289_22_LS_INB_R3

Job Reference

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Position

Team Leader - Health Data Research (R/RE3)

Data de tancament

Dilluns, 31 Octubre, 2022
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About BSC

The Barcelona Supercomputing Center - Centro Nacional de Supercomputación (BSC-CNS) is the leading supercomputing center in Spain. It houses MareNostrum, one of the most powerful supercomputers in Europe, and is a hosting member of the PRACE European distributed supercomputing infrastructure. The mission of BSC is to research, develop and manage information technologies in order to facilitate scientific progress. BSC combines HPC service provision and R&D into both computer and computational science (life, earth and engineering sciences) under one roof, and currently has over 770 staff from 55 countries.

Look at the BSC experience:
BSC-CNS YouTube Channel
Let's stay connected with BSC Folks!

Context And Mission

The Life Sciences Department from the Barcelona Supercomputing Center seeks a team leader to establish a new team on Health Data Research within the Life Sciences Department that will collaborate closely with the INB/ELIXIR-ES unit. The selected candidate will work on the acquisition, normalisation and standardisation of Health Research Data, potentially incorporate new members to the team in the near future, and drive projects in the area in close collaboration with domain experts in the clinic (collaborators).

This position is in the context of the massive amount of health data available for research in the last years and the recent efforts at national and European levels to tap on those data to benefit patients. Using such data helps scientists to understand diseases and health conditions better and provides new ways of identifying
patients at higher risk. It also helps of preventing illness and of providing better treatments. This, in turn, improves health services' efficiency, optimising their resources where they matter the most. In the COVID-19 pandemic, using health data for research has enabled clinicians to quickly adapt to the new treatments available for critically ill patients and decision-makers to provide better urgent responses at different levels. Recent efforts have been oriented towards the re-use of health data for research (secondary use), for which the adoption of FAIR principles in the health data life cycle is essential. Projects such as HealthyCloud (https://healthycloud.eu/), at the European level, and IMPaCT-Data (https://www.isciii.es/QueHacemos/Financiacion/IMPaCT/Paginas/Plan.aspx), at the Spanish level, co-led and led by the BSC respectively, are contributing to such endeavour.

The candidate will implement a project to accelerate the potential of biomedical research to advance human health, scaling up and further bringing together two initiatives: (i) at the international data-stewardship level, the European Genome-phenome Archive (https://ega-archive.org/); and (ii) at the local health research level, a unique pilot on shared computational infrastructures –known as StarLife– shared between three flagship research centres (BSC, CRG and IRB).

The selected candidate will work in a highly sophisticated HPC environment, have access to state-of-the-art systems and computational infrastructures, and establish collaborations with experts in different areas both at international and local levels.

Female candidates are especially encouraged to apply.

**Key Duties**

- Develop and impulse best practices for health research data management in collaboration with European efforts in healthcare settings.
- Identify, design and implement technological solutions for health research data management in close collaboration with data providers.
- Identity, adopt and impulse mechanisms for health data curation in close collaboration with domain experts in clinical settings.
- Contribute towards the progressive adoption of the FAIR data principles in the health research data life cycle.
- Oversee training in Health Data Research aimed at collaborators in the clinical setting, in coordination with ELIXIR and other collaborators.
- Manage and support users of computational resources for Health Data Research at the BSC, including computational equipment, databases, and software infrastructure.
- Coordinate a small team of technicians and ensure alignment of Health Data Research projects with other teams at the BSC and with similar efforts within ELIXIR, and participate in some of their meetings and discussions when needed.
- Apply for competitive and non-competitive funds in the scope of Health Data Research projects at the regional, national and international levels.

**Requirements**

- **Education**
  - PhD in bioinformatics, computational biology or computer sciences with significant bioinformatics experience, or engineer/bachelor degree with relevant experience.

- **Essential Knowledge and Professional Experience**
- At least 3 years of professional experience with a similar role.
- Experience in data management APIs and most common bioinformatics data sources and formats.
- Experience in database design and management (SQL and NoSQL): MySQL/MariaDB, PostgreSQL, SQLite or similar; MongoDB, ElasticSearch, Cassandra or similar.
- At least 3 years of professional experience in programming languages ecosystems such as C++, Perl, Python, PHP and/or Java.
- Experience in health research data management, including genomics data.
- Experience in the communication with domain experts in the clinic around health research data management, acquisition and sharing.
- Experience in developing project technical specifications.
- At least 2 years of experience in ETL processes for health research data.
- Experience in writing projects in the area of health research data to request competitive funding, in collaboration with other stakeholders.

- Additional Knowledge and Professional Experience
  - Experience in the development, generation and use of software containers e.g. Docker, Singularity and/or Rkt, as well as their orchestration using docker-compose, Kubernetes, Ansible and/or similar technologies.
  - Experience with workflow managers such as Galaxy, Nextflow or similar.
  - Fluency in English (Spanish and/or Catalan are a plus).

- Competences
  - Team leader skills, including amongst others: good writing and presentation skills, the ability to represent the team and BSC at international meetings, resources and people management, etc.
  - Used to work under pressure and under strict deadlines.
  - Strong personal soft-skills sets: Communicative, enthusiastic, highly collaborative, proactive, self-driven.
  - Project management skills: reporting, documenting and planning.

Conditions

- The position will be located at BSC within the Life Sciences Department
- We offer a full-time contract, a good working environment, a highly stimulating environment with state-of-the-art infrastructure, flexible working hours, extensive training plan, tickets restaurant, private health insurance, fully support to the relocation procedures
- Duration: Open-ended contract due to technical and scientific activities linked to the project and budget duration
- Salary: we offer a competitive salary commensurate with the qualifications and experience of the candidate and according to the cost of living in Barcelona
- Starting date: asap
Applications procedure and process

All applications must be made through BSC website and contain:

- A full CV in English including contact details
- A Cover Letter with a statement of interest in English, including two contacts for further references

In accordance with the OTM-R principles, a gender-balanced recruitment panel is formed for every vacancy at the beginning of the process. After reviewing the content of the applications, the panel will start the interviews, with at least one technical and one administrative interview. A profile questionnaire as well as a technical exercise may be required during the process. The panel will make a final decision and all candidates who had contacts with them will receive a feedback with details on the acceptance or rejection of their profile.

At BSC we are seeking continuous improvement in our recruitment processes, for any suggestions or feedback/complaints about our Recruitment Processes, please contact recruitment [at] bsc [dot] es

Deadline

The vacancy will remain open until suitable candidate has been hired. Applications will be regularly reviewed and potential candidates will be contacted.

OTM-R principles for selection processes

BSC-CNS is committed to the principles of the Code of Conduct for the Recruitment of Researchers of the European Commission and the Open, Transparent and Merit-based Recruitment principles (OTM-R). This is applied for any potential candidate in all our processes, for example by creating gender-balanced recruitment panels and recognizing career breaks etc.

BSC-CNS is an equal opportunity employer committed to diversity and inclusion. We are pleased to consider all qualified applicants for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or any other basis protected by applicable state or local law.

For more information follow this link

Barcelona Supercomputing Center - Centro Nacional de Supercomputación