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# Job offer

JOB

SPAIN

[Universitat de Barcelona](#) | Posted on: 22 January 2025

## Postdoctoral position Artificial Intelligence in Cardiology - AI4HF

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Apply

22 Jan 2025

## Job Information

Organisation/Company

Universitat de Barcelona

<b>Department</b>	OPIR
<b>Research Field</b>	Computer science Other
<b>Researcher Profile</b>	Recognised Researcher (R2)
<b>Positions</b>	Postdoc Positions
<b>Country</b>	Spain
<b>Application Deadline</b>	12 Feb 2025 - 23:59 (Europe/Madrid)
<b>Type of Contract</b>	Temporary
<b>Job Status</b>	Full-time
<b>Hours Per Week</b>	37,5
<b>Offer Starting Date</b>	15 Mar 2025
<b>Is the job funded through the EU Research Framework Programme?</b>	Horizon Europe
<b>Reference Number</b>	Nº GA 101080430
<b>Is the Job related to staff position within a Research Infrastructure?</b>	No

## Offer Description

We are offering an exciting postdoctoral position at the University of Barcelona, within the **Artificial Intelligence in Medicine lab** ([www.bcn-aim.org](http://www.bcn-aim.org)), new trustworthy AI solutions for personalised medicine approach to tailor the care models in the field of cardiovascular diseases.

Concretely, we offer:

- A research position in beautiful Barcelona and its Mediterranean climate.
- Research experience within a prestigious university (1st position in Spain).
- Cutting-edge research in AI for healthcare in one of the most dynamic research groups in Europe (12 active projects including an ERC grant).
- An international research environment by joining a multi-cultural team representing all continents.
- Opportunities to collaborate with international and inter-disciplinary collaborators as part of the European projects.
- Support in career development (e.g. grant applications, supervision of PhD students).
- Travelling opportunities to scientific events, project meetings and international stays.
- Freedom to independently conduct research and contribute with own ideas.
- Flexible working hours, with possibility to telework.
- Competitive salary equivalent to Assistant or Associate Professor at the University of Barcelona, depending on experience.
- Contract duration until the end of the projects (minimum four years), with the possibility to extend the contract as part of other grants within the lab.

The requirements for the position are:

- Machine/deep learning algorithms.
- Biomedical data science.
- Medical image analysis.
- Excellent programming skills in Python and/or C++.
- Proficient English, both oral and written.
- Enthusiasm about research and medical applications of AI.
- Aptitude to work independently, lead project deliverables and meet deadlines.
- Good team spirit and participation to the lab's scientific life.
- Aptitude to collaborate with local and international project partners (including technical and clinical collaborators).

Furthermore, knowledge in any of the following areas are desirable (but optional):

- Probability and statistics.
- Mathematics and/or applied mathematics.
- Bias detection and correction.
- Transfer learning and domain adaptation.
- Uncertainty estimation.
- Federated learning.
- Bioinformatics and/or Biomedical informatics.
- Biomedical engineering.
- Personalised and/or precision medicine.
- Digital health.

### **The research projects:**

You will join our AI for cardiology team, as part of ongoing projects such as AI4HF (<https://www.ai4hf.com/>) and DataTools4Heart (<https://www.datatools4heart.eu/>), funded by the European Commission and some coordinated by our lab. In these projects, we are developing new trustworthy AI solutions for personalised medicine approach to tailor the care models in the field of cardiovascular diseases. In particular, we are interested in new AI solutions for risk assessment and patient management. The project will build on a unique set of big data repositories, real-world hospital data, trustworthy AI methods, computational tools and clinical results from major EU-funded projects in cardiology leveraging federated learning. Should you join our team, you will collaborate with several technical and clinical partners within and outside Europe (e.g. in the Netherlands, United Kingdom, Greece, Spain, Belgium, France, Germany, Portugal, Peru, Tanzania, Czechia, Turkey).

### **The group:**

The successful candidate will join the Artificial Intelligence in Medicine Lab ([www.bcn-aim.org](http://www.bcn-aim.org)), which is an integral part of the University of Barcelona's Faculty of Mathematics and Computer Science. It is a young and dynamic research lab, highly active in international projects, and composed of >25 enthusiastic academics, researchers, students and research managers, with expertise in data science, machine/deep learning, biomedical informatics, trustworthy AI, and health-related applications. The research group has an established track record in coordination and participation in European and international projects (> 10 million Euros over the last 5 years) in biomedical data science and medical AI (e.g. EuCanImage, euCanSHare, EarlyCause, LongITools, HealthyCloud, RadioVal, DataTools4Heart, Youth-GEMs, HappyMums, AIMIX, AI4HF, YOUTHreach).

### **The institution:**

The University of Barcelona (UB), founded in 1450, is one of the oldest universities in Spain. It comprises a student body of 84,370 and 4,548 research staff members. With 73 undergraduate programs, 273 graduate programs and 48 doctorate programs, UB is the largest university in Barcelona and Catalonia. The UB is ranked the first Spanish university according to several

rankings (QS World University Rankings 2022, Shanghai Ranking 2022). It is particularly interested in fostering international relations and, for many years, has managed an average of 150 European projects per year. The University of Barcelona is part of the prestigious League of European Universities Research (LERU).

Gross salary per year: 40.000 €.

## Where to apply

Website <https://t.ly/9sCzQ>

## Requirements

Research Field Computer science

Education Level PhD or equivalent

### Skills/Qualifications

- Machine/deep learning
- Predictive modelling
- Multi-source data integration
- Biomedical or bio-informatics
- Excellent programming skills (e.g. in Python)
- Excellent English, both oral and written
- Ability to independently present results

### Specific Requirements

- Good team spirit and participation in the scientific life of the lab
- Aptitude to work independently, to lead on project deliverables to co-supervise students, and to represent the lab at meetings and events
- Aptitude to collaborate with both technical and clinical collaborators
- Passion for applications of artificial intelligence to biomedicine
- Strong writing and speaking skills.

Languages ENGLISH

Level Excellent

Research Field Computer science

## Additional Information

### Eligibility criteria

- Adequacy of the CV (maximum 50)
  - Specialty doctorate (30), generic doctorate (20)
- Letter of motivation (maximum 20)
- Experience in the field (maximum 30).

Minimum score to pass the selection process: 60/100 points.

### Selection process

Required documentation:

- CV (include contact details of people from whom references or reports can be requested)
- Motivational letter
- Registration form (Appendix 3)

\*Be in possession of the doctor's degree at the time of the formalization of the contract.

### Additional comments

Duration of the contract of employment: 12 months, renewable up to 31/05/2027.

The candidate proposed for hiring must accept the job offer within **3 working days** from the date of notification of the selection.

Priority will be given to people with disabilities (Law 89/2015 of June 2, reserve of quota 2% in favour of people with disabilities in companies of 50 or more people).

Be aware that the starting date sets in this offer is an estimate date. The official starting date will depend on the bureaucratic time that will take the preparation of the labour contract and presentation of the necessary documents to be hired by the selected candidate.

For additional information regards this offer, please, contact Paloma Fernández:

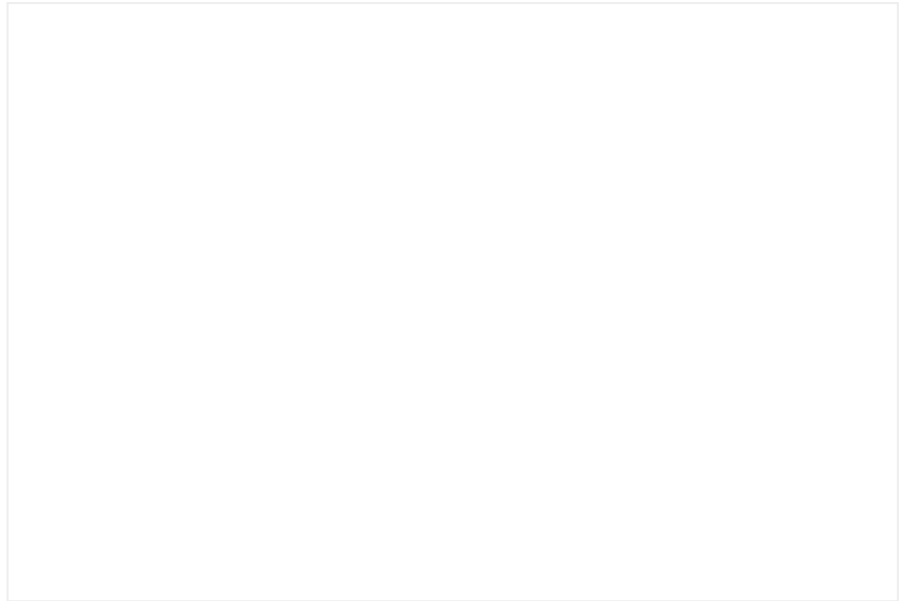
[paloma.fernandez@ub.edu](mailto:paloma.fernandez@ub.edu)

Website for additional job details <https://www.bcn-aim.org/>

## Work Location(s)

Number of offers available	1
Company/Institute	Universitat de Barcelona
Country	Spain

**State/Province** Barcelona  
**City** Barcelona  
**Postal Code** 08007  
**Street** Gran Via de les Corts Catalanes, 585  
**Geofield**








## Contact

**State/Province** Barcelona  
**City** Barcelona  
**Website** <https://web.ub.edu>  
**Street** Gran Via de les Corts Catalanes, 585  
**Postal Code** 08007  
**E-Mail** paloma.fernandez@ub.edu

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