The Institute of Agrochemistry and Food Technology (IATA), research institute belonging to the Spanish National Research Council (CSIC), located in Valencia Spain, is offering 5 Post Doctoral research contracts for researchers of Excellence, with an international and consolidated career in any of the different IATA's strategic lines, who wish to work in an institute of excellence pursuing cutting-edge topics in food science and food technology.

Applications will be admitted up to the 31th of May 2023. This contract is incompatible with other post-doctoral contracts. The length of the contracts will be 3 years, the dedication will be full-time and the gross salary is 52,177,79 €/ year.

In order to be eligible for these contracts, candidates must have obtained the Title of Doctor (PhD) in the last 12 years. In addition, the evaluation committee will consider when they evaluate the candidates:

- Postdoctoral experience at international level
- Scientific excellence (high impact publications, leadership and participation in projects, knowledge transfer, etc.).
- Experience and potential in project applications (ERC, EU H2020 or Horizon Europe, Marie Curie Fellowships, others).

The sustainable production and conservation of healthy and safe foods for an increasing world population is one of the major challenges to our society, and also a pillar of public health and economic welfare. The food industry of the future will rely on talented multidisciplinary scientific teams such as those assembled in the IATA. If you are interested in joining a center of excellence focused on research in Food Science, at IATA we offer 5 Post Doctoral research contracts.

IATA aims to promote the research produced in the center in 4 different areas.

**RP1: FOOD FOR HEALTH** Understanding how diet affects health and consumer needs, and using this information to develop new foods and dietary recommendations for personalized nutrition, will contribute to disease prevention and consumer-oriented food development. This programme takes a holistic view of the different factors that may be involved. Priority research topics of scientific and social interest which will be addressed through ongoing and future research projects are:

- RP1.1-Food for health: Microbiome and health.
- RP1.2-Food for health: Food Bioactives.

**RP2: ENSURING FOOD SAFETY AGAINST EMERGING RISKS:** Guaranteeing food safety and evaluating emerging risks in the food chain are vital for future food production and the supply system in a highly interlinked and competitive global economy. Priority research topics within this programme include:

- RP2.1- Ensuring food safety against emerging risks: Detection of biological and chemical.
- RP2.2- Ensuring food safety against emerging risks: New strategies for ensuring food safety.

**RP3: SUSTAINABLE FOODS - FROM PRODUCTION TO PRESERVATION** Sustainable food production for an increasing population is one of the major challenges we face. This requires the design of more efficient bio-based processes as well as ensuring and prolonging food quality to reduce food waste. The priority research lines which will be developed within this programme are:

- RP3.1- Sustainable Foods- from production to preservation: New ingredients and sustainable packaging materials from waste and biomass valorisation.
• RP3.2- Sustainable Foods- from production to preservation: Improving sustainability food processes.

• RP3.3- Sustainable Foods- from production to preservation: Cell Factories for sustainable ingredients/food production.

RP4: FOOD DATA SCIENCE: Introducing Big Data Science and Artificial Intelligence tools into our research lines in order to make seminal contributions in the Food Science area related to sustainability, health and food safety. This Scientific Goal, probably the most crucial of this strategic plan, deserves further elaboration on how we foresee its potential

• RP4.1- Big Data Science and Artificial Intelligence: Genomic and metagenomics sequencing projects.

• RP4.2- Big Data Science and Artificial Intelligence: Big data and molecular markers for the identification and prediction of behaviour of food-borne pathogens.

• RP4.3- Big Data Science and Artificial Intelligence: Complete genomic-scale models.

• RP4.4- Big Data Science and Artificial Intelligence: Functional genomics and large scale sequencing.

• RP4.5- Big Data Science and Artificial Intelligence: Optimize processing technologies based on integrating existing analytical and materials characterization data

• RP4.6- Big Data Science and Artificial Intelligence: Characterization of the IATA’s Value microbial strain collection- isolate strains

Required Documentation:

• CV

• 1 Motivation letter and call for expression in one of our main research topics

• Copy of valid passport or ID

• 2 different contacts (email and phone) to ask for personal references

The evaluation committee will take into account the adequacy of the profiles IATA’s main strategic research lines, as well as the personal CV. In addition, it may be required to do personal/streaming interviews.

The quality of our research has been recognized with the recent award of the “Severo Ochoa Distinction”. This highly selective distinction is awarded by Spain’s National Research Agency to “fund and accredit public research centres and units in any scientific area that demonstrate international scientific impact and leadership”. In Spain, this is the first time it has been awarded to a food technology research Institute, IATA.

If you are interested to apply to this call, please contact us through the email: international@iata.cscic.es to ask any questions and send required documents to apply, mentioning PostdocSevero Ochoa.