Call for Applicants

INnovative Life sCIence Phd Programme in South Italy — INCIPIT

CNR, High Performance Computing and Networking Institute (ICAR) 1 PhD position (Early Stage Researcher) within the INCIPIT CONFUND project (grant agreement n. 665403) co-funded by HORIZON 2020/Marie Sklodowska Curie Action for the implementation of the following research project: Integrated analysis of multi-omics single cell sequencing data.

The project will focus on the development of novel algorithms, methods and software tools for the integration of information and knowledge coming from different sources to analyse single cell sequencing data.

1. **Eligibility criteria**

(a)   Nationality: The candidate can be of any nationality.

(b)   Mobility: By the closing date of the call for applicants, the candidate must not have resided or carried out his/her main activity in Italy for more than 12 months in the 3 years immediately prior to his/her recruitment under the project. Compulsory national service and/or short stays such as holidays are not taken into account.

(c)   Qualifications: By the closing date of the call for applicants, the candidate shall have a master degree or equivalent in Bioinformatics, Computer Science, Statistics, Mathematics or strictly related fields, corresponding to the second level of studies.

(d)   Foreign language: The candidate shall be fluent in written and spoken English.

(e)   Experience: Preference will be given to candidates with a strong background and interest in Bioinformatics and Computational Biology. In particular, the candidate will have experience in developing software projects using programming languages, such as R, Python, and Perl, C. Basic

understanding of algorithms, data structures and computational complexity. Basic knowledge of statistical learning theory (classification, regression, regularization), unsupervised learning (clustering, outlier detection), statistical validation methodologies, statistics for data analysis.

(f)   Moreover, by the closing date of the call for applicants

- candidates shall **not** have been awarded a doctorate degree;

- The candidate should be in the first 4 years (full-time equivalent) of his/her research career. This includes the period of research training, starting from the date of obtaining the degree, which would formally entitle him/her to embark on a doctorate either in the country in which the degree was obtained or in Italy, irrespective of whether or not a doctorate is envisaged.

2. Information related to the supervision and the contract

- The successful applicant will

    o develop the project under the supervision of Dr. Mario Rosario Guarracino at the Naples (Italy) branch of High Performance Computing and Networking Institute (ICAR) ;

    o be enrolled in the PhD Programme in Biomolecular Sciences held by the Second University of Naples;

- The employment contract offered is a full time, temporary contract with full social security coverage;

- The duration of the contract is 36 months (or 12 Months renewable up to 36 months);

- The monthly gross salary is 2.143,50 €. In case the successful applicant has family charges, an additional allowance will be allocated once not before Month 12 of the contract period.

3. Evaluation criteria and selection procedure

The evaluation will consist of two selection steps: the first based on the documentation provided by the candidates and the second based on the interview. Within each step, the marks given for each criterion by the reviewers will be used against an established pass/fail threshold.

The following evaluation criteria will be applied respectively in the first and second selection step:

First selection step

Criteria	Mark (min/max)	Comments
Academic record and training	12.6/18	Evaluation of the marks obtained for each exam and of the relevance of the study plan with respect to the INCIPIT research

		topics proposed. The average of the marks obtained during the University studies and the final score of the degree will be taken into account and normalized as a percentage against the maximum mark achievable in each university system.
Research activities	10.5/15	Publications in journals/conferences (national or international) and scholarships/awards relevant to the INCIPIT research topics. However, given the expected junior profile of candidates, active participation in research projects will score similarly.
CV/motivation letter	10.5/15	Points will be assigned based on the following categories: (1) competence on the research topics (CV); and (2) organization, sequencing, content, vocabulary and word choice, critical thinking, originality and creativity and accuracy of the motivation letter.
Level of English	3.5/5	Evaluation of any document stating that the candidate has the necessary proficiency (e.g., British Council, TOELF and IELTS).
Reference letters	4.9/7	Points will be assigned based on the following elements: 1) level of detail, 2) specific information about the candidate, 3) knowledge about the candidate, and 4) profile of the candidate.
Overall Threshold to pass this evaluation step is **42/60**		

Second selection step

Criteria	Mark (min/max)	Comments
Scientific knowledge in the field of interest	10.5/15	Applicants will be invited to describe their scientific profile with respect to INCIPIT research topics.
Research experience in the field of interest	7/10	Applicants will be invited to talk about their research experience /subject of the thesis.
Motivation	7/10	Interest in the research topic will be evaluated.
English	3.5/5	Fluency in English will be evaluated.
Overall threshold to be included in the final ranked list is **28/40**		

4. Criteria for the composition of the evaluation commission

The evaluation procedure will be carried out by a Management Committee (MAC), dealing with the administrative and formal requirements of the applications; 2) a Scientific Evaluation Committee (SEC), reviewing the scientific quality of the applications.

Each scientific panel will be composed of 5 to 7 members according to the number of applications received. It will include representatives of the Doctoral Schools (from 1 to 2), representatives of the CNR institutes (from 3 to 5) and external evaluators (from 1 to 2).

5. Deadline and procedure for the submission of the application

Deadline for application is 31 August 2017.

The application procedure will be done by electronic submission through the INCIPIT website www.igb.cnr.it/incipit (on-line application page).

The following information and documents will be required in the application:

- Europass CV, including a detailed description of the Full Time Equivalent (FTE) research experience;

- Proof of nationality (copy of passport or identity card);

- Copy in English or Italian of University diploma;

- Copy in English or Italian of study results (i.e. grades of university exams);

- Proof of language test results (e.g., British Council, TOEFL and IELTS) except for applicants whose mother tongue is English;

- Preferred research topics;

- Copy of publication(s);

- Motivation letter;

- Two reference letters.

6. Indicative date for the interview

The interview of candidates passing the first step of the evaluation procedure will be carried out via Skype in September 2017.

7. For any further information please visit www.igb.cnr.it/incipit or contact

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The Director

Ing. Giuseppe De Pietro