALES
TOTAL	2,33	0

Another of BCAM's realities is that it is women who reduce their working hours to care for children and men who work part-time because they have other jobs or collaborations in other companies and/or institutions.

Graphs nº6: Employees disaggregated by gender and areas:

DISTRIBUTION OF EMPLOYEES DISAGGREGATED BY GENDER AND AREAS						
	FEMALES	%	MALES	%	TOTAL	%
STAFF	10,5	20,62%	5,67	3,82%	16,17	8,12%
RESEARCH	40,42	79,38%	142,67	96,18%	183,09	91,89%

With this in mind, at BCAM, we are aware of the challenge we face in the future to try to achieve a gender balance.

1.3. BCAM's strategic plan

The objectives of the BCAM Strategic Plan 22-25 are perfectly aligned with our vision of BCAM as:

- Putting mathematics at the service of society
- A cutting-edge research environment with special attention to multidisciplinary disciplines
- A pole of attraction of talent
- A training school
- Connected to the world
- An experimental and scientific computing centre
- A knowledge transfer model
- Promoting the image of mathematics



The main objectives of this plan aim to:

1. Strengthen research capacities: BCAM has expertise at all levels of mathematics from pure disciplines, passing through algorithm development and simulation to the final applications. The possibilities of combining all this knowledge in a synergetic manner could provide unanticipated results and unexpected breakthroughs, and this is one of the main objectives of this proposal.
2. Foster synergies in its closer ecosystem for training and research: In the last period, BCAM became necessary in almost all leading Basque research centers. In the North of Spain, BCAM collaborates with the universities that are linked through a common Master and PhD programme. For 2025 our aim is for the programme to become a Mathematics Graduate School for the north of Spain that is competitive at national and international level. Last but not least, in the French corridor, we lead TRANSMATH, UPV/EHU-U. Bordeaux a trans-border joint research lab. Also, in the area of Analysis and PDE (APDE) there is a colloquium led by both universities with the participation of the U of Toulouse. We aim to increase the relation with Bordeaux and to extend the connection with Toulouse to other fields such as the Severo Ochoa Strategic Lab in Trustworthy Machine Learning.
3. Exert a tractor effect on the Spanish Science, Technology and Innovation System: BCAM has played a crucial role, and will continue to do so, in the recent restructuring of mathematics at the national level: (i) CEMAT (Spanish Committee of Mathematics) has become the bottom-up representative institution for mathematics and statistics in Spain, as well as for international institutions such as IMU and ICIAM. (ii) BCAM was a founding member in 2018 of the Red Estratégica de Matemáticas, and L. Vega is currently the coordinator of the network. REM is a top-down institution, since it depends directly on the Spanish Ministry of Science. It currently has two main objectives, both shared by BCAM: (a) To foster the transfer of mathematical technology by promoting the creation of the Technology Platform of which BCAM is one of the founding partners. (b) To make mathematics a relevant player in the national strategy on Digitalization and AI. In this respect BCAM has gone part of the way: the current director, JA. Lozano, develops his scientific activity in both areas.
4. Promote international scientific leadership: We will take a significant leap in the leadership and participation of the center at international research projects and particularly EU projects. The recently created Severo Ochoa International Strategic labs will play a fundamental role in this endeavour, as described in section 13.1. Moreover, the goal of BCAM on the international scene is to increase its visibility and responsibility at all levels. In this sense, the organization of international flag conferences will be one of the targets during this period. Furthermore, we will pursue an active role in international networks, and we plan to encourage BCAM members to take

relevant positions on international committees at all levels, from those on the different committees of the European Commission, to become editors of prestigious journals.

Finally, the BCAM Strategic Plan 22-25 aims to increase the scientific, social and economic impact of the center's research results and improve the research environment, thus contributing to the attraction of human resources through the implementation of the actions defined in the HRS4R plan.

The BCAM Strategic Plan 2022-2025 is mainly directed at answering our SWOT analysis. The Scientific Programme per research group described below is based on the strong relationships among research lines and the commitment of all the BCAM research team to working together towards a common scientific goal: consolidating an interdisciplinary system capable of facing challenges of Mathematical Science in a broad manner by bringing together Mathematics, Engineering and Sciences.

2. HRS4R Strategy

2.1. HRS4R Strategy timeline

At BCAM, we've always believed that our people are our greatest asset. Our commitment to creating a supportive and enriching environment for our researchers goes back to our founding strategy in 2008, which emphasized excellence, openness, and ethical values.

Here's a look at our timeline, highlighting our dedication to the European Commission's Human Resources Strategy for Researchers (HRS4R) and our continuous improvement:



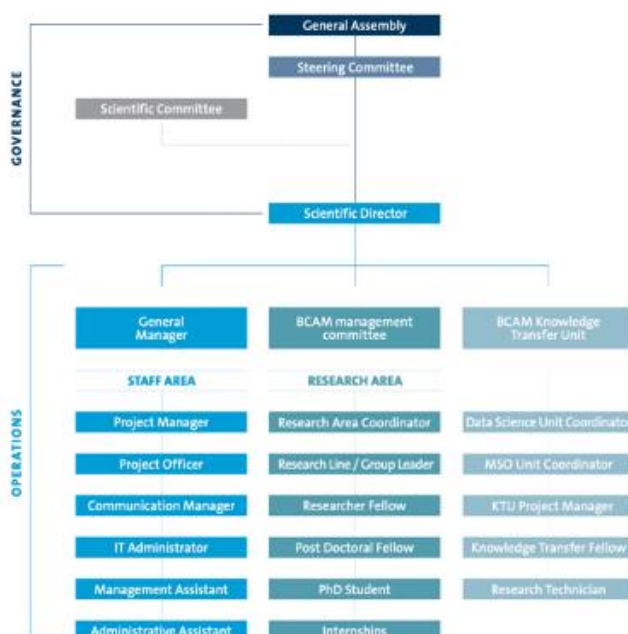
- **2008: Laying the Foundation:** We started strong by signing onto the 40 principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. This signified our early commitment to fostering a positive research environment.
- **2015: Taking the Next Step:** We decided to deepen our commitment to people management by initiating an internal analysis of the HRS4R. This led to our first Internal Analysis and Action Plan in 2016.
- **2016: Achieving Recognition:** Our hard work paid off! We were awarded the prestigious "HR Excellence in Research" logo, a testament to our dedication to our researchers.

- **2018: Continuous Improvement:** We underwent an interim assessment by the European Commission, which resulted in the renewal of our award and the development of a Revised Action Plan for 2018-2021.
- **2022: Evolving and Adapting:** We shared our Improved Action Plan for 2021-2024, demonstrating our ongoing commitment to refining our practices.
- **2023: Expert Feedback:** We welcomed a visit from the HRS4R European Committee, providing valuable insights and feedback.
- **2025: Moving Forward:** We're currently working on our HRS4R Internal Review document and implementing the assessment team's recommendations, ensuring we continue to improve and support our researchers in the years to come.

This timeline reflects our ongoing journey to create a world-class research environment at BCAM. We're very proud of our progress and excited about the future that is yet to come.

2.2. Stakeholders involved in the strategy.

BCAM's organization chart follows the following structure:



The spirit of BCAM's strategy aims to involve every relevant stakeholder in the HRS4R process. This means that both Governance and Operation bodies work together to build and comply with an integral strategy that reaches every aspect of BCAM's daily life.

2.3. SWOT Analysis

After an internal analysis, this is BCAM's SWOT analysis:

Strengths

- **World-class and multidisciplinary research teams with theoretical and technical expertise in Maths, Physics, Engineering and Computer Science:** BCAM is home to world-class research teams, uniquely characterized by their multidisciplinary nature. These teams bring together leading experts with deep theoretical foundations and advanced technical skills spanning core areas of Mathematics, Physics, Engineering, and Computer Science. This powerful synergy fosters innovative approaches and allows for the tackling of complex scientific challenges from diverse perspectives, driving impactful discoveries at the forefront of applied and computational mathematics.
- **Strong relationships among research lines and commitment of all BCAM research team to work together towards a common scientific goal:** A defining characteristic of BCAM is the strong interconnectedness of its various research lines. This is underpinned by a genuine commitment from every member of the BCAM research team to collaborate and pool their expertise towards a shared overarching scientific vision. This collaborative ethos transcends individual research areas, fostering a dynamic and supportive environment where interdisciplinary projects flourish and collective progress towards ambitious goals is prioritized.
- **The number and quality of scientific publications and the number of exceptionally talented young people who have joined the centre over the past few years:** The scientific excellence of BCAM is clearly demonstrated by the consistently high number and exceptional quality of its publications in leading international journals and conferences. Furthermore, the centre has successfully attracted a significant number of exceptionally talented young researchers in recent years. This influx of promising individuals underscores BCAM's growing reputation as a vibrant and stimulating environment for cutting-edge research and the development of future scientific leaders.
- **Reputation in the field, particularly in light of the centre's relative youth:** Despite its relatively young age, BCAM has rapidly established a strong and distinguished reputation within the international applied and computational mathematics community. This recognition is a testament to the impactful research output, the caliber of its researchers, and its proactive engagement with the broader scientific landscape. BCAM's swift ascent highlights its dynamism and its significant contributions to the field.

- **Exceptional facilities that support cutting-edge research in Applied and Computational Mathematics:** BCAM provides exceptional facilities equipped with state-of-the-art computational resources, advanced software, and dedicated research infrastructure. These resources are specifically designed to support cutting-edge research across the spectrum of applied and computational mathematics, enabling researchers to conduct complex simulations, analyze large datasets, and push the boundaries of scientific discovery.
- **The structure of the organization, including highly motivated human resources aligned with the mission of the center and the scientific strategy management structure:** BCAM's organizational structure is strategically designed to maximize its scientific impact. This includes a highly motivated and dedicated team of human resources whose expertise and commitment are fully aligned with the center's mission. A robust scientific strategy management structure ensures efficient resource allocation, clear pathways for research development, and effective implementation of the center's overarching scientific goals.
- **Procedures for training, mentorship, recruitment, and retention of researchers (HRS4R):** BCAM has implemented comprehensive and transparent procedures for the training, mentorship, recruitment, and retention of its researchers, aligning with the principles of the Human Resources Strategy for Researchers (HRS4R). These procedures foster a supportive and stimulating environment for professional development, provide guidance and mentorship for early-career researchers, ensure a rigorous and fair recruitment process, and promote a culture that encourages talented individuals to build long-term careers at the center.
- **The integration in international networks and the numerous international agreements:** BCAM actively fosters its integration within prominent international research networks and has established numerous international agreements with leading academic institutions and research centers worldwide. This strong international engagement facilitates the exchange of knowledge, promotes collaborative research projects, and enhances BCAM's global visibility and impact within the scientific community.
- **The success in applications to real problems and the knowledge transfer activities:** BCAM has demonstrated significant success in applying its research expertise to solve real-world problems, exemplified by its achievements. Furthermore, the center actively engages in knowledge transfer activities, ensuring that its research findings and technological advancements are effectively disseminated to industry, government, and society, thereby contributing to innovation and addressing societal challenges.

- **Strong PhD internal programme and relationship with the University of the Basque Country and other national and international Universities:** BCAM boasts a strong and well-regarded internal PhD programme that attracts talented doctoral candidates. This is complemented by close collaborative relationships with the University of the Basque Country and other prestigious national and international universities. These partnerships enrich the educational experience of PhD students, facilitate joint research initiatives, and foster a vibrant academic environment for the next generation of researchers in applied and computational mathematics.

Weaknesses

- **Difficulties attracting senior researchers because Spanish salaries are not competitive in comparison with other countries:** A significant challenge faced by BCAM is the difficulty in attracting and recruiting top-tier senior researchers. This is primarily attributed to the fact that salary levels for senior academic positions in Spain are often not competitive when compared to those offered in other leading research-intensive nations. This disparity can make it challenging to entice established and highly sought-after researchers to relocate to Spain, potentially hindering the center's ability to further strengthen its leadership and expertise in key areas.
- **Difficulties attracting outstanding postdoctoral profiles in applied fields due to not very competitive salaries in comparison to other countries and the industrial R&D sector:** Attracting outstanding postdoctoral researchers, particularly in applied mathematics and related fields, presents another challenge. The relatively less competitive salaries offered in Spanish academic research, when compared to those available in other countries and within the industrial Research and Development (R&D) sector, can make it difficult to recruit the most promising early-career scientists. This can impact the center's capacity to drive innovation and maintain a pipeline of exceptional talent in strategically important applied areas.
- **The difficulty in obtaining funds for the core of our activity:** Securing consistent and sufficient funding to support the core activities of BCAM represents an ongoing challenge. The competitive landscape for research grants and the availability of public funding can fluctuate, creating uncertainty in the long-term financial stability required to sustain the center's research programs, maintain its infrastructure, and support its talented researchers. Diversifying funding sources and navigating complex funding application processes require significant effort and strategic planning.
- **The effort and expense of periodically renewing computational infrastructure with the aim of avoiding obsolescence:** Maintaining a cutting-edge research environment in applied and computational mathematics necessitates the periodic renewal and upgrading of computational infrastructure. This endeavor involves significant financial investment and dedicated effort to

identify, acquire, and integrate new hardware and software. The rapid pace of technological advancement requires continuous monitoring and strategic planning to avoid obsolescence and ensure that BCAM researchers have access to the advanced tools necessary for their groundbreaking work.

- **Difficulties attracting outstanding women researchers:** BCAM recognizes the importance of fostering a diverse and inclusive research environment and acknowledges the specific difficulties in attracting outstanding women researchers. Systemic factors within the broader scientific community and potential disparities in career progression opportunities can contribute to this challenge. BCAM is committed to addressing these issues through proactive strategies aimed at creating a more equitable and attractive environment for talented women in mathematics and related fields, thereby enriching the diversity and quality of its research teams.

Opportunities

- **Leading-edge research:** BCAM is committed to conducting leading-edge research at the forefront of applied and computational mathematics. This involves actively pursuing novel theoretical frameworks, developing innovative computational methodologies, and tackling challenging open problems with the potential for significant scientific and technological impact. Our researchers strive to push the boundaries of knowledge and contribute to groundbreaking advancements in their respective fields.
- **Alliances with centers in other countries:** BCAM strategically cultivates alliances with leading research centers and academic institutions in other countries. These international collaborations foster the exchange of ideas, facilitate joint research projects, enable access to diverse expertise and resources, and enhance the global reach and impact of BCAM's research endeavors. These partnerships are vital for staying at the cutting edge of international scientific developments.
- **Alliances with other research centers:** In addition to its international collaborations, BCAM actively forges alliances with other prominent research centers within Spain and across various disciplines. These national and cross-disciplinary partnerships promote synergy, facilitate the tackling of complex problems from multiple perspectives, and contribute to a vibrant and interconnected research ecosystem. By collaborating with other centers of excellence, BCAM amplifies its research impact and fosters interdisciplinary innovation.

- **Given the increase in projects, it is possible to hire more staff to lighten the workload:** The recent increase in the number and scope of research projects undertaken at BCAM presents an opportunity to strategically expand our team. By hiring additional research staff, we aim to distribute the growing workload more effectively, allowing our current researchers to focus more deeply on their core research activities, enhance productivity, and maintain a healthy work-life balance. This strategic expansion will further strengthen our research capacity and ensure the successful execution of our expanding project portfolio.
- **Interculturality: our offers open the option to incorporate profiles from other countries:** BCAM embraces interculturality and actively encourages applications from talented researchers worldwide. Our recruitment processes are designed to be inclusive and open to individuals from diverse national and cultural backgrounds. We recognize that the incorporation of international perspectives enriches our research environment, fosters creativity, and strengthens our global competitiveness in the field of applied and computational mathematics.
- **Accompaniment in the incorporation of foreign personnel:** To ensure a smooth and positive transition for researchers joining BCAM from other countries, we provide comprehensive accompaniment and support during their incorporation process. This includes assistance with practical matters such as visa procedures, housing arrangements, language support, and cultural integration. Our commitment to providing a welcoming and supportive environment helps international researchers to quickly become fully integrated into the BCAM community and focus on their research.

Threats

- **High competition from the industry: strong job market for STEM profile:** BCAM operates within a highly competitive landscape due to the strong demand for STEM (Science, Technology, Engineering, and Mathematics) professionals in the industry. The robust job market offers numerous attractive opportunities for individuals with the quantitative and computational skills that are central to our research areas. This external competition presents a challenge in attracting and retaining top talent, as researchers may be drawn to potentially higher salaries and different career trajectories offered by private sector companies.

- **Difficulties competing with private companies:** A significant factor contributing to the challenge of attracting and retaining researchers is the difficulties competing with private companies. The financial resources available to many industrial R&D departments and technology-driven firms often allow them to offer significantly more competitive salaries and benefits packages compared to those typically available in academic research institutions. This disparity makes it difficult for BCAM to directly compete on salary alone, particularly for experienced researchers and those with highly sought-after applied skills.
- **Administrative bureaucracy for hiring foreigners, very slow:** The administrative processes involved in hiring researchers from foreign countries can be cumbersome and often proceed at a slow pace. Lengthy visa application procedures, complex documentation requirements, and bureaucratic hurdles can create significant delays in the recruitment and onboarding of international talent. This sluggishness can be particularly detrimental when trying to attract highly mobile and in-demand researchers who may opt for opportunities in countries with more streamlined hiring processes.
- **Collaboration with local leaders:** While BCAM fosters internal collaboration, there is a recognized need to enhance collaboration with leading researchers and institutions within the immediate geographical area. Strengthening these local partnerships could lead to synergistic research initiatives, shared resources, increased visibility within the regional scientific ecosystem, and enhanced opportunities for knowledge exchange and joint projects that could benefit the Basque Country's innovation landscape.

2.4. Progress monitoring bodies

HRS4R Working Group



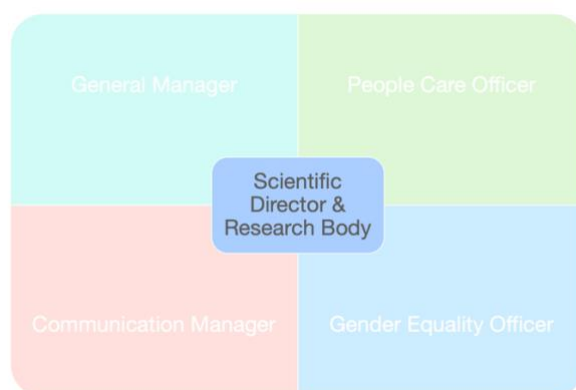
To execute the implementation of the HRS4R Strategy at BCAM, the HRS4R Working group was created in 2016 with the first Action Plan and its members have been changing due to the variations in the BCAM Team. The main tasks of this team are to:

- **Assess the adequation and impact of the actions:** One of the primary responsibilities of this team is to rigorously evaluate the suitability and effectiveness of the various actions undertaken by the institution. This involves a systematic assessment of whether these actions are aligned with the strategic goals and objectives of the center and critically analyzing the tangible impact and outcomes they generate. This assessment process likely involves the collection and analysis of relevant data, the application of appropriate metrics, and a thorough review of the extent to which the actions are contributing to the overall success and advancement of the research endeavors. The insights gained from these evaluations are crucial for informed decision-making, continuous improvement, and ensuring that resources are allocated effectively to the most impactful initiatives.
- **Supervise the execution of the actions:** This team plays a crucial role in overseeing the implementation and execution of planned actions. This involves monitoring progress against established timelines and milestones, ensuring that activities are carried out in accordance with defined protocols and standards, and proactively identifying and addressing any potential challenges or roadblocks that may arise during the execution phase. Through diligent supervision, the team ensures accountability, promotes efficiency, and helps to guarantee that actions are implemented effectively and contribute to the desired outcomes. This oversight function is vital for maintaining the quality and integrity of the center's operations and ensuring that strategic initiatives are brought to fruition successfully.
- **Be a canal of communication towards the Researchers:** Serving as a central channel of communication between the management or governing bodies and the research staff is another key function of this team. This involves effectively disseminating important information, updates, and decisions from the leadership to the researchers in a clear and timely manner. Conversely, the team also acts as a conduit for researchers to voice their concerns, provide feedback, ask questions, and share insights with the management. This two-way communication flow is essential for fostering transparency, building trust, promoting a collaborative environment, and ensuring that researchers are well-informed and feel connected to the overall direction and decision-making processes of the institution. By facilitating open and effective dialogue, this team contributes significantly to a cohesive and productive research community.

Currently, the HR working group's structure is the following:

Person	Role
Lorea Gómez	General Manager
Ana López	People Care Officer
Oriana Elejalde	Gender Equality Officer
Estibaliz Gutiérrez	Communication Manager
Paula Gostín	HR Management Assistant
Irati Landa	HR Management Assistant

Additionally, the group counts on the support of the Research Body and the Scientific Director.



The main task of the HRS4R Working Group is to define the annual performance of the department, with the indicators that govern the functioning of the Recruitment area, which is evaluated and monitored annually through the HR logo committee. Also, it is in charge of all the administrative load that the implementation of the HRS4R Strategy implies.

HR Logo Committee

The HR Logo Committee ensures that policy compliance and development actions align with the institution's goals. This involves assessing the adequacy and impact of the developed actions to ensure they meet the desired outcomes. In the context of BCAM's HR Logo policy, new actions can be proposed for integration to strengthen the policy further. Supervision and monitoring of the implementation of these actions are key to ensuring their proper execution, followed by comprehensive reporting and evaluation.

The collaboration with the HRS4R Working Group is essential for maintaining alignment, while promotion and dissemination efforts help increase awareness and adherence to the policy across the institution.

The current members of the committee are the following ones:

Person	Role
José Antonio Lozano	Scientific Director
Lorea Gómez	General Manager
Ana López	People Care Officer
Oriana Elejalde	Gender Equality Officer
Luz Roncal	Senior Researcher
Pablo Merino	PhD Student Representative
Juan Zaragoza	PhD Student Representative
Enric Alberola	PhD Student Representative

The Committee will always be composed by a minimum of 6 members, and they will be renewed every year. For this, BCAM will make an open call to every employee, being it research or administrative staff of every category. Also, **the committee will meet twice a year** and will elaborate per each meeting the corresponding minutes summarizing the decisions and recommendations adopted in each meeting. These minutes will be available at all times to any BCAM member. Also, any member of the committee will be entitled to request an extraordinary meeting if there are circumstances that make it necessary or advisable. During this last period, the committee has met three times and has set the following calendar:

Date	Type	Objective
14/10/2024	Ordinary	Committee member appointment
25/03/2025	Extraordinary	Re-submission feedback
30/04/2025	Ordinary	Revision of the amendments for the third request for modification
October 2025	Ordinary	Committee member renewal and 2026-2027 period action plan analysis and proposal
April 2026	Ordinary	2026-2027 period action plan implementation update
October 2026	Ordinary	Committee member renewal and 2026-2027 plan implementation update
April 2027	Ordinary	Preparation for the elaboration of the new action plan
October 2027	Ordinary	Committee member renewal and presentation of the new action plan

The main tasks of this committee are:

- **Policy Compliance and Development:** This critical function involves ensuring that all HR-related practices and procedures at BCAM adhere to relevant internal policies, as well as national and international regulations and legal frameworks. Furthermore, this area encompasses the proactive development and refinement of BCAM's HR policies to ensure they remain current, effective, and aligned with best practices in research institutions. This includes staying abreast of evolving legal requirements, anticipating future needs, and formulating new policies or updating existing ones to foster a fair, equitable, and supportive work environment for all researchers and staff.
 - **Assessment of the adquation and impact of the developed actions:** This task focuses on systematically evaluating the effectiveness and consequences of the HR actions that have been implemented under BCAM's HR Logo policy (presumably referring to the Human Resources Strategy for Researchers - HRS4R). This involves analyzing whether the actions are achieving their intended goals, measuring their impact on researchers' well-being, career development, recruitment, and retention, and determining if they are contributing to a positive and productive research environment. This assessment often involves gathering feedback from researchers, analyzing relevant data, and using appropriate metrics to gauge the success and identify areas for improvement in the implemented HR strategies.
 - **Proposition of new actions that could be integrated in BCAM's HR Logo policy:** This forward-looking responsibility involves proactively identifying and proposing new initiatives and strategies that could be incorporated into BCAM's HR Logo policy to further enhance its effectiveness and impact. This requires staying informed about innovative HR practices in the research sector, understanding the evolving needs of the research community at BCAM, and creatively developing new actions that could address existing challenges or capitalize on emerging opportunities. These proposed actions aim to continuously improve the HR framework and ensure BCAM remains an attractive and supportive environment for top research talent.
 - **Supervision and monitoring of the execution of the actions:** This involves the ongoing oversight and tracking of the implementation of the HR actions that are part of BCAM's HR Logo policy. This includes monitoring progress against established timelines, ensuring that actions are being carried out as planned, identifying any obstacles or challenges that arise during implementation, and taking proactive steps to ensure successful execution. This supervision and monitoring function is crucial for maintaining accountability, ensuring the consistent application of HR policies, and guaranteeing that the intended benefits of the HR strategy are realized in practice.

- **Reporting and evaluation:** This responsibility entails the systematic documentation of HR activities, the analysis of relevant HR data, and the preparation of comprehensive reports on the progress and impact of BCAM's HR Logo policy. This includes evaluating the effectiveness of implemented actions, identifying key trends and outcomes, and communicating findings to relevant stakeholders within the institution. These reports provide valuable insights for decision-making, demonstrate accountability, and contribute to a culture of continuous improvement in HR practices.
- **Collaboration with the HRS4R Working Group:** This task highlights the importance of working closely and cooperatively with the dedicated HRS4R Working Group within BCAM. This collaboration ensures alignment of efforts, leverages the expertise and perspectives of different stakeholders involved in the implementation of the Human Resources Strategy for Researchers, and fosters a coordinated approach to advancing the goals of the HR Logo policy. This collaborative spirit is essential for the successful adoption and ongoing development of HR practices that meet the needs of the research community.
- **Promotion and dissemination of the Policy:** This involves actively communicating and promoting BCAM's HR Logo policy and its associated actions to the research community within the center and potentially to external stakeholders. This includes raising awareness about the available support, opportunities, and principles embedded within the policy. Effective dissemination ensures that researchers are well-informed about their rights and responsibilities, understand the benefits of the HR strategy, and can fully engage with the initiatives designed to support their careers and well-being. This promotion also contributes to BCAM's reputation as an institution committed to fostering a positive and supportive research environment.

2.4. Progress monitoring mechanisms

To monitor accordingly the progress made in the embedding of this strategy within the Center, BCAM counts on a series of mechanisms that collect both the status of the implementation of the strategy as well as the employee's feedback.

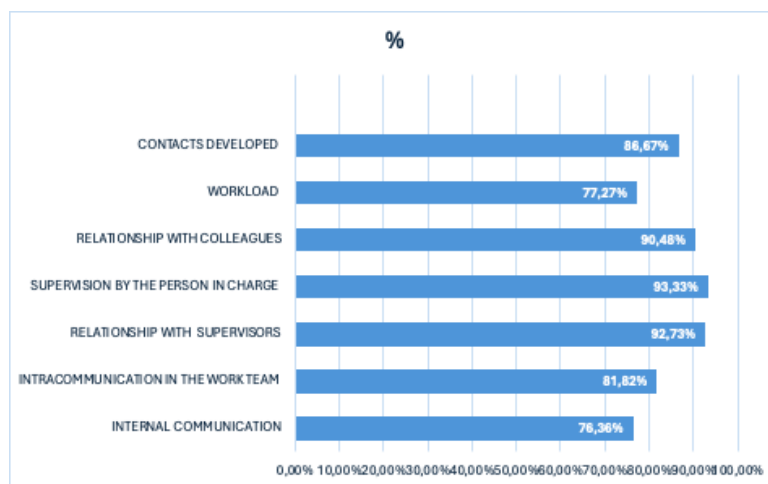
Regarding the implementation of the strategy, the HR Logo committee members elaborate yearly a **monitoring report** of the actions carried out during the year. This report is published on BCAM's website. Also, these actions are included on a specific section of the Center's **Activity Report**. Complementarily, since these actions are a part of BCAM's Strategic Plan, they are also monitored in form of indicator, which are reported in the midterm reports to the Spanish Ministry.

Regarding the employees' feedback, currently the main mechanism is the so-called Offboarding survey. The principal goal of this survey is to gather systematic feedback from departing employees to understand their reasons for leaving, identify areas for improvement in the employee experience, and ultimately reduce future unwanted turnover. This is:

- Understand reasons for leaving
- Identify areas for improvement in the employee experience:
- Reduce future unwanted turnover

If we disaggregate the data provided by these offboarding survey, we obtain the following results:

	TOTAL	%
INTERNAL COMMUNICATION	3,82	76,36%
INTRACOMMUNICATION IN THE WORK TEAM	4,09	81,82%
RELATIONSHIP WITH SUPERVISORS	4,64	92,73%
SUPERVISION DUTIES	4,67	93,33%
WORKING ENVIRONMENT	4,52	90,48%
WORKLOAD	3,86	77,27%
WORK RELATIONS AND CONTACTS	4,33	86,67%



The average satisfaction rate was 85,5%, a satisfactory figure, but attention should be paid to workload and internal communication, which are the aspects that scored significantly below the average.

3. Improved action plan 2024-2027

In view of the outcome of both the internal surveys, which provided valuable insights into the perceptions and experiences of our researchers and staff, and the evaluation process carried out by the appointed experts, which offered external validation and recommendations for further enhancement, BCAM reaffirms its commitment to continuously improving the Center's Human Resources Strategy for Researchers (HRS4R). We recognize that fostering an attractive and supportive research environment is paramount to achieving our scientific goals and maintaining our position as a leading research institution in the Basque Country and beyond. Building upon the progress made and addressing the feedback received, our strategic axes will continue to be fundamentally the following five, each with a renewed emphasis and specific objectives to drive meaningful impact.



Ethical and professional aspects

Respect the ethical practices recognized and the essential ethical principles related to their specialties and the labor conditions of R&D careers.



Recruitment

Improve the recruitment methods and career evaluation/appraisal systems in order to create a more transparent, open, equal and internationally accepted system of recruitment.



Working conditions and social security

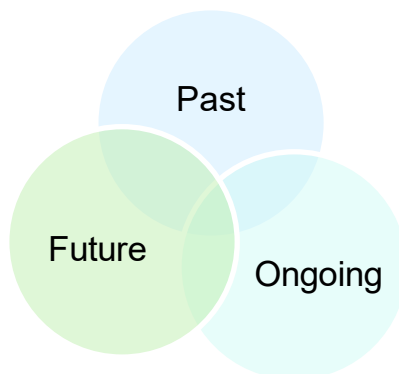
Develop and maintain a supportive research environment and working culture, ensuring adequate social security coverage according to their legal status.



Training

Design training and career development plans to encourage the progress of researchers at any stage of their careers.

Having said this, in this section of the Action Plan we will deepen on the following actions and its impact on the Center:



3.1. Completed actions.

Since the start of the Action Plan 2024-2027 BCAM has carried a variety of actions incardinated in every axe.

Ethical and professional aspects

89.7% of the indicators achieved. The target was to achieve 50%.

Within this axe BCAM has carried out a series of actions to cultivate and maintain an organizational culture grounded in integrity, accountability, and respect. This encompasses several key objectives:

- Promoting ethical conduct
- Preventing misconduct
- Ensuring regulatory compliance
- Fostering a respectful and inclusive environment
- Upholding transparency and accountability
- Protecting individuals who report concerns
- Aligning actions with institutional values
- Continuously improving ethical practices

In essence, the actions within this framework aim to build a strong ethical foundation that underpins all aspects of the organization's operations, fostering a culture of trust, fairness, and responsibility among all its members.

As has been already mentioned, the HRS4R Strategy is fully embedded in BCAM's Strategic Plan. In fact, many of the indicators included in the monitoring of this Plan are related to this Strategy:

Indicator	Baseline e ¹ (*)	Source and date	Expected outcomes 2025	Means of verification and Comments
i. High impact scientific publications				
No. Articles and reviews in Q1	[308]	Scopus Jul/18 - Dec/20. Ranking SJR	340	SCOPUS by BCAM affiliation. Ranking in SJR
No. Articles and reviews D1	[177]		190	
Percentage of articles and reviews in Q1	[82.1]		> 75.0	
ii. Research talent recruitment and training				
No. PhD thesis defended	[32]	Results in the period Jul/18 - Dec/21. Source BCAM database	37	On BCAM website and by means of a certificate of the General Manager
Average of PhDs to be trained in the centre	[33.5]		34	
Average of Postdocs to be trained in the centre	[17.5]		21	
No. of Joint trained researchers in the SO Strategic labs	--		10	
No. of new top senior researchers	[2]		2	
Percentage of women working at BCAM	[28.95]		29	
No. of HRS4R and OTM-R (HR) actions	[5]		10	
No of Gender Balance (GB) actions	[5]		10	
iii. Knowledge and technology transfer				
No. of agreements signed with regional, national and international companies and institutions	[17]	Results in the period Jul/18 - Dec/21. Source BCAM database	19	Submitting the Agreement to the Ministry authorities
No. Joint positions with other stakeholders	[4]		5	Certificate of the General Manager
No. produced assets (SW platforms, patents, datasets, ...)	--		10	
iv. Internationalization				
No. ERC research projects obtained (Coordinator, Participant or Third Party).	[2]	Cordis or Grant Agreement	2	Cordis or Grant Agreement
No. EC research projects obtained (Coordinator, Participant or Third Party). Excluded the ERC grants.	[7]		8	

To monitor the compliance of the Plan BCAM follows various evaluation systems. On the one hand, once per semester BCAM organised the so-called guarantor meetings. BCAM convenes guarantor meetings on a semesterly basis. These meetings serve as a key mechanism for internal oversight, bringing together BCAM researchers entrusted with the correct execution of the Plan. During these sessions, the designated guarantors meticulously track and follow up on relevant performance indicators. The current guarantors are:

- Luis Vega
- Joaquin Serra
- Javier Fernández de Bobadilla
- Jose Antonio Lozano
- Elena Akhmatkaya
- David Pardo
- Michael Barton
- Marco Ellero

- Arghir Zarnescu
- Carlos Pérez
- Luz Roncal
- Santiago Mazuelas
- Gianni Pagnini
- Pedro Caro

Also, halfway through the Plan's implementation period, BCAM prepares and submits a comprehensive midterm report to the Spanish Ministry. This formal report aims to provide an official assessment of the Plan's progress and to accredit the correct execution of the defined indicators.

BCAM further disseminates its progress and achievements in meeting the established milestones through its annual **Activity Report**.



Published during the first semester of each year, this report offers a comprehensive overview of all significant activities undertaken by BCAM in the preceding year. Critically, the Activity Report details the embedding and implementation of the Human Resources Strategy for Researchers (HRS4R) within BCAM, showcasing its commitment to this important framework.

As a way of strengthening the implementation the HRS4R Strategy at BCAM, thanks to the securing of complementary funds for the launch of the BCAM Talent Hub, BCAM has incorporated two more professionals to the already mentioned HRS4R Working Group:

Person	Role
Lorea Gómez	General Manager
Ana López	People Care Officer
Oriana Elejalde	Gender Equality Officer
Estibaliz Gutiérrez	Communication Manager
Paula Gostín	HR Management Assistant
Irati Landa	HR Management Assistant

These additional assistants will provide the department with more personnel dedicated to the practical implementation of the HRS4R action plan. This includes tasks such as developing and updating internal regulations, organizing training and development programs, improving recruitment and selection processes, and ensuring fair and transparent evaluation procedures. With more hands-on deck, BCAM expects to accelerate the implementation of the various actions outlined in the HRS4R strategy. This could also help providing more focused and personalized support to BCAM's researchers regarding their rights, obligations, career development, and working conditions.

Complementarily to this and in response to the recommendations put forth by the evaluation team, BCAM), as seen in the previous section of this report, has established a dedicated **HR Logo Committee**, which works alongside other bodies to implement and embed the HRS4R Strategy in BCAM's everyday life. As previously highlighted, the mandate of this committee is to ensure a robust alignment between policy compliance measures, ongoing development initiatives, and the overarching strategic objectives of the institution.

Having said that, in March 2024, the Basque Center for Applied Mathematics (BCAM) formally established its dedicated **Whistleblowing Channel**, known as the BCAM Reporting Channel. This secure and confidential mechanism has been implemented to facilitate the reporting of potential infringements by individuals operating within both the private and public sectors. The channel is specifically designed to be accessible to informants who have acquired information regarding violations within a work-related or professional sphere, strictly adhering to the stipulations outlined in Article 3 of Law 2/2023, dated February 20, which governs the protection of individuals reporting regulatory breaches and acts of corruption.

Regarding the **review of BCAM Policies**: During this last period, in a continuous improvement process, BCAM has reviewed and implemented the following policies:

- **Remuneration policy:** The aim of this policy is to establish a fair, transparent, and competitive framework for compensating its employees. Its primary goals are to attract and retain talented researchers and support staff, motivate high performance and productivity, and align individual and team efforts with the center's overall research objectives and strategic goals.
- **Work-life balance policy:** This policy seeks to cultivate an environment where employees can effectively manage their professional responsibilities alongside their personal lives and well-being. The aim is to foster a supportive culture that recognizes the demands of BCAM's employees and provides flexibility and resources to help individuals achieve a healthy equilibrium. This policy includes provisions for flexible work arrangements, leave policies, access to support services, and initiatives that promote a positive and sustainable work environment.
- **Telework policy:** This policy aims to establish the guidelines and procedures under which BCAM employees may perform their work remotely, either on a full-time or part-time basis.
- **OTM-R policy:** This policy has been elaborated to ensure that the recruitment processes for all positions, are fair, equitable, and designed to attract the most qualified candidates. The core objectives include enhancing transparency in advertising positions, clearly outlining selection criteria and procedures, and ensuring that candidate evaluations are based purely on merit, skills, and experience relevant to the role.
- **Short stay policy:** This policy's main goal is to facilitate and regulate short visits by predoctoral students who are enrolled in a doctoral program at another institution.

Building upon its established framework of inclusive policies, the Basque Center for Applied Mathematics (BCAM) has recently formalized its commitment to diversity and equity through the approval of its inaugural **LGTBIQ+ Plan**. This strategic initiative is designed to cultivate a more inclusive, safe, and respectful environment for all individuals working and studying at the Centre, irrespective of their sexual orientation, gender identity, or gender expression. More specifically, the LGTBIQ+ Plan is structured to actively contribute to the following key areas:

- **Combating discrimination and harassment:** Implementing proactive measures to prevent and address any instances of discrimination or harassment based on sexual orientation, gender identity, or gender expression.
- **Promoting inclusion and visibility:** Fostering a culture that actively embraces and celebrates the diversity of the LGTBIQ+ community within BCAM, ensuring their experiences and perspectives are visible and valued.
- **Ensuring equal opportunities:** Guaranteeing equitable access to opportunities for all individuals, regardless of their sexual orientation, gender identity, or gender expression, in all aspects of their professional and academic engagement with the Centre.
- **Creating a positive working environment:** Cultivating an atmosphere of mutual respect, understanding, and acceptance, where all members of the BCAM community feel safe, supported, and empowered to thrive.

Also, in further alignment with its commitment to fostering a respectful and secure working environment, the Basque Center for Applied Mathematics (BCAM) has officially approved and implemented a comprehensive **Sexual Harassment Protocol**. This protocol serves as an overarching institutional mechanism designed to proactively prevent, effectively address, and ultimately eliminate any form of harassment within the workplace. It is intended to provide a consistent framework across BCAM, with the understanding that in specific instances, distinct protocols may be required at the national level, tailored to the particular type of harassment and in accordance with prevailing local legislation.

In October 2024, marking a significant step in its continuous pursuit of the highest standards of ethical conduct in research, the Basque Center for Applied Mathematics witnessed the appointment of two esteemed researchers, Dr. Tomás Teijeiro and Dr. Santiago Mazuelas, to the **Ethics Committee of the Basque Autonomous Country**. This notable inclusion underscores the Center's unwavering commitment to cultivating and maintaining a robust and ethically sound environment for all its research endeavors.

As it will be seen in other sections of this report, to support the implementation of its Gender Equality Plan, and therefore, this Strategy,



BCAM created the Gender Equality Committee. The **Gender Equality Committee** is made up of volunteers, representatives of the different bodies involved and technical staff and it will be responsible for the implementation and execution of the plan's actions. The Gender Equality Committee carries out the monitoring and evaluation of the plan during its usual meetings by using the annual equality plan and the monitoring and impact indicators defined in the section on measures, deadlines, calendar and indicators. At the beginning of the year, an evaluation is carried out and a report is presented to the monitoring Committee, the decision-making bodies and sent to all the staff. The report will include the following contents:

- Evaluation of the previous year's management plan and monitoring of indicators.
- Evaluation of the internal organisation of the equality commission.

This committee is renewed yearly, opening the call to any BCAM member that might be interested in taking part of this initiative. Currently, the committee is made up of the following BCAM members:

Person	Role
Lorea Gómez	General Manager
Ana López	People Care Officer
Oriana Elejalde	Gender Equality Officer
Naiara Alcobre	Communication Manager
Pablo Merino	PhD Student
Maíra Aguiar	BCAM Researcher
Matteo Croci	BCAM Researcher
Andrea Olivo	Postdoctoral Fellow

Recruitment

81,8 % of the indicators achieved. The target was to achieve 50%.

The overarching aim of actions within the Recruitment axe is to strategically attract, engage, and secure highly qualified and diverse talent that aligns with the organization's needs, values, and future objectives. This involves a multifaceted approach focused on:

- Identifying talent needs
- Attracting qualified candidates
- Ensuring fair and equitable processes
- Assessing candidate suitability
- Providing a positive candidate experience
- Efficiently onboarding new hires
- Complying with legal and regulatory requirements
- Building a strong employer brand
- Continuously improving recruitment practices

Ultimately, this axe strives to build a high-performing and engaged workforce that contributes to the organization's success by attracting and retaining the best possible talent.

Development of the International Reception Office

Traditionally, there was a Recruitment & People Care area, in close collaboration with BCAM's Project Office, which was responsible for developing all the actions within the field of recruitment of research personnel, developing tasks related to the accompaniment of the researcher in the center. This year 2024, it has been possible to centralise all the tasks of a Human Resources department, focusing on attracting, training, and retaining talent, thus consolidating a Talent Attraction office. This office, called **Talent Hub**, is led by the figure of People Talent Attraction in collaboration with two figures of Management Assistant, who have contributed to its launch and implementation, from the Human Resources area of the center.

The name BCAM Talent Hub suggests an association with values such as:



BCAM Talent Hub has a logo, for which a magnifying glass and a person have been used, alluding to the values to be represented, i.e. a magnifying glass as a symbol of the search for talent and people, because they are the core of BCAM.



Due to the fact that a large part of our staff is of international origin, we have worked to extend the support service for international researchers through the creation of the 'International Welcome Office'. This office will support researchers in all administrative procedures:

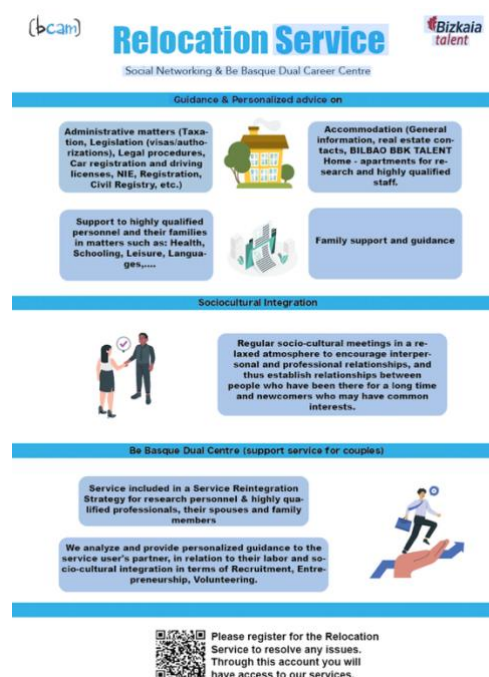
- Support in administrative procedures for researchers and their families (taxation, legislation - visas/permits-, legal procedures, identification number of foreigners-NIE, etc.).
- Accommodation (general information, property contacts, access to facilities for researchers: BBK Talent Home).
- Support in integration and bureaucratic procedures for international staff joining, as well as procedures related to health, digital certificate, maternity/paternity benefits, etc.
- Landing service. Welcome service for researchers and their families. Financial support for relocation.

Furthermore, in this area BCAM has the support of Bizkaia Talent in the social and cultural integration of the researchers who come to BCAM and their families in services related to schooling, leisure, advice on tax declarations, etc.

To support this, manuals have been created with the steps and times involved in an expatriation, to guide and help our international talent in such a crucial decision as this. Likewise, a manual of the city of Bilbao has been created to provide them with cultural information, accommodation and means of transport. After launching the Talent hub, it has been proceeded to communicate the launching of the project and to communicate the importance of talent management and attraction for BCAM: we sent an e-mail to our team and updated the information on the website.

To lead the project, the team in charge of People Care has been trained to provide the team with knowledge and keep them up to date on attraction. To this end, they have participated in several courses:

- **TALENT STRATEGY'** programme of Bizkaia Talent, which began in January and ended in June. This is a training programme involving around twenty industrial, technological and service companies, developed within the framework of the Bizkaia Provincial Council's Talent Commitment Strategy so that companies in Bizkaia can design and align their talent strategy. The programme includes Personalized diagnoses, training sessions and support to implement an effective action plan. It focuses on attracting, and retaining talent, and is aimed at companies with consolidated people departments that are already working on talent strategies and positioning themselves as quality employers.
- **Tips for incorporating a foreign professional:** throughout the year, the Talent Hub team has participated monthly in various workshops organized by Bizkaia Talent, in which they are trained in administrative and bureaucratic tasks, to facilitate the incorporation and reception of international staff.
- **Gender Equality:** Two training sessions were held during the year, one on **UNCONSCIOUS GENDER BIASES IN RESEARCH AND EVALUATION** of research and academic staff and the other on promoting gender equality in the organization.



In order to measure the impact of the actions carried out in Talent Hub, a series of KPIS have been defined, established in a schedule, which set the baseline for the actions of this office and will provide the metrics for the annual evaluation and the impact on the results. To STRENGTHEN THE STRATEGY FOR ATTRACTING TALENT, BCAM, through the Talent Hub, has made several improvements, including the following:

- **DIAGNOSIS OF BCAM'S TALENT ATTRACTION STRATEGY:** An analysis of the current talent attraction strategy has been carried out to identify the external and internal factors that influence the attraction of talent, both weaknesses and strengths, threats and opportunities (SWOT). This diagnosis serves as input for the rest of the tasks, which will be developed throughout the project, focusing and paying special attention to the weaknesses.
- **ANALYSIS OF CURRENT CHANNELS AND DEFINITION OF TOOLS FOR THE RECRUITMENT OF INTERNATIONAL STAFF:** It has been analysed the current dissemination channels that BCAM has for the publication of vacancies and, in parallel, with the aim of improving the current strategy of identifying the most effective recruitment channels and platforms, a survey has been launched among the research staff to analyse the different tools proposed.
- **NEW JOB OFFER DESIGN:** We have also redefined our job offers, making them attractive and accessible to our target audience and we are working on the design of a more visual template, which will facilitate word of mouth and which our staff can share with all BCAM job vacancies.

Development of BCAM Programmes, international laboratories, and agreements to attract talent:

With the intention of continuing to give undergraduate and master's degree students not only from Spain, but also from abroad, the **"BCAM Aulas Programme"** **offers** them the opportunity to get to know and be part of BCAM. These "Aulas" are spaces that act as joint laboratories for cooperation in training and research activities in the field of applied mathematics, which will allow the center to continue building solid and lasting relationships with other institutions, facilitating the exchange of talent. This collaborative spirit will also foster knowledge transfer and create networking opportunities. As a result, in 2024, we have reached two "BCAM Aulas Programme" with the following institutions:

UNIVERSITÀ DEGLI STUDI DI TRIESTE	UNIVERSIDAD PÚBLICA DE NAVARRA

Likewise, BCAM has the “**BCAM Internships Programme**” and it is one of the most used access routes for students. Through this channel, students begin to have their first work experiences, gradually approaching the world of research. In this line, the following areas have been worked on:

- Contacts have been developed with study centers and Universities, in which degrees and masters in our discipline are taught, in order to disseminate our job offers among their students.
- Agreements have been signed with different centers and universities.

Signing collaboration agreements with leading universities at local, state, and international level is a fundamental strategy for BCAM in its mission to attract and retain outstanding talent in the field of applied mathematics. These agreements offer a series of key benefits that strengthen our ability to recruit the best professionals and students. As a result of our actions, in this first year, we have managed to sign agreements with the Following Institutions:

AGREEMENTS SIGNED DURING THE YEAR 2024	
UNAM (Coutele)	University of Amsterdam
Department of Information Engineering, University of Pisa, Italy	Universidad de Mondragón
UPV/EHU: Universidad Pública del país Vasco	Università degli Studi di Bari
Institute of Mathematics and Statistics of the University of São Paulo	ENSTA Paris, Polytechnique Institute of Paris
Universität Duisburg Essen (Germany)	Digipen
Universidad de Granada	

The objective of signing at least 10 institutional cooperation agreements has been exceeded, and since 11 agreements have been signed, the indicator is considered achieved.

Another key aspect in attracting junior talent to our center, is through the delivery of lectures at universities, for it:

- In February 2024, BCAM attended DigiPen Europe-Bilbao: to give a lecture ('M³OVE') and a presentation about the centre. The students were given a complete overview of BCAM's professional field, revealing a world of opportunities.



- In March and April 2024, they were held at the UPV in the Mathematics degree. In both talks, apart from the information about the research provided by the research speakers: Javier de la Bodega, Henryr Andrés Cortés and Mauricio Rincón Bonilla, Ana López was in charge of presenting the Internships programme to the students present.

AULA UPV/EHU-BCAM: LA CONJETURA ARCO-FLOER. CUANDO LA ARITMÉTICA TOPA CON LOS SISTEMAS HAMILTONIANOS

Ponente: Javier de la Bodega

Fecha y hora: 13 de marzo, 2024 | 12:00 - 13:00

Lugar: Aula 1.10 Facultad de Ciencia y tecnología.

Campus: Leioa (UPV/EHU).

Abstract:

En los años 80, el matemático japonés Junichi Igusa observó una extraña relación entre la aritmética y la topología de las superficies algebraicas. Más concretamente, cabe esperar el tomar un polinomio f con coeficientes enteros y considerar el número de soluciones de la ecuación $f(x) = 0$ módulo n , cuando n crece en ciertos límites topológicos del espacio $H^1(\mathbb{C}, \mathbb{C})$. Estas observaciones dieron lugar a la hoy conocida como conjetura de la monodromía, la cual conecta directamente el interés de la comunidad de geometría algebraica al explorar una conexión entre la teoría de números y la teoría de singularidades. A pesar de haber sido verificada en varios casos, a día de hoy esta conjetura está lejos de estar resuelta. En este caso, el problema ha permitido avanzar en otros ámbitos relacionados, como la integración motivada, la geometría no-abeliana o la teoría de modelos. Más recientemente, los matemáticos Budur, P. de Bobadilla, Li y Nguyen propusieron una línea para atacar la conjetura explotando las propiedades simétricas de la singularidad II^1 . De esta manera formularon una segunda conjetura en su misma filosofía que la de la monodromía, la conjetura arco-Floer. En este caso, los objetos aritméticos están relacionados no solo con la topología de la singularidad, sino con la teoría Floer propia de la topología simpléctica. En esta charla se introducirá a los estudiantes a las conjeturas de la monodromía y de arco-Floer, y se explicará en estado actual de las mismas.

Javier de la Bodega

Javier de la Bodega es un alumno de cuarto año de doctorado, el cual se está realizando en copartida entre BCAM y la universidad KU Leuven de Bélgica, y bajo la supervisión de Javier Fernández de Bobadilla y Piero Budur, respectivamente. Su investigación se centra en la conexión entre los espacios de curvas en geometría algebraica y las teorías Floer en topología simpléctica. Como estudiante, de la Bodega cursó el grado de matemáticas de la UPV/EHU, y el MSc en Pure Mathematics de la universidad de Cambridge, en Reino Unido.

Página web: <https://sites.google.com/view/auladebodega>

INSCRÍBETE AQUÍ

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www.bcamath.org

AULA UPV/EHU-BCAM: DE LOS ÁTOMOS A LAS APLICACIONES: DISEÑO Y CARACTERIZACIÓN DE MATERIALES PIONEROS MEDIANTE SIMULACIONES ATOMÍSTICAS

Ponentes: Henryr Andrés Cortés y Mauricio Rincón Bonilla

Fecha y hora: 10 de abril, 2024 | 12:00 - 13:00

Lugar: Aula 1.10 Facultad de Ciencia y tecnología

Campus: Leioa (UPV/EHU).

Inscripción: <https://forms.gle/3Agm7vymUZY5T5>

Abstract:

Las simulaciones atomísticas representan un enfoque transformador en la ciencia de los materiales, ya que ofrecen una visión sin precedentes de los comportamientos fundamentales de los materiales a nivel atómico. Aprovechando modelos computacionales para simular las interacciones y la dinámica de átomos y moléculas dentro de un material, los científicos pueden predecir y analizar una amplia gama de propiedades, como la resistencia mecánica, la conductividad térmica y la estructura electrónica. Además, las simulaciones atomísticas facilitan la exploración del comportamiento de los materiales en condiciones extremas que son difíciles de reproducir experimentalmente. Como resultado, pueden acelerar el descubrimiento de nuevos materiales y reducir significativamente el costo y el tiempo asociados a los enfoques experimentales de ensayo y error. En el Centro Vasco de Matemática Aplicada (ICAM), el grupo Modeling and Simulation in Life and Materials Science (MSLS) de la profesora Elena Armatukhina está a la vanguardia del desarrollo de técnicas innovadoras para mejorar la precisión y velocidad de las simulaciones atomísticas. El grupo también está desarrollando técnicas para superar los múltiples desafíos de tiempo y longitud que intervienen en el comportamiento de los materiales más avanzados tecnológicamente, así como explorando el uso de métodos de aprendizaje automático para modelar, caracterizar y mejorar mejor los materiales objeto de estudio. Las aplicaciones prácticas de estas tecnologías son amplias y de gran impacto.

Actualmente, estamos enfocados en el desarrollo de técnicas más seguras y eficientes, un componente crítico en la transición hacia fuentes de energía sostenibles. Además, colaboramos con empresas locales en la creación de soluciones avanzadas para el almacenamiento y transporte de combustibles de hidrógeno. Un prometedor vector investigativo alternativo. En esta charla hablaremos de nuestros métodos, de cómo los utilizamos en estas proyectos y de las infinitas posibilidades que nos ofrecen en el campo del diseño computacional de materiales y la innovación.

Sobre los ponentes

Henryr Andrés Cortés obtuvo una licenciatura en Física de la Universidad del Guindo Colombia, y un doctorado en Ciencia y Tecnología en Física de la Universidad Nacional de San Martín, Argentina (2020). Su investigación se centra en la simulación multiescala de materiales, integrando, para avanzar, su conocimiento y experiencia. Después de doctorarse, se unió al grupo de Simulaciones Moleculares en Materia Condensada de la Universidad de Buenos Aires, Argentina, donde investigó la partición de solutos alcohol-agua dentro de nanoporos utilizando dinámica molecular y modelos coarse-grained. En 2021 se unió al grupo MSLS de la Prof. Elena Armatukhina en BCAM, donde ahora es doctorando de campos de fuerza y simulaciones atomísticas de electrolitos acuosos, así como en el modelado de interfaces en baterías comerciales de iones litio.

Mauricio Rincón Bonilla es Ingeniero Químico con más de diez años de experiencia en métodos multiescala en Biociencia computacional. Obtuvo un doctorado en Ingeniería Química (2014) de la Universidad de Guayaquil Ecuador y se doctoró como post doctor en la misma universidad (2014-2018). En 2017 se incorporó al grupo MSLS de la Profesora Elena Armatukhina en BCAM. Aquí, co-dirige un equipo que aplica técnicas avanzadas de simulación en el estudio de materiales para almacenamiento energético. Mauricio obtuvo los títulos de Máster y PhD (2023) y Juan de la Cruz (2024) de la NEI, así como HPC-Europe (2018) de la comisión europea. Ha sido co-PI y miembro de equipos de numerosos proyectos nacionales e internacionales relacionados con el modelamiento de procesos, simulación en sólidos, líquidos, interfaces.

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As a result of these actions, BCAM has grown by 49% in the number of interns in 2024, as can be seen below:

	2023	2024
Curricular Practices	11	15
TFG (Final degree thesis)	0	4
TFM (final master's thesis)	6	8
Visiting PhD	5	16
TOTAL STUDENTS	22	43

As for the number of talks given in centers and institutions, we had set a target of 4 in one year and 3 have been given, so we intend to make up for this shortfall, increasing the annual target for the 2025 financial year.

The center also promotes and strengthens international joint research laboratories, including new structures and newly created laboratories in co-supervision with renowned researchers from other centers and/or universities, which means a strengthening of the center's research lines and its international positioning. The agreement will be materialized through different activities such as joint supervision of postdoctoral researchers or visits to the center and joint participation in scientific activities. The joint laboratories are:

Joint Research Lab U. Sussex	 
Joint Research Lab U. Oxford	 
Joint Research Lab ETH Zurich	 
Joint Research Lab Rényi Institute	 
Joint Research Laboratory on Offshore Renewable Energy (Tecnalia-UPV/EHU-BCAM)	  
Joint Research Laboratory on Artificial Intelligence (Tecnalia-UPV/EHU-BCAM)	  
Transmath - Transborder Laboratory for Mathematics and its Applications	    

It also has a **Knowledge Transfer Unit (KTU)**, which was created as a result of the increase in transfer activities developed by the center, with the aim of promoting the transfer of research results and best practices to different sectors such as energy, health, advanced manufacturing or climate change.



The purpose of BCAM's Knowledge Transfer Unit is structured around four main objectives.

One of BCAM's most important missions is to disseminate knowledge and technology to industry and society in general. For the entity, it is essential to transfer the research results obtained to sectors such as biosciences, health, energy, advanced manufacturing, telecommunications, and transportation, including local, national, and international entities. To this end, BCAM offers its expertise in numerous research fields to SMEs and large industrial groups and supports the creation of new companies.

It is worth mentioning that BCAM reached a commitment to formalize **1 new joint position per year**. In 2024 the Center complied with this by establishing one Joint PhD Student position with the company VERSES, on “goal-directed behavior and the origin of life”.

Principles of Open, Transparent and Merit-based recruitment.

Throughout 2024, the recruitment and selection policy has been updated in accordance with the principles of open, transparent, and merit-based recruitment. In addition to revising our principles, we have trained people in senior positions at the center in transferable skills, leadership, and talent attraction.

The training activity was organized by *Skills 4 Science*, a coaching and training company specialized in the development of “soft skills” and with more than 15 years of experience in training in industry and academia in the field of transferable skills and leadership. The target audience was all those who currently lead teams, or who we believe are likely to do so, and who participate or may participate as evaluators in selection processes. Three sessions were organized, dealing mainly with talent attraction, leadership style, collaboration, and communication in the team, as well as motivation. In the end, this initiative was attended by an average of 20 people, distributed among the different research groups of the Center.

For each selection process, BCAM assigns a Recruitment Evaluation Committee. This committee is responsible for evaluating and selecting the person who will become part of BCAM according to the defined evaluation process. The Recruitment Evaluation Committee is composed by a Principal Investigator or Research line leader, and as second evaluator, which is assigned by the Scientific Director and the Center Manager, to a Research line leader or an experienced Researcher, with a deep experience in the area of knowledge and the required technical skills necessary for that profile. In case of disagreement of the Evaluation Committee, a member of the BCAM Management Committee (BMC) of a research line, different from the vacant one, will intervene to reach an impartial agreement. In all the cases, the members of the Recruitment Evaluation Committees are experts in the field, with broad professional experience and know-how, highly qualified, and able to speak different languages. Likewise, in each selection process, the assigned committee signs a document in which they declare the absence of conflict of interest, so that the process respects the principles established in the OTMR (Annex 2).

1. Consolidation of the Center's image and presence

4.1.- Elaboration of material (graphic and audiovisual) to promote BCAM's presence in the media.

Within the communication strategy of the center, in the axis of attracting talent we focus on two axes; positioning BCAM as a reference research center in applied mathematics in the digital environment and content curation through the platforms already developed. In this sense, the creation of content to attract talent will be focused on social networks and web, offering and publishing information about the opportunities to build a research career at BCAM, also showing the character of the center and testimonials of the research team. In terms of graphic material, a new information brochure has been designed to attract talent:



BCAM's corporate videos are important to BCAM Talent Hub for several key reasons: fostering communication, talent promotion, talent attraction, community engagement and knowledge dissemination. The objective was 4 videos and a total of six have been produced.

- VIDEO 11 F; INTERNATIONAL DAY OF WOMEN AND GIRLS IN SCIENCE: Feb.24
- JUAN DE LA CIERVA AID PROMOTION VIDEO: April 2024
- VIDEO PROMOTION OF IKERBASQUE AID: April 24
- RAMÓN Y CAJAL AID PROMOTION VIDEO April 2024
- VIDEO PROMOTION AID MSCA JUDIT MUÑOZ MATUTE April 2024
- VIDEO PROMOTION AID MSCA NICOLÁS MORENO April 2024

The objective was 4 videos and a total of six have been produced.

Dissemination of the center in the local media

Dissemination of the center in local media: Publicizing BCAM (Basque Center for Applied Mathematics) in the local press is important for the BCAM Talent Hub for several key reasons: Visibility and Recognition, Talent Attraction, Networking, Social and Economic Impact.

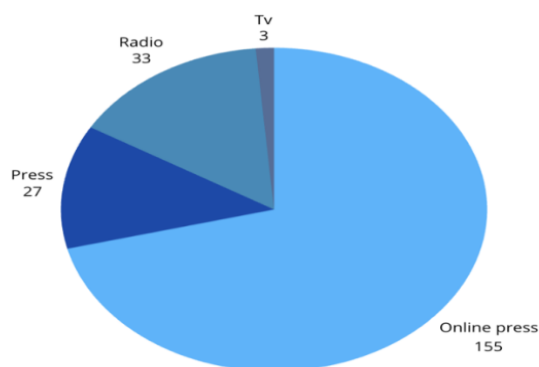
Over the course of 2024, BCAM has maintained a notable presence in the media, with a total of 274 appearances, especially highlighting the interviews with José Antonio Lozano and Lorea Gómez, Scientific Director and Manager of the Center respectively. These interventions have been crucial to strengthen BCAM's visibility, highlighting its research work and its impact on the scientific community and society in general.

This year, the Center's management has been interviewed by the following **radio stations**:

RADIO STATIONS DURING THE YEAR 2024	
Cadena SER (Radio Bilbao)	Radio Euskadi (Boulevard)
Onda Cero	Deia
COPE Euskadi	El Correo
Bizkaia Irratia	Gara
Radio Popular	Eldiario.es
Periódico Bilbao	Opinion article Grupo Noticias
Health Report Grupo Noticias	

Interviews to researchers:

INTERVIEWS TO RESEARCHERS DURING THE YEAR 2024
Judit Muñoz Matute in Berria, Deia and on Radio Euskadi.
Daniel Eceizabarrena on Radio Euskadi, Euskadi Irratia and El Semanal XL
Luca Fanelli on Radio Euskadi
Javier Fernández de Bobadilla on TVE, El Correo, Berria, Deia and Radio Euskadi
Onintze Zaballa in Deia
Verónica Álvarez in Deia

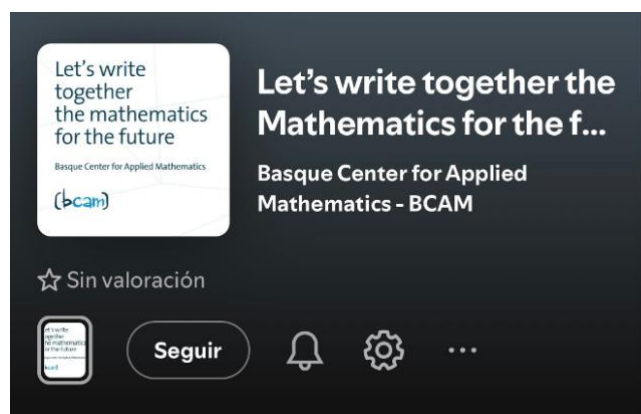


Total of Media impacts in 2024: 240

The aim of at least 20 publications during the year has been successfully exceeded.

BCAM Podcast:

Another action has been the **recording and launching of the BCAM Podcast**: In 2024 we launched our BCAM podcast, "Let's Write Together the Future for Mathematics," in Spotify, there we delve into the transformative ideas shaping the landscape of mathematical research and its profound impact on our world. Through engaging conversations with researchers, we explore innovative solutions, projects, and the evolving role of mathematics in addressing global challenges.



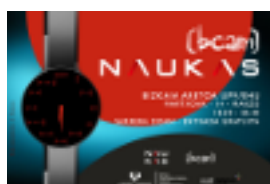
The aim was to record 4 sessions, and a total of six have been produced.

Promote BCAM's image abroad, give talks and lectures on BCAM and mathematics in European master's and doctoral programs.

As for the objective of promoting BCAM's image, we will take into account two environments, both online and offline. Regarding the online strategy, we will work on content curation first from its analysis of the current presence of the center on the platforms LinkedIn, Youtube, Twitter and BCAM's new website. Our work on these platforms is to be able to offer information with clear messages and a good SEO positioning for users who browse our platforms. This information will be based on making visible the work and daily life of the research staff at BCAM, as well as the atmosphere of the center and the different events that we organize and co-organize to attract talent, taking into account the characteristics of each audience that is on the platforms.

BCAM has several programs to promote the scientific work of the center to society. The Matematikhariak program focuses on promoting and making STEAM careers visible among the youngest students, participates closely in the BCAM-Naukas event together with the Chair of Scientific Culture and annually in the cycle of talks on Mathematics in Everyday Life in Bidebarrieta coordinated by the mathematician and professor Raúl Ibáñez of the UPV/EHU. It also participates in several external programs such as Bizilabe, Zientzia Azoka of Elhuyar Zientzia and Zientzia Astea and La noche europea de los investigadores, both coordinated by the UPV/EHU.

▪ BCAM – NAUKAS



On March 14, International Mathematics Day, the fifth edition of BCAM Naukas was held at the Bizkaia Aretoa of the UPV/EHU. Once again this year, BCAM - and the Chair of Scientific Culture of the University of the Basque Country - prepared a program of workshops and mathematical monologues.



▪ Parekoen Topaketa

The Bizilabe 2024 initiative has counted with the participation of 19 women from Bilbao from the professional field and 80 young people between 10 and 16 years of age from the -abe program. At each table there has been a scientist and a group of young people. First, the professional woman introduces herself and informs the young people about the work she does and, subsequently, the young people have informed the professional about the project they are carrying out in the program. Through the exchange of ideas, the scientist offers a series of suggestions and advice to the young people, who have the opportunity to learn more about her activity through questions to the scientist.



This is the 3rd time that the peer encounter is held in Bilbao. It is an extracurricular activity that was launched in 2017 and in which young people work on science and technology. When it comes to being interested in these areas, the actions carried out in free time have a great influence. Consequently, the interpenetration between the different institutions in Bilbao (institutions and institutions, schools, companies, families) is very important and is the result, among others, of Parekoen Topaketa.

Aula de Cultura de El Correo - IA para andar por casa

Aula de Cultura de El Correo - IA para andar por casa: A space for cultural dissemination organized by the newspaper El Correo, which aims to bring topics of general interest to the public through lectures, debates and presentations. This space addresses various topics such as science, literature, art, technology and society, among others. Through these activities, it seeks to promote knowledge and reflection in the community, offering free or low-cost events, where experts in different fields share their knowledge in an accessible and understandable way for all attendees.

Conferencias

El Aula de Cultura de EL CORREO recibe a José Antonio Lozano

El director científico de BCAM charlará sobre 'Inteligencia Artificial para andar por casa'

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[e](#)

BILBAO

LUGAR. Salón El Carmen
FECHA. 24 de octubre de 2024
HORA. 19:30
PRECIO. Entrada libre

El Aula de Cultura de EL CORREO recibe a José Antonio Lozano, director científico de BCAM, quien impartirá la charla 'Inteligencia Artificial para andar por casa'. Estará acompañado por el periodista de EL CORREO Jon Garay.



Innobasque Global Innovation Day:

Event organized by Innobasque, the Basque Innovation Agency, which aims to promote innovation in society and in the business fabric of the Basque Country. This event brings together companies, institutions, researchers and entrepreneurs to share ideas, projects and advances in various fields of innovation. During the Global Innovation Day, conferences, workshops, round tables and exhibitions are held to highlight best practices in innovation, as well as new trends and emerging technologies. It is a key space for networking and collaboration between different actors in the innovation ecosystem. Video



Also, BCAM has participated in international, national and local job fairs. These employment forums can be articulated either online or offline, approaching the universities in their job fairs. This action will also make the work of researchers visible in environments where it is not so present.

- **ECM SEVILLE:** 9th European Congress of Mathematics (9ECM), the quadrennial congress of the European Mathematical Society, to be held in Seville (Spain) between July 15 and 19, 2024. BCAM participated with a stand for talent recruitment.



- Participation in the round table of the session: **“Economic Development Forum 2024 - Brain drain vs talent attraction policies: local perspectives on talent mobility”**, held in Bilbao by Bilbao Ekintza, on Friday, 25 October 2024. where the issues of talent attraction, retention and how to overcome them were discussed.

The objective was to organise at least two congresses aimed at attracting talent, and the target has been achieved.

Talks to students and visits to the center:

Offering talks and school visits to the center by BCAM is critical to the success of the BCAM Talent Hub for several significant reasons: Promotion of Scientific Vocations, skills and Knowledge Development, Knowledge Democratization, Inspiration and Role Modeling, and Fostering Collaboration and Innovation. In summary, offering talks and visits by schoolchildren plays a crucial role in justifying support for the creation of the talent office by demonstrating BCAM's commitment to education, outreach, and talent development from an early age.

TALKS TO STUDENTS AND VISITS TO THE CENTER
Visit of the Artaza - Romo BHI Institute with Mikel Pérez and Leire Garmendia (Research Technician and PhD)
Visit of the Botikazar BHI Institute with Mikel Pérez and Leire Garmendia (PhD)
Researcher Jone Renteria visited her Institute (Research Technician)
Researcher Lore Zumeta visited the Zunzunegui School (PhD)
Visit of the Jesuitas School with Mikel Pérez (Research Technician)
Two visits of the Escolapios School with Luca Fanelli and Luz Roncal (Principal Investigators)
Visit of Eibar Institute with Claudia Peña (PhD)
Visit Eibar BHI (Baccalaureate) with Miguel Aguilera (Ikerbasque Research Fellow)
Visit of the winners of Elhuyar Zientzia Azoka
June 4 with José Ignacio Segovia and Pablo Merino (PhD Students)
June 10 with Leire Garmendia (PhD Student) and Mikel Pérez (Research Technician)
Visits of Beasain BHI and Colegio Vizcaya
Visit to BHI Durango



Also, BCAM has participated in the in **First Lego League** from Euskadi. The FIRST® LEGO® League Challenge is a LEGO® robotics-based educational programme for 10–16-year-olds where teams work on research, coding, engineering and problem solving, building and programming a robot with LEGO® Education materials.

An aim of 10 schools had been set, which has been successfully exceeded.

Working conditions and social security

76,7% of the indicators achieved. The target was to achieve 50%.

The central aim of actions within the Working Conditions and Social Security axe is to establish and maintain a supportive, safe, and equitable environment that promotes the well-being and security of all individuals within the organization. This encompasses a commitment to:

- Ensuring safe and healthy workplaces
- Providing fair and competitive compensation
- Guaranteeing social security coverage
- Promoting work-life balance:
- Fostering positive labor relations
- Adhering to labor laws and regulations
- Providing opportunities for development and growth
- Promoting equality and non-discrimination
- Continuously improving employee well-being

In essence, the actions executed in this axe are dedicated to creating a stable, secure, and supportive ecosystem that values employees' contributions, promotes their well-being, and fosters a positive and productive working environment.

With the aim of building staff loyalty, our onboarding process has been redefined, identifying the different phases:

- Pre-onboarding: where we provide information of interest to the person who is interested in coming to work in our center.
- For the Pre-Onboarding process, we have prepared materials to promote the center, which help to correctly identify all the information of interest related to the center, such as administrative tasks of EU and NON EU staff, first tasks once in BCAM and a presentation with interesting information about our city, which will help them in their first days.
- Onboarding with People Care: where we accompany the new incorporations in their adaptation process.
- Onboarding with the Scientific Director: once a month, we meet the new incorporations with the Scientific Director, so that they can get to know the center firsthand and feel more accompanied in this process.

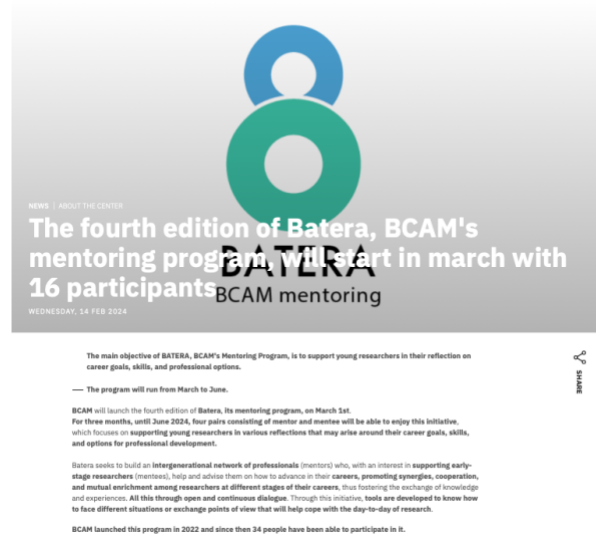
- Follow-up interviews: a questionnaire has been designed to measure the impact of the onboarding process and to monitor the incorporation, providing us with objective metrics. The process has been initiated in a first phase, with the PhD Students team.
- Exit interviews: In order to find out possible areas for improvement, we met with each person leaving the company, with the aim of finding out their motivations and ambitions and collecting this information through objective metrics that provide us with information on feasible improvements.

Also, BCAM has a Doctoral Programme, in collaboration with the UPV-EHU, through which it accompanies doctoral students throughout the life cycle of their doctoral thesis. This programme not only focuses on research but also offers comprehensive complementary training. Students have access to short stays at international institutions, personalised guidance and continuous mentoring. In addition, BCAM organises various training activities and workshops that help doctoral students develop professional and academic skills, thus ensuring an enriching and well-rounded experience during their doctoral studies. The Administrative Office aims to provide administrative support to BCAM doctoral students. The main functions of the Administrative Office are:

- Assistance in obtaining grants and their follow-up (submission of reports).
- Processing of grant-related files: applications, justification, etc.
- Support for enrolment in the University's Doctoral Programme.
- Internal University procedures.
- Annual evaluation.
- Short stays.
- Special agreements (co-supervision, co-supervision, etc.). o Deposit and defence process.
- Monitoring of the different grants.
- Support for the organisation of activities (communication, recruitment, etc.).

As a result of these actions, during the year 2024, **a total of 9 students have defended their doctoral thesis at BCAM**. In addition, the Center currently has more than 50 PhD students. During 2024 we have organized tri-monthly meetings with the PhD Committee, a meeting has been organized to address all their doubts and questions and a closer and more fluid communication forum has been created. We have also proceeded to analyze their situation on an individual basis, through follow-up surveys.

Another of the most significant actions carried out has been the **launching of the BATERA Program**. In March 2024, the Basque Center for Applied Mathematics (BCAM) proudly inaugurated the fourth iteration of its esteemed mentoring initiative, the BATERA Program. This program is strategically designed to cultivate a robust intergenerational network of seasoned professionals (mentors) who are committed to providing guidance and support to early-stage researchers (mentees) in their career progression. Through dedicated mentorship, BATERA aims to foster valuable synergies, encourage collaborative endeavors, and facilitate mutual enrichment among researchers at varying stages of their professional journeys, thereby promoting a dynamic exchange of knowledge and diverse experiences. This is achieved through open and continuous dialogue between mentors and mentees. The initiative further seeks to develop practical tools and insights that empower mentees to navigate diverse professional situations and benefit from varied perspectives, ultimately enhancing their ability to effectively manage the day-to-day challenges inherent in research. Looking ahead to the fifth edition, BCAM is actively engaged in a process of reflection, carefully considering the feedback received from participants in previous cycles. This thoughtful analysis informs the development of an enhanced version of this highly valued program, ensuring its continued relevance and impact within the research community.



Also, In 2024, the Basque Center for Applied Mathematics (BCAM) proudly announced its integration into the **BBK Kuna Kideak 2030 network**, a significant multi-sector alliance comprising over 100 prominent entities. This collaborative initiative has



been established to accelerate the pace of collaboration and innovation within Bizkaia, with the overarching objective of actively implementing the 2030 Agenda and achieving the United Nations' Sustainable Development Goals (SDGs). BCAM's decision to join this network underscores and reinforces the center's enduring commitment to both sustainable development principles and the advancement of technological innovation. As a participating member of this influential network, BCAM assumes the role of "Kidea" for Sustainable Development Goal 9 (SDG 9), which specifically focuses on the critical areas of building

resilient infrastructures, promoting inclusive and sustainable industrialization, and fostering innovation across various sectors. BCAM's extensive experience and advanced knowledge in the field of applied mathematics are recognized as highly valuable assets in addressing these complex challenges and are expected to contribute significantly to Bizkaia's progress and advancements within these crucial domains. The BBK Kuna Kideak network, an initiative spearheaded by the BBK Foundation and its BBK Kuna social innovation laboratory, serves as a dynamic platform that unites more than one hundred leading institutions spanning diverse sectors. This fosters an environment conducive to interdisciplinary collaboration and aims to maximize the societal impact of the participating entities' respective projects. Furthermore, the network provides a vital space for strategic collaboration, enabling members to pool their resources and expertise to collectively address the most pressing challenges of our time, exchange best practices, and gain access to valuable resources and specialized knowledge.

A significant part of the key initiatives undertaken within this strategic pillar, which is socio-cultural, is directly related to the advancement and promotion of Gender Equality. BCAM has a **Gender Equality commission**, composed of members of both its research as well as administrative staff. This commission meets every quarter and it's responsible for the implementation of the actions included in the Gender Equality Plan. Having said this, these actions are specifically designed to address existing disparities, foster a more inclusive environment, and ensure equitable opportunities for all individuals, regardless of gender, across all aspects of the organization's activities and operations. The most relevant actions in this area are described below.

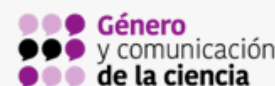
- Since its inception, the Basque Center for Applied Mathematics (BCAM) has demonstrated a strong and consistent commitment to the "**Emakumeak Zientzian**" (Women in Science) initiative, actively participating as a key collaborator. Annually, a diverse array of organizations representing the robust science and technology network of the Basque Country formally join forces as organizers of this significant initiative through the signing of a specific collaboration agreement. By entering into this agreement, these entities collectively endorse the core objectives of the initiative and undertake the responsibility of organizing impactful actions aimed at engaging society as a whole. Furthermore, these participating organizations make a financial contribution, which is essential to the successful development and implementation of the project's various activities. This sustained involvement underscores BCAM's dedication to promoting gender equality within the scientific community and fostering greater engagement of women in STEM fields.



- Another key initiative is the **WomenxAfrica program**. Over the past several years, the Basque Center for Applied Mathematics (BCAM) has actively engaged as a welcoming hosting institution within the framework of the WomenxAfrica program. In 2024, BCAM had the distinct privilege of collaborating with Dr. Myriam Sonia Djoukwe Tapi, a distinguished researcher affiliated with the University of Douala in Cameroon. During her tenure at BCAM, Dr. Djoukwe Tapi undertook a Visiting Fellowship within the Mathematical and Theoretical Biology research line, fostering a valuable exchange of knowledge and expertise between the institutions and contributing to the internationalization of research efforts in this field.



- The Basque Center for Applied Mathematics (BCAM) demonstrates its ongoing commitment to gender equality in science communication through its annual participation in the conference **"Género y comunicación en la Ciencia"** (Gender and Communication in Science), organized by the esteemed University of the Basque Country. This significant event serves as a dedicated platform for critical reflection on the methodologies and approaches through which the gender perspective can be more effectively integrated and enhanced within the realm of scientific communication. The conference is particularly valuable for individuals seeking to expand their competencies in communicating scientific concepts through a gender-sensitive lens and offers a unique opportunity to learn from diverse experiences in inclusive communication practices, as well as to share their own insights and perspectives in this crucial area.



- In recognition of all the work carried out in this regard, in May 2024, the Basque Center for Applied Mathematics (BCAM) was honored with the prestigious **STEAM Euskadi Sariak** recognition for its impactful "Matematikhariak" initiative. This innovative project is specifically designed to introduce young students to the inherent magic and captivating nature of mathematics, offering a novel and engaging perspective on this fundamental discipline. Through the implementation of playful and interactive activities, such as origami, the exploration of



geometric figures, and stimulating mathematical challenges, the "Matematikhariak" project effectively makes mathematics more appealing and accessible to schoolchildren. This significant initiative serves to open doors to the fascinating world of mathematics and plays a crucial role in socializing the understanding that mathematical principles are pervasive and relevant across numerous facets of everyday life.

In November 2024, the Basque Center for Applied Mathematics (BCAM) actively participated in the **Conference on Research Careers 2024**. This significant event was strategically focused on making continued progress towards the establishment of more sustainable working conditions for researchers, the promotion of healthier working environments, the provision of opportunities for the development of new and diverse skill sets, the facilitation of seamless mobility between different sectors, the implementation of effective incentives and rewards systems, and the modernization of research management practices. BCAM's involvement underscores its commitment to fostering a supportive and progressive ecosystem for researchers.



Today's skilled workforce, especially the younger generation, is aware of its value and demands dynamic, horizontal and meaningful work environments. Specifically, they are looking for organizations that offer autonomy in decision-making, real opportunities for learning and growth, and a sustainable work-life balance. BCAM is responding to this paradigm shift by implementing measures that facilitate work-life balance, promote flexibility and enhance individual well-being, as part of a broader strategy of institutional commitment to people.

Thus, we understand that attracting the best talent is only part of the equation; retaining and fostering long-term commitment is equally crucial. At BCAM, we believe it is essential that each team member feels valued, recognized and fully aware of the impact their work has on the organization as a whole. For this reason, we continually develop and implement new initiatives aimed at improving the staff experience, from an approach focused on professional development, recognition and strengthening the sense of belonging.

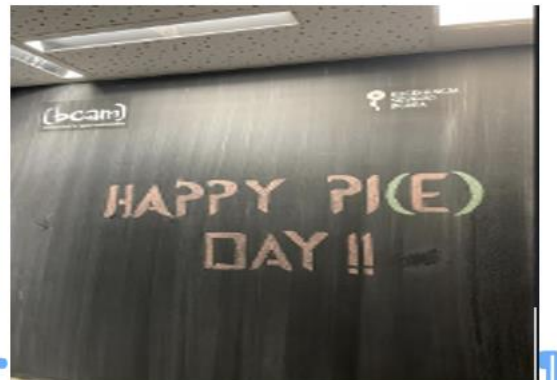
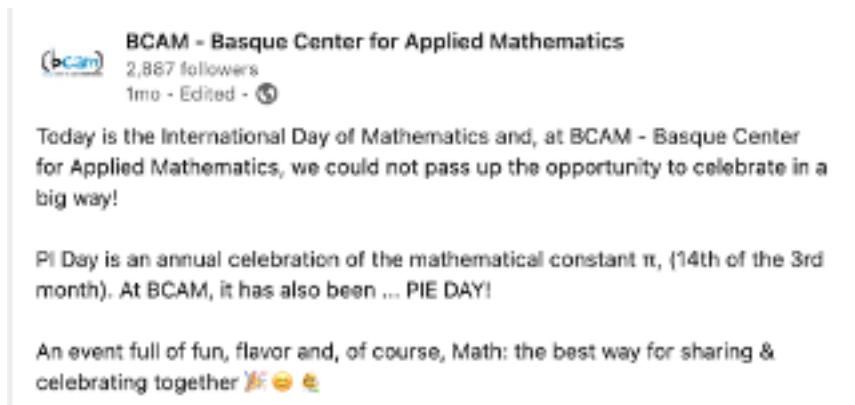
The **work-life balance** is more than a reality at BCAM, and we believe that it is essential to achieve a balance between family and professional life. In order to achieve a balance between work and family life, we offer our team a series of measures that exist at BCAM and are included in a document, which they can request to make it easier for them to reconcile their work and personal life as: medical leave, study leave, children care leave.

Likewise, BCAM has a **Telework policy**, which provides the rules and guidelines to be followed for good management of the telework request by researchers. It may be allowed to telework from one to four days per week, except due to family or health reasons, that it may be allowed to telework 5 days a week. Also, the **digital disconnection** policy has been launched this year. This policy regulates the limitation of the use of communication technologies outside working time, to guarantee respect for rest time, leave, holidays or sick leave. The aim is to promote the right to reconcile work with personal and family activities, avoiding pressure for the employer to continue to dictate instructions outside the office. Another important update has been the elaboration of the **manual for the use of computer resources**, which provides useful tips are given on how to use the means provided by BCAM.

Lastly, The Basque Center for Applied Mathematics (BCAM) firmly upholds the conviction that social activities within a research center yield a wide array of benefits that extend well beyond mere enjoyment. These initiatives are recognized as significant contributors to the overall productivity, well-being, and collaborative ethos that defines a thriving research environment. Furthermore, the promotion of a healthy and stimulating work culture should not be lost, thus creating a collaborative work environment, which promotes creativity, innovation and the exchange of ideas. All of this is aimed at promoting diversity and inclusiveness at BCAM. Supporting the work-life balance of researchers will be crucial to the creation of a positive and healthy work culture. Without losing sight of the engagement of our team, as well as the feeling of belonging, we have organised enjoyable and relaxed days that favour integration, teamwork, motivation and a good working environment.

The following are particularly noteworthy among the various social engagements undertaken during the preceding months. The following are particularly noteworthy:

- **Pi Day Celebration:** In observance of The International Day of Mathematics on March 14th, BCAM organized a special "Pie Day" event. This provided a convivial occasion for members to celebrate the significance and ubiquity of mathematics in a relaxed and engaging atmosphere.



- **Winter Cocktail Reception:** This annual gathering serves as an important opportunity for all BCAM members, including researchers, administrative staff, and collaborators, to come together and share a special moment as a unified center, fostering a sense of community and camaraderie.
- **Mathematics In Everyday Life:** In April and May 2024, “Mathematics in everyday life” is back, organized by BCAM, the Faculty of Science and Technology of the UPV/EHU and the City Council of Bilbao. This year it will be held on Thursdays April 18 and 25 and May 2 and 8 at 19:00 in the



Assembly Hall of the Bidebarrieta Library. This XXVI edition will be focused on highlighting the versatility of mathematics in different aspects of society, technology, scientific research and art. Since its inception, the aim of the conferences is to bring

mathematics closer to the general public by showing the importance it has had in the history of mankind, deciphering the important applications it has for society, discovering the deep relationships with art and culture and even sharing its beauty.

- **Pint of Science:** The Pint of Science festival aims to offer interesting, fun and approachable talks about the latest scientific research in a format accessible to the public, and the stage chosen for that are bars around the world, in the case of BCAM, in Bilbao. This provides a platform that allows people to discuss research with the people conducting it. Pint of Science is a non-profit, volunteer-run organization that was created by a community of graduate and postdoctoral researchers in 2012. This festival is held simultaneously each year in all participating countries and cities, and for three consecutive days fills bars around the world with science.
- **Villa de Bilbao Piano competition:** BCAM organizes its Piano Competition “Villa de Bilbao 2024”. The synergy between mathematics and music: a melody for youth piano development in Villa de Bilbao 2024. Through this competition, Bilbao becomes a stage where young people can explore and deepen the relationship between mathematics and music. This initiative, which is part of the “2M-Mathematics and Music” program and is framed within the BILBOMATH project, arises from the collaboration between the Bilbao City Council and the Basque Center for Applied Mathematics (BCAM). Its aim is to celebrate music and mathematics as independent disciplines and to reveal the beauty that emerges from their intersection.
- **PhD Meeting:** This recurring open forum is specifically designed for all PhD students affiliated with BCAM. Its primary objective is to cultivate a strong sense of community among doctoral candidates, encourage valuable networking and collaborative opportunities, and provide a dedicated space for students to share their experiences, discuss challenges they may be facing, and celebrate their academic successes.



- **BE Zientzia:** Science fair in collaboration with Achucarro and BC3. More than 150 students from primary and secondary schools in Bilbao participated in different txokos organized by the 3 BERC centers.



- **El Correo Business Race: 2 June**

The participation of BCAM researchers in the Correo Business Race highlights the center's commitment to fostering team spirit, collaboration, and well-being beyond the workplace. By joining this sporting event, our researchers not only engage in a healthy and fun activity, but also strengthen interpersonal connections and reinforce a sense of community within the center. Initiatives like this promote team building and reflect BCAM's dedication to creating a positive and dynamic work environment where science and human connection go hand in hand.



- **Participation in the "Gran Recogida de Alimentos":** In 23rd November 2024, both research and administrative staff from the Center volunteered their time and effort at various supermarkets across Bizkaia as part of the "Gran Recogida de Alimentos" (Great Food Collection). Their contribution directly supported the collection of non-perishable food items for families in vulnerable situations within the region, demonstrating BCAM's commitment to social responsibility and community engagement.



Lastly, throughout the year 2024, we have focused our attention on the development of an internal management tool, the new intranet, which will facilitate the management of the center and reduce response times: ADA (Advanced Administrative Staff). It is also important to highlight the program that BCAM has been working on for the last few years.

This project represents the most ambitious and significant digitalization initiative that the center has undertaken since its creation. ADA (Advanced Administrative Staff), is designed to become an integral and unique administrative management system, not only focusing on internal administration, but also on the management of the research community, facilitating its integration and collaboration from different perspectives. Its main purpose is to serve as a bridge between the various projects developed by the center, creating a centralized platform from which to manage various key aspects of daily activity. With this approach, ADA (Advanced Administrative Staff) aims to optimize processes, simplify the interaction between the different actors within the center and ensure a more efficient and fluid management of resources and projects.

The implementation of this system will not only improve internal operations but also strengthen the center's capacity to attract and manage large-scale projects. This proposal is being led by the center's manager, Lorea Gómez, who has been instrumental in its planning and execution. Under her leadership, it is expected to be consolidated as a fundamental tool for BCAM's growth and sustainability, allowing greater administrative efficiency and improving the experience of both the research staff and the center's internal management.

We are convinced that ADA will also facilitate internal communication, and will be an added value to the other proposals already implemented (newsletter, website, social networks, mailing) in the Center to facilitate internal communication between staff and research personnel.

Here are several concrete ways it can contribute:

- Centralization of information: ADA can serve as a single reference point for procedures, administrative documents, internal calendars, and relevant updates, helping to avoid misunderstandings and ensuring that all staff have access to the same up-to-date information.
- By Improved communication flow between departments: By facilitating more structured and automated processes, ADA reduces reliance on informal emails and promotes clear communication channels between research, project management, HR, finance, and other areas.
- Clarity in task assignment and responsibilities: Thanks to the definition of workflows and roles within the system, each person knows exactly what they need to do, when, and with whom they need to communicate, minimizing duplication or errors.
- Transparent tracking of processes and requests: ADA allows users to track the status of internal requests (e.g., travel, purchases, leave, contracts), which reduces uncertainty and fosters trust among staff.
- Promotion of a collaborative culture: By enabling structured and efficient interaction among different profiles at the center, ADA fosters a more collaborative environment where everyone feels part of the same project.
- Support for onboarding and internal training: ADA includes tools or resources for onboarding new members, training on internal procedures, and will be answering frequently asked questions, improving staff integration and autonomy from day one.

In 2024, BCAM has implemented various initiatives to strengthen internal communication, significantly improving interaction and the flow of information among its members. The introduction of strategically placed entrance panels provides quick access to key announcements and institutional updates, keeping everyone informed in real time. Additionally, the installation of bulletin boards in common areas such as the kitchen encourages the smooth exchange of ideas and news among researchers and staff. Center's regular newsletters have become a cornerstone for sharing events, team achievements, and academic opportunities, ensuring that every member stays up to date with the latest developments.

Complementing these efforts, the internal television system broadcasting announcements and live events reinforces cohesion and engagement within the BCAM community, fostering a collaborative and well-informed environment.

The goal for 2024 was to develop at least 5 modules and the aim has been successfully completed with launch of the following ones:

- Vacations & absences

Vacations

Home

Work Calendar

BCAM Vacations Calendar

Time tracking

New Absence

My Absences

Manage

Pending requests

General Pending Requests

Responsible exceptions

General Vacations Report

Accumulated days

Accumulated hours

Vacation days

Vacations

Absences

Absences types

Work calendar

Vacation request

Select the vacation days by clicking on them, once you have made the selection, click on the "Request days" button. The days approved and/or taken for vacations are marked as "Vacations".

If you have any question: recruitment@bcamath.org.

Accumulated days
from previous years
0
days

Selected days
of this year
4
days

Available days
of this year
26
days

Select

Select

Festive

Nonworking

Vacations

Review pending

Selection

« 2025 »

Request vacations

Support Documents

[BCAM23_ADA_Vacation requester_v1.0.pdf](#)

- Payroll

(b) >

payroll

Home

BCAM Desks

Notes

Mazarredo 14

Mazarredo 16

Mazarredo 39

Leioa Ground Floor

Leioa Floor 1

Payroll Documents

2025

- Payroll 2025/03
- Payroll 2025/02
- Payroll 2025/01

2024

- Payroll 2024/12
- Payroll 2024/11
- Payroll 2024/10
- Payroll 2024/09
- Payroll 2024/08
- Payroll 2024/07
- Payroll 2024/06
- Payroll 2024/06
- Payroll 2024/05
- Payroll 2024/05
- Payroll 2024/04
- Payroll 2024/03
- Payroll 2024/02
- Payroll 2024/01

10T

- Payroll 10T/signed

Telework request

[b](#) > Telework >

Telework

Home

Telework requests

My Tasks

All Tasks

[EDIT LINKS](#)

Telework from abroad is exceptionally allowed at BCAM.

Teleworking from abroad has implications for the worker in IRPF tax amount and residence permit.

If you have not been more than 183 days in Spain, the IRPF applicable will be 19% if you have European fiscal residence and 24% for those who have non-European fiscal residence. Also, for the researchers from third countries, an absence of 6 months in Spain may make the renewal of their contract impossible (because the residence permit cannot be extended)

Telework requests

Support Documents

[ADA_Telework request_Handbookv1.pdf](#)

Select by week days

Select by date range

Meeting rooms booking

[b](#) > Bookings >

Home

Home

Bookings

Manage

Resources

Resource types

Locations

Features

Bookings

Recycle bin

Make a new booking:

Where...

Location:

(Select)

Resource type: (All)

Resource: (All)

Use: (All)

Capacity: (All)

When...

Date:

14/05/2025

Start: 14 : 00

End: 15 : 00

☐ Is recurring?

Features...

[Check availability](#)

Support Documents

[BCAM23_ADA_Meeting rooms reservation_v3.0_.pdf](#)

Project idea request

[b](#) > BCAM Projects >

Project Idea Gathering

Home

[Submit your project idea](#)

Project idea gathering

Proposals

Highlights

Highlights and main results

Project Documents

My Tasks

All Tasks

Workflow tasks

Project Logos

Projects office board

Recycle Bin

Management

The current page has been customized from its template. [Revert to template.](#)

What kind of project are you thinking of...

<p>I know the possible Funding Programme</p> <p>If you have a project idea and know the funding programme that best suits your needs.</p>	<p>I do not know the possible Funding Programme - Projects</p> <p>If you have an idea for a collaborative project but you don't know the funding programme that best suits your needs.</p>	<p>I do not know the possible Funding Programme - Individual grants</p> <p>If what worries you is your professional future and you are looking for individual help</p>
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Training

54,5 % of the indicators achieved. The target was to achieve 50%.

The last of the four axes is the one related to Training. The primary aim of actions carried out within the framework of this axe is to foster the continuous professional and personal development of all individuals within the organization. This encompasses a strategic focus on:

- Enhancing skills and knowledge
- Improving performance and productivity
- Facilitating career advancement
- Promoting adaptability and innovation
- Fostering a culture of continuous learning
- Supporting personal growth and well-being
- Addressing specific organizational needs
- Promoting collaboration and knowledge sharing

In essence, this axe aims to empower individuals with the skills, knowledge, and competencies they need to excel in their current roles, prepare for future challenges, and contribute fully to the success and growth of the organization, while also fostering a dynamic and engaged learning environment.

Throughout the academic year, the Basque Center for Applied Mathematics (BCAM) demonstrates a strong commitment to the continuous professional and personal development of its team members through the provision of a diverse range of **training activities**. These strategically designed initiatives are intended to equip individuals with essential tools and knowledge that contribute to both individual advancement and collective organizational growth. The organized training activities have been the following ones:

- Of particular significance during the past year was the comprehensive training program focused on **gender equality**, which was conducted in September 2024. This crucial initiative was specifically aimed at cultivating a more inclusive and respectful work environment by actively addressing and eradicating unconscious biases and promoting equitable opportunities for all members of the BCAM community.
- Furthermore, leadership training was delivered throughout November 2024, with the objective of strengthening the management and leadership capabilities within the center. This program empowered participants to lead their teams in a more effective and inspiring manner, fostering enhanced collaboration and productivity.

- The ongoing language courses in **Basque and Spanish**, offered throughout the academic year, play a vital role in facilitating seamless communication within an increasingly international and globalized research landscape. By enhancing linguistic proficiency, these courses open doors to broader collaboration and the rich exchange of knowledge with colleagues from diverse backgrounds across the world, further enriching the intellectual environment at BCAM.
- On September 2024 BCAM provided a training course on **risk prevention**. This course was centered on covering the identification of potential hazards specific to the research environment. It put emphasis on risk assessment methodologies, incident reporting procedures, and the importance of a proactive safety culture to minimize the likelihood of accidents and ensure a secure working environment for all BCAM personnel.
- Considering the needs of the research and technical staff, the Knowledge Transfer Unit organized a course on **software intellectual property**. This course covered the fundamental principles of copyright, patent, and trade secret law as they pertain to software development and usage within the research context. The training also addressed issues of ownership, collaboration agreements, and best practices for documenting software development processes to establish clear intellectual property rights and avoid potential legal disputes

As is shown, BCAM is deeply committed to the well-being and professional growth of its diverse workforce, strives to address the multifaceted needs of its employees by strategically organizing a comprehensive array of training activities tailored to specific situations and roles, alongside broader, center-wide initiatives designed to foster a collaborative and knowledgeable environment. This proactive approach ensures that individual development goals are met, essential skills are cultivated across the institution, and a culture of continuous learning and improvement is embedded within BCAM's operational framework.

Another noteworthy initiative integrated within BCAM's comprehensive training program is the engaging series known as **EU Coffee Talks**. These informal yet highly informative sessions provide a valuable platform for researchers who have successfully secured grants from various European funding programs to share their firsthand experiences throughout the application process. By recounting their strategies, challenges, and insights, these grantees offer invaluable guidance and practical assistance to other researchers within BCAM who are currently in the process of developing their own European grant proposals. This peer-to-peer knowledge transfer fosters a supportive and collaborative environment, empowering researchers with practical advice and demystifying the often-complex process of securing European research funding.



Building upon the positive reception of the EU Coffee Talks initiative among its research personnel, the Basque Center for Applied Mathematics (BCAM) has established a new dedicated role: the **Funding Programme Scientific Coordinator**. The primary aim of this strategic appointment is to proactively encourage and enhance the participation of BCAM's research personnel and the center as a whole in funding programmes deemed strategic for their advancement and the institution's overall research objectives.

Funding Programme	Scientific Coordinator (SC)
ERC – Advanced Grants	Luis Vega
ERC – Consolidator Grant	Javier Fernández de Bobadilla
ERC – Starting Grant	Javier Fernández de Bobadilla
ERC - Proof of Concept	Novi Quadrianto
EIC – Pathfinder Open	Jose Antonio Lozano
EIC – Pathfinder Challenges	Jose Antonio Lozano
EIC – Transition Open	Jose Antonio Lozano
MSCA – Postdoctoral Fellowships	Maíra Aguiar
MSCA – Doctoral Networks	David Pardo
MSCA – Staff Exchanges	David Pardo
MSCA – Citizens & COFUND	N/A
Research Infrastructures & PRACE Grants	Elena Akhmatskaya
Simons Foundation	Luis Vega
Private Funding	Santiago Mazuelas

The appointed coordinator will be specifically responsible for undertaking the following key activities:

- Providing expert advice and guidance to potential candidates throughout the process of applying for diverse funding opportunities relevant to their research areas and career stages.
- Actively promoting the submission of high-quality and competitive research proposals that align with the funding programme's objectives and have a strong potential for success.

3.2. Future action plan: Ongoing actions and future actions

As we have already seen in the previous sections, the progress percentages per axe have been the following ones:

Axe	Objective	Achieved
Ethical and professional aspects	50 %	89,7 %
Recruitment	50 %	81,8 %
Working conditions and social security	50 %	76,7 %
Training	50 %	54,5 %

From the extracted data we can see that in the first three axes BCAM has greatly exceeded the expected results. However, in the last one, dedicated to the training part of the HSR4R Strategy, even if the indicator has been reached, the level of execution has been lower.

As this is a permanent work in progress BCAM does not stop implementing new actions that continuously seek to create a more inclusive, engaging, and supportive atmosphere for everyone. Among the current ongoing actions we can mention the following ones:

- **Jornadas de Networking “HRS4R y buenas prácticas en la gestión de RRHH”:** Periodically BCAM participates in this initiative hosted by IKERBASQUE alongside other research agents of the Basque Country. The aim of a meeting on good practices in HR management is to foster a collaborative environment for sharing successful strategies and innovative approaches.
- **Development of guidelines for the HRS4R Working Group and Committee:** The aim of this document would be to provide a structured framework for implementing and monitoring the Human Resources Strategy for Researchers within BCAM.
- **Remuneration registration and audit:** In cooperation with BCAM's external labour consultants, a remuneration register has been developed. This registration will help establishing and maintaining a transparent and accurate record of all employee compensation, ensuring compliance with legal and organizational requirements. This process involves systematically documenting salary structures, benefits packages, and any variable pay components. The audit aspect then serves to critically examine these records, verifying their accuracy, consistency, and adherence to

established policies and regulations. Ultimately, this ensures fair and equitable compensation practices, identifies potential discrepancies or risks of non-compliance, and provides valuable data for informed decision-making regarding resource allocation and talent management.

- **Activity report:** BCAM yearly publishes the activity report. This report also includes the most remarkable actions executed in the framework of the HR Excellence in Research strategy. Also, this report is always available on BCAM's website.
- **SteMatEsElla:** Since 2023 BCAM has been collaborating SteMatEsElla mentorship programme, partnering with EJE&CON, Royal Spanish Mathematical Society (RSME), and ICMAT, supporting women in STEM careers.
- **188th European Study Group with Industry:** In 2024 BCAM is organizing the 188th of the European Study Group with Industry (ESGI). Europe's leading workshop bringing together mathematicians and industrial companies. In this edition there are four challenges from the following companies: Lookiero, Quantum Mads, BAT - B Accelerator Tower and Danobat Group. The academic participants that will participate in ESGI 188 are a diverse group of people, including MSc and PhD students, postdoctoral fellows, and professors.
- **Annual employee satisfaction survey:** The main object of this survey would be to provide valuable insights into the employee experience to drive positive changes within the organization. This is:
 - Measure overall employee satisfaction
 - Identify key drivers of satisfaction and dissatisfaction.
 - Provide actionable insights for Improvement.
 - Enhance employee engagement.
 - Improve communication and feedback.
 - Reduce employee turnover.
- **Annual PhD evaluation survey:** The main aim of these mechanisms would be to provide a structured and comprehensive assessment of a PhD candidate's progress, identify areas of strength and weakness, facilitate constructive feedback and guidance from supervisors and relevant committees, and ultimately ensure the successful and timely completion of their doctoral studies. This is:
 - Structured assessment of progress
 - Identification of strengths and weaknesses
 - Facilitation of constructive feedback and guidance
 - Ensuring successful completion
 - Promoting communication and transparency
 - Maintaining academic standards

- **CSR plan:** To draw up a Corporate Social Responsibility with the aim of bringing together and reviewing BCAM's practices, standards and policies in order to operate in an ethical and sustainable manner over time, in the management of the economic, social, labour and environmental spheres.
- **BCAM Alumni program:** BCAM is working on launching an Alumni network to keep in touch with former students, PhD students, BCAM students and researchers. The objective is to strengthen the feeling of community between the people of BCAM, as well as the international relationships, so that they can continue learning from each other, having new job and research opportunities, and creating a pride of belonging to BCAM in an open, inclusive, and international environment. The alumni network will be addressed to PhD students, former students, and researchers of BCAM that still want to know about their old classmates and co-workers. The network will provide them with easy access to meetings, visits, and research to work on together. In this way, the alumni network reinforces the BCAM community, the relationships between the people and their scientific knowledge, as well as the quantity and quality of the research of the centre. The Alumni will help as well to create and establish international relationships in the network. BCAM is a centre that encourages the use of English in the classrooms and in the working environment, so this won't be different inside the alumni community. Every person that has passed by BCAM will be welcomed in the community with ease to communicate, no matter where they're from and without difficulties.

However, we intend to deepen in each one of the proposed, designing more specific actions adapted to the needs of each type of employee and work area, as well as considering their interests and aspirations.

Having said that, the planned timeline for 2025 can be seen as Annex).

In recent years, the focus has been on the embedding of the HRS4R Strategy on BCAM's daily life as well as integrating it within the recently created the BCAM Talent Hub. Thus, generating a solid structure. Thanks to the support of grant GPE2023-001295-T, together with the Severo Ochoa seal of excellence, we have managed to attract, incorporate and consolidate international talent, positioning ourselves as a centre of excellence in our field. However, this GPE2023 grant has been key to the creation and implementation of this process, but we are convinced that this initiative can be further strengthened and consolidated. To this end, it is essential to join forces with the BCAM project office, which has been operational since its inception with the BCAM Knowledge Transfer Unit (KTU) established in 2018, and the KTU (Knowledge Transfer Unit) established in 2018., with a common goal: to expand our reach and attract and retain excellent scientific talent in the field of applied mathematics.

In order to achieve this objective, BCAM's structure needs to be strengthened by aligning the strategic objectives of the existing Talent Hub, the Projects Office and the Knowledge Transfer Unit. Currently these areas work closely, but they need to contribute in a cohesive way to BCAM's HRS4R Strategy. In this sense, the following areas of improvement have been identified as part of the **period 2026-2027**:

- **Strengthen the strategy for attracting and consolidating talent**, through the international reception office. The aim is to strengthen the employee experience by means of policies that place human value at BCAM, and to build loyalty among managers and people involved in BCAM's decision-making, so that they contribute to attracting excellent talent.
- **Implementation of the professional development plan (Career Path)**. The career path of BCAM's research staff will be updated through an upskilling and reskilling structure that will provide the team with greater visibility of the skills necessary to take their next step in their research career, beyond the usual known career options, such as the Juan de la Cierva, etc.
- **Continue developing actions regarding gender equality, non-discrimination and ethical commitment and social inclusion**. In line with our commitment to maintain a discrimination-free, inclusive, respectful, balanced and accessible work environment, the established action plan will pay special attention to initiatives that revolve around these issues.
- **Provide BCAM's scientific staff with training on how to attract European projects**. This training will be aimed not only at understanding what the European Framework Programme for Research and Innovation is, but also at maximising the chances of success, by providing knowledge and a deeper understanding of the dynamics of the proposal-writing process and the strategic aspects of this programme.
- **Recruitment and retention of female researchers, especially in senior positions**. This action focuses on actively working to increase the number of female researchers at BCAM, with a particular emphasis on attracting and keeping talented women in leadership and senior roles. The aim is to address the identified gender imbalances within the research staff and fostering a more diverse and inclusive scientific environment

The HR Logo Committee is currently engaged in a comprehensive undertaking to formulate the **Action Plan for the 2026-2027 biennium**, representing a crucial phase in the ongoing integration of the Strategy at BCAM. This analytical endeavor serves as the foundational step in a cyclical process of continuous improvement, enabling a meticulous identification of areas necessitating enhancement and aspects warranting reinforcement in the subsequent operational period.

Date	Action
June 2025	Open call for the 2026-2027 period
September 2025	HR Logo Seminar: 2024-2025 implementation update
January 2026	Presentation of the proposal for the 2026-2027 period
April 2026	HR Logo Committee meeting
September 2026	HR Logo Seminar: 2026-2027 implementation update
October 2026	HR Logo Committee meeting

Building upon the insights gained from the previous implementation cycle, BCAM is committed to fostering a culture of inclusivity and participatory engagement in the further embedding of the HRS4R principles within its organizational framework and daily practices. As an initial and pivotal step in the development of the forthcoming Action Plan, the institution will commence a **broad listening process**. This initiative will involve the transparent presentation of the key conclusions and outcomes derived from the implementation period spanning 2024-2025 to all members of the BCAM community. Furthermore, recognizing the invaluable contributions of its entire workforce, BCAM will extend an open invitation to all employees to actively participate in this critical phase. This invitation encompasses the opportunity to join the HR Logo Committee, thereby directly contributing to the formulation of the Action Plan. Additionally, all personnel are encouraged to share their individual perspectives, reflections, and suggestions, drawing upon their personal experiences within the institution. This inclusive approach underscores BCAM's dedication to ensuring that the HRS4R strategy is not only implemented effectively but is also deeply embedded in the lived experiences and operational realities of its researchers and staff, fostering a truly researcher-centric environment.

4.- Conclusions

One of the center's strategic pillars is the attraction of talent. At BCAM, diversity and multidisciplinary are not only aspirations, but a consolidated reality that is reflected in the composition of the teams. In relation to this point, BCAM continues with its purpose of being an international reference and works daily to attract young researchers to develop their career within the center itself, taking advantage of different funding initiatives such as Ikerbasque Fellow, JDC, RYC or MSCA. Thus, within the framework of talent attraction, we intend to develop a series of actions or initiatives aimed at consolidation and loyalty. These measures must be complemented with career plans and professional accompaniment actions, in order to support the growth of research personnel throughout all stages of their professional career.

In recent years, the Recruitment & People Care Office has not received specific competitive and non-competitive funding for this purpose, but has been financed through the Center's structural funds, which are as follows:

- BERC: This is a program of the Basque Government from which BCAM receives competitive funding since the creation of the center in 2008 every four years. We are currently in the period 2022-2025.
- "Severo Ochoa": It is a program of the State Research Agency (AEI) that promotes research excellence in science, strengthening the centers with a grant of 4.0M€ for 4 years. BCAM has been accredited since July 2014 continuously until the current accreditation that will end in 2026, concatenating 3 accreditations.
- Other grants aimed at attracting talent, in which management costs are a bankable concept.
- In 2023, the company obtained the GPE2023-001295-T grant, which enabled it to launch and professionalize the Talent Hub office.

These sources of financing support the hiring of managers who carry out the tasks of recruitment and selection of personnel, advice on labor and ethical issues, as well as the definition of training and professional development plans. In the past, we have focused on the creation and formalization of BCAM Talent Hub as a solid structure. Thanks to the support of the GPE2023-001295-T grant, together with the Severo Ochoa seal of excellence, we have managed to attract, incorporate and consolidate international talent, positioning ourselves as a center of excellence in our field. However, this GPE2023 grant has been key to the creation and implementation of this process, but we are convinced that this initiative can be further strengthened and consolidated. To this end, it is essential to join forces with the BCAM project office, which has been operational since its creation with the BCAM Transfer Unit (KTU - Knowledge Transfer Unit) established in 2018, with a common goal: to expand our reach and attract and retain

scientific talent of excellence in the field of applied mathematics. This will also allow us to generate and obtain projects involving companies from the ecosystem to which BCAM can have access, in addition to attracting talent that can obtain ERC grants in the area of basic research.

In this line, we understand that attracting the best talent is only part of the equation; retaining and fostering long-term commitment is equally crucial. At BCAM, we believe it is essential that each team member feels valued, recognized and fully aware of the impact their work has on the organization as a whole. For this reason, we continually develop and implement new initiatives aimed at improving the staff experience, from an approach focused on professional development, recognition and strengthening the sense of belonging. In particular, as a research center we are aware that we compete in a global environment where other entities, especially in the private sector, can offer more competitive economic conditions. However, our value proposition is based on differentiating elements that go beyond remuneration: we promote a work environment that prioritizes emotional well-being, equal opportunities, transparency and mutual commitment. We are committed to an organizational culture in which people feel respected, supported and motivated to give the best of themselves, while contributing to the development of knowledge and the progress of society.