IRTA

"WE SHARE OUR SCIENCE TO FEED THE FUTURE"

CRAG CENTRE FOR RESEARCH IN AGRICULTURAL GENOMICS
CSIC IRTA UAB

HR EXCELLENCE IN RESEARCH

RESEARCHER FOR THE GENOMICS & BIOTECHNOLOGY PROGRAM

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About IRTA

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 centers 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.

mission

To contribute to the modernization, improvement and promotion of competiveness and sustainable development in the Agriculture, Food and Aqua-culture sectors, providing safe, quality foods to the final consumer and generally contributing to the global improvement of human welfare.

vision

To become the scientific reference and a force for innovation, and technology transfer. We aim to be the strategic partner of the food industry.agro-food sector.

values

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

The program of Genomics & Biotechnology

The **Genomics & Biotechnology** program combines both fundamental and applied research to understand the genomic variability of crops and the inheritance of traits of agronomic interest, with the final objective of applying this knowledge to crop improvement.

Their lines of work are:

- **Melon genomics**. The programme coordinates the sequencing of the melon genome and is studying the genetic variability of the species by resequencing a collection of melon genotypes. The group has identified new QTLs and characterised genes controlling important agronomic traits as fruit quality, climacteric ripening and resistance to viruses.
- ***Prunus genomics***. The programme is conducting studies of genetic variability and association using next-generation sequencing (NGS) technologies, as well as comparative analysis between different species within the Rosaceae family. The group is interested in understanding the genetics of fruit quality, and developing strategies for introgression of genes from wild or cultivated relatives into peach cultivars.
- Research on ***strawberries*** has focused on the comparison of the genomes of diploid and octoploid strawberries, to characterise QTLs associated with the nutritional quality of the fruit, such as sugar, polyphenol content and aromas.
- The programme has a long-term collaboration model with breeding companies by means of two **Joint Research Units**.

ROLE PROFILE

IRTA is currently seeking a **Researcher in Plant Genetics and Genomics.**

DUTIES AND RESPONSIBILITIES

- To participate in the planning and execution of research projects and studies in the area of Plant Genetics and Genomics. Specifically, to construct introgression line collections (ILs), and fine mapping of major genes and QTLs involved in characters of economic interest using IL collections or other conventional populations.
- To develop collections of SNPs, SSRs or other markers from massive DNA sequencing data. To elaborate SNP chips for genotyping and map construction.

- To identify candidate genes from the position of major genes/QTLs in databases of sequenced genomes and to validate these genes with linkage or association studies.
- To coordinate and perform experimental work in the lab and field, and carry out data analysis.
- To supervise the work of technicians and students where necessary.
- To write reports on the progress of the scientific activity.
- Part of the work will be associated with private contracts and may be submitted to confidentiality agreements.

REQUIRED EXPERIENCE AND QUALIFICATIONS

Requirements:

- PhD in Sciences.
- Good knowledge of plant breeding and in development and use of molecular markers applied to breeding programs.
- Solid knowledge of data analysis with statistics.
- Good knowledge of state-of-the-art genotyping technologies and basic methods in molecular biology.
- Excellent level of English.

Specific merits:

- Postdoctoral experience.
- Basic knowledge on bioinformatics and analysis of next and third generation sequencing data.
- Good knowledge on population and quantitative genetics.
- Previous experience on gene/QTL cloning.

TERMS OF APPOINTMENT

This is a full-time position with the successful candidate being contracted on 1 year basis with the possibility of renewal and become part of IRTA's scientific permanent staff.

Salary will be commensurate with the qualifications and experience.

LOCATION: Campus UAB – Autonomous University of Barcelona

Our research is carried out at the Centre for Research in Agricultural Genomics, a consortium composed of IRTA, CSIC, UAB and UB, and is physically based at the UAB campus, one of the main universities in Catalonia, which benefits from its permanent contact with the academic environment. The UAB ranks 172 in the Performance Ranking of Scientific Papers for World Universities 2016 published by National Taiwan University (NTU). The UAB continues to be among the 200 best universities worldwide, and is the second university in Spain, after the UB and followed by the University of Valencia and the Autonomous University of Madrid.

In the rankings by subject, the UAB scores highest in Spain in Animal and Plant Science (occupying position 69 worldwide), and stands out in Agricultural Science (100 worldwide), Environmental Science (101), Mathematics (104), and Pharmacology and Toxicology (156).

BARCELONA

A city with character

Barcelona is an open, vibrant and creative city with a busy cultural, political, business and commercial life. It is a metropolis where every imaginable language can be heard, as well as a city that invites its residents and visitors alike to discover its Catalan culture and traditions.

The Catalan capital

Barcelona is the capital of Catalonia, a country whose nation boasts a long history, enjoying self-government as an autonomous region in the Spanish State. It is situated on the north-east coast of the Iberian Peninsula, facing the Mediterranean Sea and bordered by Andorra and France along its north. Catalonia also has its **own language**, Catalan, which grew out of Latin, as did Spanish, French, Italian and Portuguese. **Catalan is its official language**, **together with Spanish**, and both are used regularly in every walk of life. In addition, most of the people working in international trade and the country's main tourist areas speak English and other languages as well. Barcelona has always attracted people from all over the world, making it even more **multilingual and special**. It is the people living there, with their different backgrounds and cultures, who make it so **cosmopolitan, diverse and intercultural.**

Economic powerhouse of a prosperous region

One of the biggest metropolitan areas in Europe has grown up around the capital, consolidating Barcelona as an **outstanding business, technological and industrial centre, as well as a major economic powerhouse**. In fact, the city has always stood out for its intensive business and commercial activities and proved its ability to modernise and adapt itself to the new times. It has become such a magnet for global talent that it is now a European centre for business creation, especially in **leading sectors** such as information and communication technologies, biotechnology, sustainability, design and aeronautics. The city also plays host to several of world's most important international trade fairs, such as the **Mobile World Congress** and the **Barcelona Meeting Point**. Innovation is another Barcelona's hallmarks: it is the number-one smart city in the Spanish State and the fourth in Europe. It is also one of the cities with the highest quality of life in the world and the life expectancy of its residents is among the highest in Europe.

KEY STEPS IN THE SELECTION PROCESS

If you wish to be considered for this position, please, go to the link:

http://www.irta.cat/en-US/Persones/TreballarIrta/Pages/default.aspx and register yourself. You should load your CV in Adobe Acrobat pdf format before 12 June, 2017. All information will be in the strictest confidence.

During the recruitment process, Human Resources Department will keep you informed on which step is your application.

CALENDAR

Deadline timing job ref. 13/17 Researcher in Plant Genetics and Genomics project	
30 days	Publication and diffusion of the job advertisement on IRTA's website, EURAXESS Jobs, social networks and other specific recruitment places.
2 following working days	To send, for its study, the pre-selected CV which match eligibility criteria to the Selection Committee. To send an automated e-mail for those who have not been pre-selected and cannot continue the process.
5 following working days	Selection Committee: .Interview with preselected candidates. .To send an e-mail for those who have not been selected by the Selection Committee. .Committee Selection Agreement with the selected candidate, giving reasons for the rest to be excluded. . Notification by e-mail to the candidates who have been interviewed but not selected.
7 following working days	To send to HR all the needed official documentation in order to make the work contract and co-ordination for establishing the start of the employment.
June 12, 2017	Start of employment (approximately)