

POSTDOCTORAL RESEARCH SCIENTIST IN PLANT GENETICS AND DROUGHT RESILIENCE

The **Center for Advanced Studies in Arid Zones (CEAZA)**, located in La Serena and Coquimbo, Chile, is a scientific consortium established in 2003. Its mission is to generate and transfer scientific and technological knowledge through the understanding of how climate fluctuations affect the hydrological cycle and productivity (both natural and cultivated) in terrestrial and marine ecosystems.

The Plant Physiology and Hologenomics Lab at CEAZA, is recruiting a highly motivated and independent Postdoctoral Research Scientist to investigate, in a holobiont perspective, the genetic basis of microbial recruitment under drought stress conditions in tomato landraces. This position is part of a multidisciplinary project that include quantitative genetics (QTLs mapping analysis), Genotype x Environment x Microorganisms interactions, and phenotypic evaluation in field conditions.

In addition, the postdoc will contribute to establishing the Oxford Nanopore sequencing platform for metagenomics analysis applications and will be expected to lead the writing of scientific manuscripts for peer-reviewed journals.

Responsibilities

- Evaluation of morphological and physiological data from field trials considering conventional irrigation and drought stress.
- Design and conduction of genetic analyses including genotyping (e.g., ddRADseq), QTL mapping, Genotype-by-Environment interaction analysis and identification of contribution of the endophyte bacterial communities to the plant phenotype.
- Establishment and operation of a Nanopore sequencing pipeline for the sequencing of isolated bacterial genomes and endophytic microbial communities.
- Genome assembly and analysis (including comparative genomics).
- Collaboration with a national and international project partners, including plant biologists, geneticists and microbiologist.
- Writing and publishing scientific articles and congress contributions based on the project results.

Required Qualifications

- Ph.D. in Plant Genetics, Quantitative Genetics, Plant Molecular Biology, or a related field.
- Strong command of R and working experience in Linux (Bash).
- Molecular Biology skills including DNA isolation, electrophoresis, PCR analysis, among others.
- Proven ability to write scientific papers and work independently.
- Demonstrated experience with QTL analysis will be highly appreciated.
- Experience in microbial community studies (amplicon sequencing and/or shotgun metagenomics) will be highly appreciated.

Additional skills

- Teamwork and collaboration.
- Communication with team members, including peers, students and technicians
- Ability to analyze facts, identify root causes, and find effective solutions.
- Adaptability and flexibility
- Critical thinking and proactivity
- Reliability and dependability
- Fluent English communication skills (written and spoken)
- Spanish communications skills a highly appreciated.

Practical Details

The position will be available from February 15, 2026. This is a 1-year position, renewable for up to 3 years, subject to a positive annual academic evaluation. Applications must include:

- Curriculum Vitae and publication list.
- A research statement describing your experience and motivation for this position.
- Certificates and other relevant documents confirming academic qualifications and/or other relevant information.
- One letter of recommendation referring to the candidate's academic or research background.

All documents must be sent it directly to: ofertas.laborales@ceaza.cl, until January 30, 2026, using the subject: **Postdoctoral Position in Plant Genetics**.

Selection Process

- CEAZA reserves the right to select the candidate(s) it considers most suitable or to not select any of the applicants.
- Candidates participating in this selection process agree to undergo all evaluation tools deemed appropriate to verify their competencies and experience, including interviews and psychological assessments.
- CEAZA will notify all applicants of the outcome of their application in writing, including the selected candidate, who must confirm acceptance of the job offer in writing.
- Foreign candidates will apply for a working permit at their own expense.
- No relocation fund is available.
- Candidates must submit a simple sworn statement certifying that they are not under investigation nor have been convicted for violations of the following Chilean laws:
 - a. **Law 21.369**, which regulates sexual harassment, violence, and gender discrimination in higher education.
 - b. **Law 20.066**, which regulates domestic violence.
 - c. **Law 21.389**, which regulates the payment of child support.
 - d. **Law 21.643**, which amends the Labor Code and other legal bodies regarding the prevention, investigation, and sanction of workplace harassment, sexual harassment, or violence.

- CEAZA will follow the National Policy on Gender Equality in Science, Technology, Knowledge, and Innovation (CTCI), and will support efforts in the advancement of qualified individuals, thus encouraging early-career researchers to apply for this position.