STARS: Supercomputing And Related applications Fellows Programme

STARS programme aims at fostering the training of highly skilled post-doc in all fields of High Performance Computing and related applications. This initiative is part of COFUND call of the Marie Sklodowska Curie Actions within the Horizon 2020 Programme.

- **Coordinator of the action**: Barcelona Supercomputing Center (BSC).
- **Areas of research**: HPC and related applications, specifically in Earth Science and Meteorology, in Life Sciences, Genomics and Personalised Medicine and in Computational Engineering and Physics and Computational Social Sciences.
- **Candidates**: postdoctoral researchers with international mobility (see "how to apply" for eligibility rules)
- **Offer**: 24-months incoming fellowships.
- **Salary range**: Annual living and mobility allowances (35,000€ gross salary) + Annual Family allowance Researchers (1,500€ gross salary)
- **Additional support**: Annual budget for Travel and Research & Training activities (5,400€)

The programme will award 20 outstanding post-doctorate researchers of all nationalities with 24-month INCOMING fellowships, providing them with all necessary tools for developing their potentials, deepening their skills and knowledge in a stimulating, international and interdisciplinary environment, and offering them intersectorial short secondments (1-3 months) with private industry or non-academic research centres (such as Lenovo, CISCO, AstraZeneca, IBERDROLA, EU JRC, AEMET, IRB and CRG in order to boost their career perspectives as successful independent researchers. Short secondments periods under the premises of these partner institutions will take place within the STARS programme. Fellows will also be
strongly encouraged to participate at least once a year in an international event in their domain of research. This call will award up to 12 fellowships.

**STARS programme projects and groups available**

Please find below the BSC research lines and groups available to welcome a postdoctoral position in the STARS programme.

- **Fusion**
- **Natural Hazards and Risk Analysis**
- **Biomechanics**
- **Environmental Simulations**
- **Data-Center Optimization**
- **Memory systems for HPC**
- **Accelerators and Communications for HPC**
- **Computational Earth Sciences**
- **Climate forecast bias development mechanisms**
- **Urban air quality modelling**
- **Wind energy services**
- **Climate prediction**
- **Atmospheric Composition**
- **Comparative Genomics**
- **Text mining in Biomedicine**
- **Computational Biology**

**Training & Development**

Career guidance, training and supervision of the STARS fellows will be provided through a combination of BSC’s Education and Training Unit, the Centre’s HR service and the scientific departments. The framework for STARS fellows will be structured in line with the well-established processes already in place in the Centre:

1. A Personal Development Programme (PDP) including a system of annual objectives and an annual
training plan will be supervised by the research group leader and an internal committee

- A central plank of the training programme will be the BSC Diploma of Excellence in Research Skills including courses in scientific writing, project management tech transfer, outreach and soft skills.
- Additionally, there will be a focus on development of HPC skills and knowledge through PRACE Advanced Training Centre (PATC) courses

2. This may be complemented by a secondment towards the middle of each fellow’s stay at BSC, when they will have the opportunity to spend from 1-3 months at a partnering organisation, most of which are industrial.

3. Each fellow will also be assigned a mentor to facilitate their integration into BSC who will encourage contact with other STARS fellows through meetings and social activities.

4. The Severo Ochoa research seminars open to researchers from both inside and outside BSC and the annual Doctoral Symposium will also provide opportunities for the fellows to present the results of their research and exchange ideas.

To place a request for travel/training please click here.

FAQs

Do I have to contact a group leader at BSC to prepare my application?

If you need more information about the research carried out in a group offering to host a STARS fellow, you may also contact the group leader of that BSC group, in order to select properly the BSC research line(s) that best correspond to you. The list of the BSC research lines open to host a STARS fellow can be found above on this same page in "STARS programme projects and groups available".

How many BSC STARS Fellowships are available?

In total we offer 20 fellowships. In this call, up to 12 fellowships are available.

How many applications can be submitted?

Only one application can be submitted per call per person. It is possible to apply again in the second call after having being rejected in the first call, provided that the eligibility requirements are respected.

Which nationalities are eligible for the fellowships?

All nationalities are eligible, but at the time of application you may not have resided or carried out your main activity in Spain for more than twelve months in the three years immediately prior to the reference deadline for submission of proposals. Short stays such as holidays are not taken into account.

Is there an age limit for applications?

No, there is no age limit, but the eligibility criteria have to be met.

Is it possible to update my application after the submission, e.g. if a paper has been accepted?

No, modifications will not be accepted after the submission deadline.

Which are the contractual conditions of employment?
Two year labor contract for the performance of a research project with a 35,000,00 yearly gross salary with full security coverage. 23 working days of paid holidays, plus the 24th and 31st of December. There is an additional family allowance for researchers with dependents. See Conditions of Employment for additional information.

Are there any measures to foster the successful integration of researchers affected by conflicts around the world?

In line with the commitment of the Marie Skłodowska-Curie actions (MSCA) of the EU Horizon 2020 programme to ensure that equal opportunities are provided to researchers whose scientific careers have been interrupted due to armed conflicts, the following measures will be implemented within the STARS programme:

- Career breaks caused by forced displacements due to armed conflicts will be counted to extend the eligibility limit of 5 years after the award of the PhD degree.
- For refugees under the Geneva Convention, the refugee procedure (i.e. before refugee status is conferred) will not be counted as ‘period of residence/activity’ in Spain when assessing whether the candidate has spent more than 12 months in Spain prior to recruitment.
- Specific topics related to social and professional resettlement of researchers affected by a conflicts will be included in the BSC mentoring programme open to STARS fellows.

Will I get support with administrative affairs (visa, accommodation, etc) if my candidature is accepted?

Yes, you will receive support from BSC’s HR unit.

How do I submit my application?

Visit the online application platform.

Who can I contact if I have any further questions?

starsprogramme [at] bsc [dot] es

Barcelona Supercomputing Center - Centro Nacional de Supercomputación