INSTITUTO DE MEDICINA MOLECULAR JOÃO LOBO ANTUNES

Av. Professor Egas Moniz Ed. Egas Moniz 1649-028 Lisboa Phone: +351 217 999 411

Fax: +351 217 999 411



Instituto de Medicina Molecular João Lobo Antunes (iMM) opened a call for one postdoctoral researcher position with the funding support from "La Caixa" Banking Foundation under the project "IL7R_LungCan".

The ad was published at EURAXESS Portugal Portal on 21st of February 2022 and also disseminated in iMM website. The call was opened from 22nd of February 2022 until 10th of March 2022 and during which the following applicant applied:

- ✓ B. Nandha
- ✓ Bruno Silva
- ✓ Christian Ramos
- ✓ Cláudia Santos Bessa
- ✓ Diana Bicho
- ✓ Hadi Parsian
- ✓ Marina Badenes
- ✓ Zohreh Lasjerdi

On the 22th of March 2022 the jury composed by João Barata, Rita Cascão and Rita Fragoso (all PhD's), met to analyze the application documents (Motivation Letter with a short description of your previous research experience with relevance to the project, the main scientific achievements, and why the candidate believes IMM should hire him/her; 2) CV, including list of publications; 3) two reference letters and/or reference contacts) in accordance to the profile and work plan indicated in the job advert.

Work Plan and Objectives: Lung cancer is the leading cause of cancer-related deaths worldwide. Non-small-cell lung cancer (NSCLC) is the major lung cancer subtype, accounting for 85% of all cases. Immunotherapy based on PD-1 axis blockade transformed the therapeutic landscape of advanced NSCLC in recent years. However, resistance can emerge and constitutes a significant challenge. Another clinical hurdle stems from >50% primary tumors metastasizing. Interleukin (IL)-7 and its receptor (IL-7R) are critical for T-cell development, survival of naïve T-cells, and generation and maintenance of memory T-cells, being essential for efficient immune anti-tumor responses. However, in the current project, funded by la Caixa Foundation and based on our preliminary data, we wish to demonstrate that IL7R can have an oncogenic role in lung cancer. We aim to:

- Demonstrate that IL-7R signaling in NSCLC cell lines and PDX samples leads to cancer cell proliferation, survival, motility, migration or invasion in vitro.
- Using xenograft and knock-in models of IL7R overexpression, show that IL-7R signaling promotes lung cancer development, expansion and/or metastasis in vivo.
- Characterize the tumor cell-intrinsic and microenvironmental mechanisms involved in IL-7R-dependent cancer development (with a particular focus on the immune compartment).

Candidate's Profile:

- Doctoral Degree in Biomedical sciences or related fields (for more than 3 years);
- Know-how in cancer research and/or immunology;
- Experience working with laboratory animals is highly valued (preferably with personal license for handling animals);



- Experience in molecular biology;
- Experience in multicolor flow cytometry analysis;
- Experience with cell culture of cell lines and primary cells (knowledge of proliferation, viability, migration and invasion assays is an important plus);
- Basic concepts of microscopy;
- High sense of responsibility, organization and method;
- Pro-active personality;
- Ability to work independently but also with team spirit;
- Excellent knowledge of English, spoken and written.

Necessary Documents for Applications: 1) a motivation Letter with a short description of your previous research experience with relevance to the project, your main scientific achievements, and why you believe we should hire you; 2) your CV, including list of publications; 3) two reference letters and/or reference contacts.

Selection Method: First phase: Curriculum Analysis (60%) and Motivation Letter (10%). The Curriculum will be analyzed qualitatively, and in what concerns to its content and relevance for the tasks to be performed, namely: executed and/or published scientific work, with special emphasis on areas related to the work plan (20%); research experience and relevant knowledge in the area of the proposed work plan as described in the candidate profile (40%). The letter of motivation will be evaluated in what concerns the motivation and adequacy for the activities to be performed (5%), and command of the English language (5%).

Second stage: The jury will select for the interview (evaluation: 30%) 5 candidates who obtained in the first phase the highest ranking, with a minimum of 50%. If less than 5 candidates obtained a minimum rating of 50% those with at least 50% will all be interviewed. No interviews will be conducted if none of the candidates achieves a score of at least 50% in the first phase.

After evaluation of all admitted applications, the jury will write a meeting minute with all process of recruitment, evaluation and selection including an ordered short list of approved candidates and their respective classification. If, after the interview, the score of none of the candidates reaches at least 90%, the Jury may decide that no candidate will be selected for the position.

Curriculum Analysis (60%)

The analysis of the Curriculum Vitae took in consideration:

- Executed and/or published scientific work, with special emphasis on areas related to the work plan (20%);
- Research experience and relevant knowledge in the area of the proposed work plan as described in the candidate profile (40%).

Motivation Letter (10%)

The analysis of the Motivation Letter took in consideration:

- Motivation and adequacy for the activities to be performed (5%);
- Command of the English language (5%).

The analysis and discrimination of all admitted candidate's classification is presented in Annex I.

Interview (30%)

Following the evaluation of the CV and motivation letter, the jury decided to invite for an interview the 2 candidates that obtained a score equal and/or higher than 50%. The candidates are identified below. The interview took place on 29th of March 2022.

- Cláudia Bessa Santos;
- Marina Badenes;

The candidate Marina Badenes communicated through email that she was no longer interested in the position due to a new job offer. Thus, Cláudia Bessa Santos was the only candidate interviewed.



The interview was based in the following criteria:

- Communication and social skills (5%);
- Grasp of the project, commitment and independent thinking (20%);
- Spoken English (5%);

The analysis and discrimination of the candidates' classification in the interview phase and the total classification in both phases are presented in Annex II.

Lisbon, 1st of April 2022

João Barata (FMUL, iMM)

Rita Cascão (iMM)

Rita Fragoso (iMM)

Rita Fragoso

ANNEX I - Postdoctoral Research Employment Contract Reference IMM/CT/23-2022

Each element of the jury analyzed and rated the interview of the sole candidate and all agreed unanimously in the classification and justification given below.

	Curriculum Analysis (60%)		Motivation Letter (10%)				
Applicant	Executed and/or published scientific work, with special emphasis on areas related to the work plan (20%)	Research experience and relevant knowledge in the area of the proposed work plan as described in the candidate profile (40%)	Motivation and adequacy for the activities to be performed (5%)	Command of the English language (5%)	Total	Justification	
Cláudia Bessa Santos	20	40	3	5	68	The candidate has a good publication record, with 3 papers as first author and 13 as co-author. Importantly, all the publications as first author are in the cancer field. The candidate has the technical skills and experience required for the proposed study, including working with laboratory animals and cell culture and knowledge regarding TME. The motivation letter showed a good command of written English language, but grasp of the proposed project concept.	
Marina Badenes	15	40	3	5	63	The candidate has a good publication record, with 3 papers as first author and 6 as co-author. Of note, some of these publications were in the cancer field. The candidate has the technical skills and experience required for the proposed study, including working with laboratory animals (mice models of cancer) and knowledge regarding signalling, immunology and cancer. The motivation letter showed a good command of written English language and motivation, but lack some grasp of the proposed project concept.	
Christian Ramos	10	30	3	5	48	The candidate has a good publication record, with 10 papers as first author and 15 as co- author, but not in the proposed work area (cancer). The candidate has a lot of experience as a postdoctoral fellow, since he finished his PhD in 2011. He has the technical skills and experience required in this proposed project, including working with laboratory animals. However, the candidate has no previous solid expertise in the cancer field. The motivation letter showed a good command of written English language, and motivation to carry out this project, still with no deep grasp of the project.	
Diana Bicho	7	30	3	5	45	The candidate has some publications, with 6 papers as first author and 6 as co-author, but not in the proposed work area. The candidate has the technical skills and experience required in this proposed project, including working with laboratory animals. Still, she has a stronger experience in the field of Inflammation/Rheumatic diseases, vaccines and microbiology. The motivation letter showed a good command of written English language, but lack some grasp of the proposed project concept.	
Zohreh Lasjerdi	10	20	3	5	38	The candidate has a good publication record, with 4 papers as first author and 25 as co-author, but not in the proposed work area (cancer). The candidate has some technical skills and experience required in this proposed project, but it is not clear her expertise regarding FACS and microscopy. Also, the candidate has no previous solid expertise in the cancer field, her main research experience has been in Medical parasitology. The motivation letter showed a good command of written English language, with motivation for the proposed project but lack some grasp of its concept.	
Bruno Silva	5	20	3	5	33	The candidate has some publications, with 3 papers as first author and 4 as co-author, but not in the proposed work area. Despite the candidate only recently finished his PhD, he has the technical skills and experience required in this proposed project, including working with laboratory animals. Only FACS and microscopy experience were not completely stated in the CV. Still, the candidate has a stronger experience in the field of Immunology and Microbiology. The motivation letter showed a good command of written English language, but lack some grasp of the proposed project concept.	
Hadi Parsian	10	15	3	5	33	The candidate has a good publication record, with 48 publications. Some of these publications as last author (but few as first author) and some in the proposed work area (cancer). Still, the candidate lacks technical skills and the experience required in this proposed project, including working with laboratory animals, FACS, cell culture and microscopy. The candidate has a strong experience in the field of Clinical Biochemistry, with no solid expertise working in the cancer field. The motivation letter showed a good command of written English language, but lack some grasp of the proposed project concept.	
B. Nandha	5	5	1	5	16	The candidate has some publications, with 6 papers as first author and 4 as co-author, but not in the proposed work area. The candidate seems to have a strong CV and technical skills in the field of pharmaceutical chemistry, but not in field of cancer, as required to execute this work. The motivation letter showed a good command of written English language, but lack some grasp of the proposed project concept.	

ANNEX II - Postdoctoral Research Employment Contract Reference IMM/CT/23-2022

Each element of the jury analyzed and rated the interview of the sole candidate and all agreed unanimously in the classification and justification given below.

Applicant	Total Annex I	Interview (30%)					
		Communication and social skills (5%)	commitment	Spoken English (5%)	Total Annex II	Justification	Total Annex I + Annex II
Cláudia Bessa Santos	68	2	5	5	12	The candidate seems independent and revealed interest in the project, but did not show any actual grasp of it. She thinks she can contribute to this work with her experience in targeted therapies and pharmacology, but that is not the core of the project and we need to gain knowledge in multiple other aspects before reaching the aims of the project more related to the development of targeted therapies. After the interview it became apparent that the candidate has not much experience in in vivo work and FACS. The candidate revealed capacity to work as a team member, although she did not reveal a particularly enthusiastic profile. Overall, we find the candidate does not have the necessary charateristics to be selected for this position.	

