

**IRTA**

“ WE SHARE OUR SCIENCE  
TO FEED THE FUTURE ”

**hr**  
HR EXCELLENCE IN RESEARCH



**SENIOR SCIENTIST  
ROSACEAE BREEDER**

## About IRTA

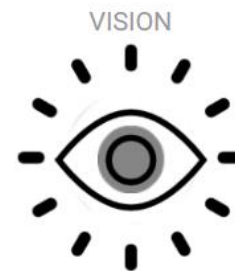
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**IRTA** is a research institute owned by the Government of Catalonia ascribed to the Department of Agriculture and Livestock. It is regulated by Law 04/2009, passed by the Catalan Parliament on 15 April 2009, and it is ruled by private regulations. IRTA is one of the CERCA centres of excellence of the Catalan Research System.

IRTA's 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.



Contribute to the modernization, competitiveness and sustainable development of the agrarian, food and aquaculture sectors, to the provision of healthy and quality food for consumers and, in general, to improve the welfare of the population.



Become a scientific reference, an engine of innovation and technology transfer. We want to be the strategic ally of the agri-food sector.



1. Commitment
2. Creativity
3. Learning
4. Innovation
5. Leadership
6. Respect
7. Vocation of service

## **THE FRUIT PRODUCTION PROGRAM**

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The objectives of the **Fruit Production** program are:

- Renovation and continuous improvement of the productive structure, working plant material from selection and/or evaluation to genetic improvement, bringing in new varieties adapted to different agro-environmental conditions and to different markets.
- Efficient use of production inputs.
- Reducing production cost and improving productivity.
- Development of models for integrated production systems, conservation and distribution considering the preservation of natural resources and preserving the environment.
- Obtaining excellent quality fruit products (commercial traits, organoleptic attributes and nutritional properties).

**Pip Fruits, Stone Fruits and Nuts** - studies on apple, pear, peach, prune, apricot and almond species.

Their lines of work are:

### **Plant material**

- Introduction and evaluation of new varieties and rootstocks.
- Genetic improvement of apple, pear, peach and nectarine as well as pear rootstocks.
- Projects focused on the expansion and application of the knowledge in databases of genetic traits of interest for these species.
- Application of molecular genetic techniques to improve the efficacy of selection processes.

### **Crop technology**

- Reduction of the unproductive period.
- Formation, pruning and management systems.
- Bioregulators to control vegetative growth.
- Chemical thinning and regulation of the fruit load.
- New varietal replant situations.
- Agronomic techniques to improve quality.

### **Fruit quality**

- Determination of the optimum harvest time.
- Application of products and techniques to improve fruit organoleptic quality.
- Application of products and techniques to improve fruit color and reduce defects.

- Development and/or validation of non-destructive measurements of fruit quality.

## ROLE PROFILE

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IRTA is currently seeking a **Senior Scientist for *Rosaceae* breeding** for the joint breeding program with Plant and Food Research (NZ)

## DUTIES AND RESPONSIBILITIES

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- As leader of the breeding programme, you'll have responsibility for identifying and integrating areas of research that will optimise the performance of the programme, and for operational management of the programme to ensure the timely delivery of outcomes and impacts for our key customer(s),
- To breed and develop new apple and pear varieties, implementing the coordination and planning of breeding programs. Control and supervision of the tasks related to fruit breeding. Seedling selection assessment at different stages both in the field and in the laboratory. To establish the breeding methodology to follow in coordination with the breeding team.
- To design crosses according to breeding aims.
- Planning and supervision of work related to plant material (parents, progenies seedlings and selections) from the breeding program.
- To select seedlings in the greenhouse and the field, including marker assisted breeding.
- Supervision and management of seedlings in selection plots.
- Agronomical and commercial assessment of advanced and elite selections.
- Fruit assessment in the field and the laboratory according to taste and sensory evaluation parameters.
- Management, maintenance and analysis of breeding databases.



## REQUIRED EXPERIENCE AND QUALIFICATIONS

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### Essential requirements:

- Ph.D. in plant science (degree in plant breeding and genetics, agronomy, plant biology or related).
- Experienced, with more than 3 years of experience in plant breeding and/or genetics, preferably on fruit trees.
- Post-doc and/or research position, with a minimum experience of 2 years in an international research institution.
- Advanced knowledge and skills in genetics and molecular marker assisted selection (MAS) applied to plant breeding programmes.
- Sound knowledge of statistics applied to plant breeding and genetics.
- Sound informatics background at advance user level of the Office package (Word, Excel, Power Point, etc.) and data analysis programs.
- Command of English language, both spoken and written. Catalan, Spanish and French skills will be valued.
- Full driving license for Europe and travelling availability.

### Desirable requirements:

- Skills and experience in fruit orchard management.
- Skills and experience in fruit quality determination (taste and sensory analysis).
- Experience as research project leader during at least 3 years.
- Capacity on fruit industry concertation, technology transfer and fostering innovation added value.

### Personal profile:

- Strong organizational capability and ability to learn and successfully work within multidisciplinary teams and experience to motivate research teams.
  - Receptive to challenges and results oriented.
  - Capacity and skills to develop and encourage strong collaborative links with the national and international scientific community and the fruit industry sector (Catalan, Spanish and European).
  - Capacity to anticipate, plan and write R+D projects, reports and technical documents.
  - Good oral and written communication skills
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## TERMS OF APPOINTMENT

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This is a **full-time permanent position**.

Gross salary will be commensurate with the qualifications and experience.

## LOCATION: LLEIDA

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Lleida is the economic and demographic hub of inland Catalonia. Located 150 km from Barcelona, with which it is very well connected by express train, bus, and motorway. Furthermore has its own airport ([Alguaire airport](#)).

The city of Lleida is one of the four main cities of Catalonia. Culture comes alive in Lleida. The city is restless, curious and very open to any different cultural events. You can find more information here <http://app.paeria.cat/agenda/>

Furthermore, its ideal geographical location allows to easy access to the Pyrenees (100 km) and the Mediterranean coast (100 km)

The city has a continental climate, with cold, dry winters and very hot summers. Temperatures usually range from below 0°C in the winter to over 35°C in the summer.

IRTA has in Lleida one of its most singular centres: the IRTA-Fruicentre. It is dedicated completely to the R+D+I in the fruit value chain

(<https://www.youtube.com/watch?v=EG83pbxicPA>)

## KEY STEPS IN THE SELECTION PROCESS

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If you wish to be considered for this position, please, go to our page [WORK AT IRTA](#)  
There you can apply for this offer by registering in our Job Centre, using this button:



You should load your CV in Adobe Acrobat pdf format before **17<sup>th</sup> November**. All information will be in the strictest confidence.

During the recruitment process, the Human Resources Department will keep you informed the progress of your application.

## CALENDAR

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The start date will be in the first half of 2020