

JUNIOR RESEARCHER (M/F) IN BIOINFORMATICS - 1 VACANCY

Reference: CCMAR/ID/01/2019

The Algarve Centre for Marine Sciences (CCMAR) opens a call for a Junior Researcher (M/F), of any nationality, including stateless candidates. The uncertain term employment contract will be as part of the EOSC-Life Research and Innovation Action (RIA) "Providing an open collaborative space for digital biology in Europe" (INFRAEOSC-04-2018), Grant Agreement number: 824087.

EOSC Demonstrator Project Description:

Marine Eukaryote Genomics Portal – access to tools and data-flows for marine genome annotation in the European Open Science Cloud (EOSC).

A new platform will address the fragmented research landscape for genome annotation of marine organisms. The project will develop a portal to marine genomic resources and a community driven annotation platform for marine eukaryotes which would provide a focus for post-assembly genomic workflows and data access and complement access services such as EMBRIC Configurator, ELIXIR ontologies, and meta-data standards. Together these resources will expose the workflow from genome data collection to publication using open access and FAIR compliant standards and procedures. Although taxon agnostic, initially the platform will focus on pelagic fishes and the use primarily of comparative methods of gene prediction and validation.

Job Summary and Duties:

The Junior Researcher will provide bioinformatic and computational expertise to develop a "Demonstrator" project for the European Open Science Cloud (EOSC) infrastructure.

- 1) Develop a web-based portal for the EOSC to enable access to marine genomic resources, including a inter-species software pipeline to compare and update gene annotations and ontologies.
- a) Develop programmatically a content management framework (e.g. Drupal) based on the Orcae platform (Online Resource for Community Annotation of Eukaryotes).
- b) Develop programmatically databases and software pipelines for genome curation, and annotation and ontology comparisons.
- 2) Provide general bioinformatic expertise to project managers.



Relevant Legislation:

- Decree-Law nr 57/2016, from 29th August, altered by Law nr 57/2017, from 19th July, (RJEC).
- Portuguese Labour Law, approved by Law nr 7/2009, from 12th February in its current form.
- Decree Law nr 124/99, from 20th April in its current form.
- Regulatory Decree nr 11-A / 2017, of 29th December.
- Decree Law nr 29/2001 of 3rd February.
- Portuguese Administrative Procedure Code

Starting Date: The contract will begin on April 2019 and will be in place until the work plan is completed.

Place Of Work: Centro de Ciências do Mar (CCMAR), Campus de Gambelas, Universidade do Algarve, Faro, Portugal.

Working Schedule: 35 hours per week.

Monthly Remuneration: Gross monthly Remuneration is 2.128,34€, correspondent to the level 33 of the TRU - Junior Researcher remuneration.

Application Period: Applications will be accepted between 06th and 25th February 2019.

Required Profile:

- 1. A PhD in Computer Sciences, Biology, Computational Biology, or related discipline with less than five years postdoc.
- Demonstrable skills in the administration of UNIX(-like) systems, proficiency in Python programming, content management frameworks, relational databases and SQL, and related web technologies.
- 3. Demonstrable research capability through internationally recognized journals within the field of computer science and/or computational biology.
- 4. A high proficient in English (spoken and written).

Non-compliance with any of these requirements invalidates the application. Provision of false documentation will be punished by law.



Desired profile:

1. Experience of analysing large life science data sets, such as genomic data and/or physical measurement data, using bioinformatics tools and web-based resources.

Selection Panel: In accordance with article 13° of RJEC the selection panel is composed of Adelino Canário, Professor at Algarve University and CCMAR's President (President), Cymon J. Cox, researcher at CCMAR (Member); and Gianluca De Moro, researcher at CCMAR (Member).

Candidate Evaluation: The evaluation is carried out in two phases, which will result in a final classification between 0 and 100 points.

Phase 1) Curricular assessment

The selection is made through the evaluation of the motivation letter, which will include the activity and career development plan, and of the scientific and professional curriculum focusing on the relevance, quality and timeliness of the criteria referred to in Article 5 (2) (a) to (d) of the RJEC and of the motivation letter in the subject area, considering the specific requirements and the adequacy for the duties to be performed:

- CA) Scientific, technological production in the last five years, deemed most relevant by the candidate;
- CB) Activities of applied research or based on practice that the candidate considers with greater impact;
- *CC)* Activities of extension and dissemination of knowledge, namely in the promotion of the culture and the scientific practices that the candidate considers more relevant;
- *CD)* Project management activities and programmes of science, technology and innovation, or experience in observation, monitoring and evaluation of the scientific and technological system or higher education in Portugal or abroad. Included here are the activities of preparation and submission of applications for science, technology and innovation projects.

The period of five years referred in the evaluation criteria may be increased by the selection panel, at the request of the candidate, when justified on grounds of suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work legally protected.

The candidates who have obtained less than 70 points in the curricular assessment will be considered not approved in absolute merit. The decision to exclude on absolute merit



is communicated to the candidates by electronic mail for the purpose of hearing with interested parties.

Phase 2) Interview

If the selection panel considers it necessary for the evaluation, the top five candidates with the highest scores of the curricular assessments that were approved in absolute merit will qualify for the second phase, consisting of an individual interview, either face-to-face or through a videoconference. Interviews will be conducted up to 10 days after the decision taken by the evaluation panel. The interview will be weighted, at most, as 10% of the final classification score and will serve the sole purpose of clarifying aspects related to the results of scientific research of the candidates.

Selection Process

Each member of the selection panel will assess all the candidates in all the factors from CA to CD scoring between 0 and 100 and must present the reasons for the scores given. Abstention is not allowed. A similar procedure will be followed regarding the candidates that are called for the interview. The candidates that are not called for an interview will have 0 points in the second phase.

The curricular assessment (C) of each candidate is obtained from the sums of the scores of each criterion multiplied by the weights according to the formulation, rounded to the decimal place.

$$C = CA*55 + CB*25 + CC*10 + CD*10$$

The final scores (FS) of each candidate is obtained according to the average of the final results of the curricular assessment and of the interview (I) that is evaluated by the weights of the following formulation, rounded to the decimal place.

$$FS = C*90 + I*10$$

After determining the final score (FS) of all candidates, each member of the selection panel will rank the candidates according to the final scores assigned to them from the highest to the lowest. This is followed by the vote to the first place and for each successive place. A candidate is selected when they receive the majority of votes. If this does not happen in the first round of voting, the least ranked candidate is eliminated, and the procedure is repeated with the remaining candidates. In case of a draw the vote of the President of the selection panel decides.

The selection panel will write minutes of the meetings with a description of the evaluation and selection process including an ordered list of candidates, their classification, and the final decision. The CCMAR Board of Directors shall validate the final decision of the selection panel.



In the event that no applicant has the necessary profile, or the funding conditions have significantly changed since the announcement of this position, the selection committee reserves the right to close the call without any recruitment. In the event that the selected person does not accept the position or resigns during the contract, the jury reserves the right, upon convenience and opportunity, to assign the post to the next applicant in accordance with the ranking positions, through a judgment of convenience and opportunity.

Application Submission: Only applications submitted through the CCMAR website (www.ccmar.ualg.pt/list/job) will be considered. Applications are considered to be correctly submitted only after the candidate has received a confirmation e-mail from CCMAR. Applications (in English) should include a Motivation Letter (including a personal assessment of the relevance of the activities of the last five years for the present competition, highlighting the chosen scientific publications), copy of the candidate's Ph.D. certificate, a detailed CV (in accordance with the requirements and selection criteria of the application), digital copies (e.g PDFs) of up to 3 relevant publications, other documents deemed as relevant for the application, and the email contacts of up to 3 referees.

Results: The list of admitted and excluded candidates, and the final classification list, shall be posted on the CCMAR website (www.ccmar.ualg.pt/list/job-closed) and all candidates will be notified by email.

Preliminary Hearing and Final Decision Deadline: After notification, candidates have 10 working days to contest the preliminary decision. The final decisions will be announced within 90 days of the application deadline.

Disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree, type of disability and communication / expression means to be used during selection period on their application form, under the regulations above.

CCMAR's non-discrimination and equal access opportunities policy – No candidate can be privileged, benefited, jeopardised or be deprived of any right or exempt of any claim in regards to descendent, age, gender, sexual orientation, marital status, economic situation, origin, social economy, genetic heritage, disability, chronic disease, nationality, ethnicity, territory of origin, language, religion, politics, ideology or union membership.

The members of the jury approved this announcement on 4th February 2019.



