



**NOVA University of Lisbon
Institute of Hygiene and Tropical Medicine (IHMT NOVA)
Advert seeking a PhD graduate to perform researcher activities:**

Scientific Employment Competition Ref. PTDC/SAU-PUB/30089/2017

According to the provisions of Decree-Law no. 57/2016 of 29 August, and taking into account the legal regime to which it refers, contained in the same legal document, a competition procedure of international selection is open, to fill a doctoral post for the exercise of scientific research activities, financed by national funds through the Foundation for Science and Technology, with the following guidelines and specifications:

Background

- a) The decision to open the competition procedure is due to the fact that the project **PTDC/SAU-PUB/30089/2017** includes in its work plan, scientific research activities to be carried out by a postdoctoral researcher.
- b) The contract with the selected candidate is subjected to the availability of adequate budget allocation through a development contract to be signed by FC&T with the Institution, in order to fund the call.
- c) Candidates who do not earn 10 points on a scale of between 0 and 20 of the respective ranking criteria will not be considered to fill the position, due to lack of sufficient absolute merit.

GENERAL APPLICATION REQUIREMENTS:

- a. National, foreign and stateless persons with a PhD in Biology, Life Sciences, Geography or similar areas;
- b. Holders of a scientific and professional *Curriculum vitae* that displays an appropriate profile for the activity to be performed;

If the PhD has been awarded by a foreign higher education institution, it must comply with the provisions of Decree-Law no. 341/2007, of 12 October, and the fulfilment of any formalities established therein must occur by the application expiration date.

The recognition of the foreign academic degrees will only be required to the candidates selected to celebrate the employment contract.

If the candidates selected to celebrate the employment contract do not deliver the recognition of the foreign academic degrees until the date of the signature of the contract, it will determine that the contract will pass for the candidate ordered in second place and so on, successively.

SPECIFIC ADMISSION REQUIREMENTS:

PhD in Biology, Geography or related areas. Good knowledge of spatial modelling and geographic information systems (GIS) is required. The jury will consider:

Expertise in the usage of scientific programming languages for the management and analysis of spatial data (preferably in R, but also Python);

Previous experience in the development of statistical models for the analysis and prediction of spatial or temporal phenomena;

Record of international-level research publications in the fields of environment, ecology, biogeography or epidemiology, namely in species distribution modelling, population dynamics or environmental risk analysis.

Language: English as first or second language is required.

In addition, we expect the successful candidate to have:

- Ability to work in a team;
- International presentation experience;
- Availability to travel both nationally and internationally.

TASKS TO PERFORM:

The WARDEN project will implement a computer-based system for the daily prediction of risk of arboviral diseases in Madeira Island. The system will rely on the iterative collation and harmonization of up-to-date information on environmental and human factors such as temperature and precipitation, travelers arriving to the island and the epidemiological situation in their region of origin. The system will integrate this information and channel it to a number of sub-models dealing with distinct components of arboviral epidemiology, including the likelihood of arbovirus arriving to the island from epidemic regions, the habitat suitability for the mosquito vectors and the response of their populations to observed and forecasted meteorological conditions.

The successful candidate will be involved in:

- The development and implementation of the sub-models at the core of the WARDEN computer system.
- The implementing routines for the iterative collection of meteorological and socio-economic data.

- The development of statistical or machine learning-based approaches for the spatio-temporal prediction of mosquito population dynamics
- The development of statistical or machine learning-based approaches for the spatio-temporal prediction of disease risk.

CONTRACT AND STATUS:

The employment is carried out by means of an unfixed-term contract under the terms of the Labour Code, as a PhD, Level 33 of the single remuneration table (TRU), in accordance with Decree-Law no. 11-A/2017, of 29 December.

WORKPLACE:

IHMT-NOVA and IGOT facilities, Lisbon

DURATION OF CONTRACT:

The contract will start in April 2019 and may be in force until the end of the project, and can not, in any case, exceed 30 months.

DOCUMENTS THAT SHOULD BE INCLUDED IN THE APPLICATION:

- i) Motivation Letter (max. 3000 characters, including spaces);
- ii) Copy of certificate or diploma;
- iii) Detailed *Curriculum vitae* according to the application requirements;
- iv) Other relevant documents to the evaluation of the profile suitability;
- v) Copy of the identification card or passport.

METHODS OF SELECTION AND DEFINITION OF WEIGHTS:

Curricular evaluation (evaluation of *Curriculum vitae* and motivation letter according to the aspects specified in general and specific application requirements) - 90%

Interview (if needed) - 10%

If the interview is not be needed because there is only one candidate or the curricular evaluation is sufficient to rank applicants, it will weights 100%.

The indication of selection methods, their weights and classification system will be reported at first minute of Panel meetings.

COMPOSITION OF THE EVALUATION PANEL:

President: Carla A. Sousa, Assistant Professor, IHMT/UNL

Chair: César Capinha, Invited Assistant Professor, IGOT/ULisboa;

Chair: Prof. Doutor João Pinto, Assistant Professor with Habilitation, IHMT/UNL

Chair (substitute): Teresa Novo, Assistant Professor, IHMT/UNL

APPLICATION DEADLINE:

The deadline for submission of applications is 10 working days from the date of publication in the Official Gazette.

Full notice of this procedure will be available on the FCT website at <http://www.eracareers.pt> and on the IHMT website at <http://www.ihmt.unl.pt/category/bolsas-e-concursos/>.

The application must be sent by email indicating the reference in the subject field, to the email address casousa@ihmt.unl.pt e odete@ihmt.unl.pt -by 5pm.

Notification of Results: All applicants will be informed of the results via email.

Pursuant to Article 9 (h) of the Constitution, the Public Administration, as an employer, actively promotes a policy of equal opportunities for men and women in accessing employment and professional advancement, scrupulously and any form of discrimination.