







*IRTA is a research institute owned by the Government of Catalonia ascribed to the Ministry of Climate Action, Food and Rural Agenda. IRTA is one of the CERCA centers of excellence of the Catalan Research System. Our purpose is to contribute to the modernization, competitiveness and sustainable development of agriculture, food and aquaculture sectors, the supply of healthy and quality foods for consumers and, generally, improving the welfare and prosperity of the society. We are granted by the EU with the [HRS4R](#) distinction for "HR Excellence in Research" and thus we offer a rich environment for knowledge development and exchange where to develop a scientific career, and possibilities for professional promotion according to the attained achievements. Check our initiatives [here](#).*

## PhD candidate for the Animal Health Program

[ref. CPI2924]

IRTA is currently seeking an enthusiastic and motivated PhD candidate to join the [Animal Health Program](#). We invite applications from candidates with relevant research experience and passion to conduct research and innovation activities on mapping metabolic interactions within the pig nasal microbiota to develop new pathogen control strategies.

-  Supervisor: Dr. Karl Kochanowski ([see google scholar profile](#))
-  Job location: [IRTA-CReSA](#)
-  Full-time position (37.5 h/week)
-  Terms of appointment: The duration of the PhD Candidate contract will be for four years.
-  Salary: The financial remuneration for the PhD Candidate contract will be € 1.414,29/gross per month (€ 19.800/gross per annum) for the first year. From the second to the fourth year, it will be € 1.716,07/gross per month (€ 24.025/gross per annum). Upon termination of the contract, the corresponding compensation will be paid. IRTA will also pay the fees of the doctoral school when receiving the enrollment. <sup>(1)</sup>
-  Employee Benefits: 22 vacation days, 3 days of family & work conciliation, 45h of personal days, Friday afternoon off, Compressed Summer schedule from 15/06 to 15/09, Conciliation schedule.

### Tasks and Responsabilites:

**Title of project:** Mapping and exploiting the metabolic network of the nasal microbiome to rationally design antimicrobial interventions (**MapEx**, funded by the Spanish Ministry of Science and Innovation, Project-ID: PID2023-152210NA-I00)

**Aim of project:** generate comprehensive map of metabolic interactions within a recently developed synthetic consortium of the pig nasal microbiota, use this information to develop metabolic interventions to combat bacterial pathogens, and test these interventions experimentally using an *in vitro* co-cultivation system containing bacteria as well as porcine nasal organoids.

#### **Tasks/responsibilities:**

- Work within the bacterial research group at IRTA-CReSA
- Contribute to all research activities in this project, including the planning, execution, and analysis of experiments; the development of new experimental/computational approaches; the preparation of scientific publications
- Candidates will be integrated into the PhD Program in Microbiology of the Universitat Autònoma de Barcelona (UAB)

## Required qualifications and experience

Candidates must hold one of the following degrees:

- a)** A Master's in an area of Biological Sciences; especial attention will be given to candidates with a Master's in Biotechnology, Bioengineering or similar;
  - b)** To be in a position to access a doctoral programme according to the requirements of Catalan universities, *i.e.* accrediting between 60 and 120 ECTS credits at the official university master's degree level or equivalent.
- Not to have a previous PhD degree.

## Desirable requirements

- Good team player and communicator
- Interest in microbial interactions and metabolism
- Experience in experimental microbiology approaches
- Programming skills (e.g. MATLAB, Python, R)

## Languages

- Proficiency in English (written and spoken)
- Catalan and Spanish are valued

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## Application process

If you wish to be considered for this position, please, apply via our [Recruitment Platform](#) to the job post with reference CPI2924 and upload your CV and motivation letter. All information will be treated in the strictest confidence.

**Deadline for application:**  
**13/10/2024**

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| Timings in the Recruitment Process of ref. CPI2924 | Studying the metabolic interaction network of the nasal microbiota  |
|--|---|
| 30 natural days                                    | Publication and diffusion of the job advertisement on IRTA's website, EURAXESS Jobs, social media and other specific recruitment places.  |
| 5 following working days                           | Distribution of the pre-selected CVs which matching eligibility criteria to the Recruitment Committee. Communication via e-mail with the not pre-selected candidates who will not be further included in the process. |

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| <b>20 following working days</b> | Recruitment Committee: <ul style="list-style-type: none"><li>- Communication via e-mail with the not-selected candidates by the Recruitment Committee.</li><li>- Interview with selected candidates by the Recruitment Committee.</li><li>- Accord of the Recruitment Committee stating the selected candidate and detailed reasoning for the decline of the rest of the candidates.</li><li>- Communication via e-mail with the interviewed and not-selected candidates</li></ul> |
| <b>10 following working days</b> | Provision by the selected candidate of requested legal and official documentation to the HR department to coordinate the start of the candidate.   |
| <b>Last Trimester 2024</b>       | Start of employment  |

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IRTA guarantees an open, transparent, and merit-based recruitment process (OTM-R) to all registered candidacies avoiding thus any bias on gender, origin, age, ideology, or other circumstances that could be discriminatory. Candidates in a situation of social exclusion will be considered in the first place.

*Please know that if you are the chosen candidate and you are from a country which does not belong to the UE, IRTA's Human Resources Department will support you to get the residence and working permits.*

<sup>(1)</sup> The financial remuneration of the PhD Candidate contract may not be less than 56% of the salary established for the category of Research Collaborator F of the Collective Agreement of the IRTA during the first two years, 60% in the third year and 75% in the fourth.