

RESOLUTION ADOPTED BY THE VICE-PRESIDENT OF THE CARLOS III, TO OFFICIALLY ANNOUNCE ONE JUNIOR GRANT (BEAGAL 18/00174) UNDER THE ADMINISTRATIVE ORDER ECD/365/2018, OF MARCH 23TH, 2018, ADOPTING THE LEGAL BASES FOR AWARDING BEATRIZ GALINDO GRANTS.

1. OBJECTIVE AND PURPOSE

The purpose of this call is the incorporation of research talent who have developed part of their professional career abroad, under the administrative order ECD/365/2018, of March 23th, 2018, adopting the legal bases for the awarding and announcing Beatriz Galindo grants (B.O.E. OF April 7th, 2018).

One junior grant is offered in the area of Biomedicine.

2. BENEFICIARIES

In accordance with Article 15 of the administrative order ECD/365/2018 of 23 March, the requirements to become beneficiaries of these grants will be the followings:

- Applicants must be holders of a doctoral degree and show an experience of more than four years and less than seven years in teaching and research abroad, from the date they obtained the doctoral degree.
- Professional experience must be accredited by the candidate at the moment of submitting the application.

Candidates who are receiving other financial aid of similar nature, will not be eligible.

3. PERIOD AND DURATION

The duration of the grant will extend over four years, from the date of the researcher starting employment. In addition, the Carlos III University of Madrid will offer one year of additional contract without discontinuity with respect to the aid received.

4. AMOUNT, PAYMENTS AND GRANT DESCRIPTION

The distinguished researcher will join the Academic Unit called "Disruptive Technologies in Biomedicine" and the Department of Bioengineering and Aerospace Engineering, where they will carry out their teaching and research work.



The minimum amount contributed by the Ministry of Science, Innovation and Universities and the Carlos III University of Madrid will be as follows:

- 35,000 euros from the Ministry of Science, Innovation and Universities.
- 10,000 euros from the Carlos III University of Madrid (including the employer's share of the Social Security corresponding to the contract).

The gross annual salary will be 36,340 euros, which will be paid in 14 monthly instalments.

In addition, the grant consists of:

- A research allowance: 250 euros per month.
- A mobility allowance: up to 8,000 euros, depending on the candidate's current place of work. The allowance must be returned at 100%, if the final effective duration of the contract is less than one year, and at 50%, if the final effective duration of the contract is between one and two years.
- An additional allowance: in the case of dependants: 250 euros per month

5. RIGHTS OF CONTRACTED PERSONNEL

- a) Establish a full-time work contract for a Distinguished Researcher of Law 14/2011, of June 1st, on Science, Technology and Innovation.
- b) Receive the corresponding amount, in the terms established in point 4 of this call.
- c) Obtain the necessary collaboration and support from the University in order to carry out the research work properly.
- d) Benefit from the corresponding intellectual and industrial property rights and those deriving from their research activity, in accordance with current legislation and regulations.
- e) Use the services and participate in the activities offered by the University, in accordance with internal regulations.
- f) Enjoy the rights and social advantages, in the same terms, as the University Faculty.
- g) Be evaluated during the year of the additional year with similar criteria to the I3 Programme. Criteria related to teaching will be incorporated. If the evaluation is positive and you have homologated your doctorate diploma, the University will fund a permanent position, in the category for which the beneficiary is accredited, in the first Public Employment Offer (OEP) in which a vacancy is available.

6. OBLIGATIONS OF CONTRACTED PERSONNEL

- a) According to beneficiary nationality, application for and obtaining of the corresponding permits allowing the candidate to work under contract, in the terms established by the current legislation.
- b) Adherence to the internal norms and particular regulations of the University.



- c) Participate in the teaching of the Department to which the beneficiary is assigned.
- d) Declaration, in any advertising or publication, of his/her assignment to the Carlos III University of Madrid

7. OBLIGATIONS OF THE UNIVERSITY

- a) Execution of the full-time contract, in accordance with the current regulations and in accordance with Article 15 of the administrative order ECD/365/2018 of 23 March.
- b) Provision of the facilities and material means available to contracted persons to carry out their work, as well as, guaranteeing the rights and provisions enjoyed by personnel of a similar category
- c) Projects and other activities in which the beneficiaries are involved, must comply with international principles and regulations, in the fields of bioethics, animal testing, biosafety, environmental protection, natural heritage and biodiversity, and data protection.

8. INCOMPATIBILITIES OF CONTRACTED PERSONNEL

- a) The condition of being contracted in this program, is incompatible with other contractual or statutory links, unless the University expressly authorizes this, provided that the appropriate incompatibility regime is respected.
- b) The conclusion of the contract shall be incompatible with other public or private financing having a similar purpose, as well as, with wages or salaries of a similar nature. It is generally incompatible too, with the earning of any amount of a salary nature, provided that the activity could take away from the fulfilment of the grant object or takes place during the same working hours.
- c) Those activities permitted by Law 53/1984, of 26 December, on Incompatibilities of Personnel in the Service of Public Administrations, shall be compatible.

9. APPLICATION PROCEDURE

- 1. The deadline for submission of applications will be one month, counted from the day following the publication of this Resolution on the website of the Carlos III University of Madrid, from 24 April to 24 May inclusive.
- 2. Applications must be submitted using the electronic form at the following address:

http://www.educacionyfp.gob.es/mecd/servicios-al-ciudadano-mecd/catalogo/general/educacion/277089/ficha/277089-2018-fase2.HTML

This link will be active from 8:00 a.m. on April 24, 2019, mainland time in Spain until 5:00 p.m. on May 24, 2019, mainland time in Spain.



When submitting the application, the applicant shall state, under his own responsibility, that all the data entered in the application and the documents submitted, are in accordance with reality. The falsity, concealment or inaccuracy of the circumstances declared, will give rise to the rejection of the application, without prejudice to other responsibilities.

- 3. All mandatory fields of the application form must be completed and sent in electronic format, together with the following documentation:
 - a) Curriculum vitae of the applicant, detailing their predoctoral and postdoctoral stays, and their current or recent link with foreign universities or research centers
 - b) Teaching project, according to what establishes in the grant profile.
 - c) Research and transfer project, according to what establishes in the grant profile.
 - d) Explanatory report on the return to the University of the aforementioned projects (b, c).
 - e) DNI, NIE or passport. Non-EU citizens who have legal residence in Spain must provide a photocopy of their Residence Card.
 - f) Copy of the doctorate diploma.

4. Participation in this call for applications legitimizes the Carlos III University of Madrid as responsible for the processing of personal data of interested parties. The purpose of the processing is to participate in the process for the grant awarding to the University, within the framework of the call for applications Beatriz Galindo of the Government of Spain and, in the event of the University be awarded, to execute this by hiring the selected applicant as distinguished researcher, under the terms of this Resolution.

In addition, the provisions of article 16 of Order ECD/365/2018, of March 23th, which approves the bases for the award and announces the grants Beatriz Galindo, will be taken into account.

Data processing will be carried out in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27th, 2016, on the protection of individuals with regard to the processing of personal data and on the free movement of such data (which suspends Directive 95/46/EC "General Data Protection Regulation"), as well as Organic Law 3/2018 of December 5th, on the Protection of Personal Data and Guarantee of Digital Rights.

10. SELECTION AND EVALUATION CRITERIA

At the end of the deadline for submission of applications and in accordance with Article 15 of the administrative order ECD/365/2018 of 23 March, the University will have a maximum period of two months to evaluate applications and publish the provisional decision of selected candidates.

Candidates will be able to formulate allegations to said provisional resolution in the term established in the resolution itself, with a maximum of ten days, after



which the University will publish the definitive resolution of candidates selected for each one of the grants granted to the University, as holders and substitutes.

Once the final decision on the selection of candidates has been published, the University will enter into a distinguished researcher contract with the selected researcher.

The contract shall be governed by the provisions of Article 23 of Law 14/2011 of 1 June on Science, Technology and Innovation. The organization and instruction of the procedure will correspond to the University. The proposal to grant the places will correspond to the international panel of experts, and the resolution of the procedure will be made by the competent body in the University.

In accordance with Article 18 of the administrative order ECD/365/2018 of 23 March, candidates' applications will be scored between 0 and 10 points by an international panel of experts appointed by the Secretary General of Universities. The international panel of experts will assess the documentation presented by the candidate, with the following evaluation criteria, and always, in relation to the curriculum vitae of the applicant:

- a) Teaching Project, up to 2.5 points.
 - 1st Quality of the teaching project, up to 1.25 points.
 - 2^{nd} Scheduling of the teaching project, up to 1.25 points.
- b) Research project, up to 2.5 points.
 1st Quality of the research project, up to 1.25 points.
 - 2nd Scheduling of the research project, up to 1.25 points.
- c) Knowledge transfer project, up to 2.5 points. 1^{st} Quality of the knowledge transfer project, up to 1.25 points. 2^{nd} Scheduling of the knowledge transfer project, up to 1.25 points.
- d) Return to the University of the aforementioned projects (a, b, c), up to 2.5 points.
 - 1st Return of the teaching project, up to 1.25 points.
 - 2nd Return of the research project, up to 0.75 points.
 - 3rd Return of the knowledge transfer project, up to 0.5 points.

If a beneficiary has applied for more than one vacancy, it will be awarded the first corresponding vacancy for which it has expressed a preference, or, failing that, the vacancy first applied for.

In order to pass the evaluation, a minimum of 6 points must be obtained, and applications with a lower score will be automatically rejected. In addition, the individual score of each of the elements, must be at least 50%, of the maximum possible score in each of them.

If two or more candidates achieve the same overall score, the qualification of the evaluation criteria will be used as a tiebreaker. First, the candidate with the



highest score in criterion (a) or, in the event of a further tie, the candidate with the highest score in criterion (b), and so on, until the four criteria are completed. If the candidates have the same individual score in all the general criteria, the tiebreaker criterion will be the seniority in the centre in which they work.

11. GRANT DESCRIPTION

Knowledge area: Biomedicine

Teaching background

Candidates must have teaching experience in internationally recognized degree courses taught in English in the Bioengineering subjects and contents of the Department of Bioengineering and Aerospace Engineering.

To improve the subjects already taught and cope with the ones that will be taught in the new degree course, we need an expert in biological optical microscopy as the rapid progress in this field allows for more and more advanced analysis of biological structures and functions, both in vivo and in vitro. Also, in keeping with this experience, the candidate should have a strong background in molecular and cellular biology and, particularly, in intra- and intercellular signaling and in the culture of cell lines and primary cells.

Research and knowledge transfer background:

Candidates will have to have research experience related to the activities and goals of the Academic Unit in disruptive Technologies in Biomedicine at the UC3M.

This AU is in line with the strategy followed by the most advanced universities and research centers with regard to the growing integration of biology, engineering, physics, computing and mathematics around biomedicine. This integration is necessary to more efficiently address the complexity of biomedical problems to solve, such as finding new, better, more specific and economically viable methods for analyzing, modeling, diagnosing and treating illnesses.

The research priority lines of the AU are:

- Cell and tissue mechanics

- Multi-Organ-on-Chip-technologies to develop new medicines and lab-on-a-chip technologies to analyze cell and tissue behavior

- Bioelectronics: cells as sensors and actuators.

- Regenerative medicine: design and development of innovative therapeutic strategies

- 3-D bioprinting of tissues and organs

- Development of new high-resolution instrument techniques for the optical, mechanical and electrical characterization of biological systems



Ability to develop independent research, of an innovative nature and, as much as possible, transversal with the research lines of the Academic Unit wil be highly valued.

The candidate will be fundamental when determining the techniques to be forming part of a future scientific infrastructure in biological optical microscopy, which we would like to develop in the context of the new Center for Research Support (CRS) currently being created at the UC3M.

The ability to raise funds (national and international public projects and R&D&I contracts with companies) will also be highly valued.

The candidate's previous experience and interest, along with the project by him presented, will be evaluated from the point of view of participating in transfer of knowledge (patent licensing) processes and technology-based business initiatives (participation in/generation of spin-offs).

Teaaching project

The teaching project will be based on subjects that are part of the activity of the Department of Bioengineering and Aerospace Engineering.

• Bachelor's degree in Biomedical engineering. Taught in English.

-Cell and molecular biology (1st year)

-Fundamentals of tissue engineering and regenerative medicine (3rd year)

- Tissue/organ regeneration and bioengineering (4th year)
- Master in Management and Development of Biomedical Technologies. Taught in Spanish.
 - -Therapeutic technologies (first semester)

-Genetic engineering and cell and tissue bioengineering laboratory (first semester)

- New Bachelor's degree in Engineering Physics:
 - Biophysics 1: Molecular, Cell and Tissue Physical Biology (2nd year)
 - Advanced Sensors and Measurement Techniques (4th year)

Research project:

The research project will have to be carried out within the framework of the AU's priority lines of research. The priority research field proposed for the candidate has a clearly technological component: biological optical microscopy (in vitro and in vivo). The main goal is the analysis of cell biology experiments on both fixed samples (in vitro) and two- and three-dimensional cultures and experimental animals (in vivo). Examples of techniques the candidate should know include: i) Immunofluorescence techniques

ii) Confocal laser scanning microscopy (CLSM)

iii) Spinning disk confocal laser microscopy (SDCLM)



- iv) Wide field microscopy
- v) Two-photon microscopy
- vi) Quantitative phase-contrast microscopy

The selected candidate will have to develop its own innovative and viable line of research, bearing in mind the resources available in the department and the AU. As far as possible, this research should be transversal to the lines of the AU

12. EXPECTED IMPACT OF THIS GRANT ON THE UNIVERSITY

The incorporation of this candidate will have a positive impact on the Universidad Carlos III de Madrid at three levels. With regard to the impact on research, the candidate will be incorporated into an Academic Unit focused on the development of disruptive technologies in biomedicine, that is, an AU based on one of the Campus of Excellence Carlos III strategic lines of research. Also, the researcher will be incorporated into a multidisciplinary environment which seeks to exploit the synergies existing between biology, engineering and the basic sciences. This type of research at the border between disciplines is having a greater scientific and social impact these days. This, combined with the traditional high impact of publications in the area of biomedicine, anticipates that the selected researcher will obtain very important results (publications) with, as mentioned, a high scientific and social impact.

The results obtained would also contribute to raising funds to hire more researchers and improve the equipment and other required resources. As a consequence of this, , a clear impact is also expected on the traditional indicators used in different university rankings, such that the researcher's work would contribute to the rise of these indicators, which is of vital importance to the university.

Likewise, the proposed teaching project to be carried out by the candidate, together with the teaching profile that is sought, will have a great impact on teaching at the university. The incorporation of professors that have spent part of their career abroad, especially if they participated in internationally renowned degree courses taught in English and have extensive experience in in certain areas, will greatly enrich the subjects taught. It will also effectively contribute to the internationalization, interdisciplinarity, innovation and quality of the teaching, one of the basic strategies for improving teaching in UC3M's Campus of International Excellence.

Lastly, it must be emphasized that the vocation for knowledge transfer and the market orientation of the AU that the candidate will join, along with the profile demanded and the proposed research project, anticipate an important activity in technology transfer to both industry and the SNS. Thus, it is expected this incorporation will increase the already frequent participation of the AU in collaborations with industry (multinationals and small and medium companies), the generation of new spin-offs and clinical trials. In this regard, the positive impact of this hiring goes beyond the university itself, directly reaching the



Spanish economy and society in the form of new developments and cutting-edge products in the areas of bioengineering and biomedicine.

13. AWARD RESOLUTION OF THE CALL

The Resolution with the selected candidates will be made public at the website address indicated in point 9.2.

Getafe, date of electronic signature VICE-PRESIDENT FOR FACULTY, by delegation of the Rector

(Resolution of October 17th, 2016. BOCM January 2th, 2017)

This Resolution terminates the administrative proceeding and may be appealed through: "Recurso Potestativo de Reposicion" to the Rector, within one month from the day following the notification of this Resolution, in accordance with the provisions of Section 3 of Chapter II of Title V of Law 39/2015, of October 1st, of the Common Administrative Procedure of Public Administrations; or, "Recurso Contencioso-Administrativo" to the Contentious-Administrative Court of Madrid, within two months from the day following the notification of this Resolution, in accordance with the provisions of Article 46 of Law 29/1998, of 13 July, regulating the Contentious-Administrative Jurisdiction.