



CALL FOR A POSTDOC RESEARCHER

The research team of the Anillo project **ATE250049 “Fruit Production in Semi Arid Climate: Sustainable Adaptation Pathways (FruitSAP)”** seeks for an exceptional and highly motivated candidates for a full-time one-year postdoctoral position.

The FruitSap project bring together Chilean researchers from the School of Engineering and School of Agriculture and Natural Resources of the Pontificia Universidad Católica de Chile (PUC), School of Agricultural Sciences University of Chile (U Chile) and the School of Natural and Exact Sciences of the Universidad de Playa Ancha, Chila (UPLA), in collaboration with an international core of leader researchers in the field.

The general objective is to develop sustainable adaptation pathways for fruit production systems in the Chilean semi-arid region by integrating biophysical, socio-institutional, and behavioral dimensions at multiple scales (orchard, basin, and governance). This objective addresses the urgent need to reconcile productive agriculture — particularly high-value fruit crops — with long-term water security, climate resilience, and social equity in water stressed Mediterranean-type regions, such as central Chile. By focusing on the Aconcagua and La Ligua-Petorca basins as emblematic case studies, the project will generate actionable insights that can inform adaptive planning across similar global contexts and propose technological solutions and recommendations for transitioning to more sustainable and resilient fruit production systems.

We are interested in those candidates capable of working in diverse teams that include undergraduate and graduate students as well as people working in Chilean fruit farming systems.

Project description:

The postdoctoral researcher will work at the interface between Specific Objectives 1 and 2 of the FruitSAP project, linking orchard-scale measurements of water use and water footprint with basin-scale analyses based on Earth observation and remote sensing.

At the orchard scale (SO1), FruitSAP will generate detailed field observations of actual evapotranspiration, water use, crop productivity, and eco-physiological responses for selected fruit crops under different water availability conditions. The postdoctoral researcher will use these observations, together with available meteorological and spatial data, to develop and validate remote-sensing approaches for estimating evapotranspiration and other relevant components of the water cycle.



At the basin scale (SO2), the researcher will contribute particularly to Activity 2.1, using multi-temporal satellite imagery and Earth observation products to reconstruct the historical evolution of irrigated agriculture, vegetation conditions, evapotranspiration, and other relevant hydrological variables in the Aconcagua and Ligua-Petorca basins. The analysis will seek to identify spatial and temporal changes associated with agricultural development, drought, water scarcity, and changes in surface- and groundwater availability.

A central contribution of the position will therefore be to bridge the orchard and basin scales: using detailed field measurements from SO1 to evaluate and improve remotely sensed estimates, and subsequently scaling these approaches up to characterize the spatial and temporal evolution of agricultural water use across the study basins. This integration will provide a consistent framework for assessing how orchard-level water use and water footprints aggregate and interact with basin-scale hydrological dynamics.

The postdoctoral researcher is expected to work closely with the teams responsible for field measurements, remote sensing, and hydrological analysis, contributing to the development of integrated datasets and scientific publications. The resulting products will also provide key inputs for the historical reconstruction and basin-scale modeling activities developed under SO2 and, ultimately, for assessing sustainable adaptation pathways for fruit production under increasing water scarcity.

Candidates must have:

- i) A PhD in agriculture/micrometeorology or related disciplines
- ii) Proven expertise in evapotranspiration estimation based on energy balance methods and remote sensing.
- iii) Demonstrate a good record of high-quality scientific publications
- iv) Good communication skills in English and desirable Spanish (if Spanish is not the native language)
- v) Available to start working at the latest in the first semester of 2027 (from December 2026)
- vi) Have a driving license, and driving experience in the countryside is desirable
- vii) Chilean citizenship or foreigners with current Chilean residence.
- viii) Be willing to collaborate and move across all the associated laboratories in Chile and overseas.
- ix) Candidates must not have any standing issue with ANID.



Salary: The selected candidate will have a monthly gross salary equivalent to that granted by the FONDECYT-postdoc program of 2.315.333 Chilean pesos (approximately 2,300 USD/month).

Note for foreign applicants: Under Chilean tax regulations, foreign individuals without tax residence or domicile in Chile who perform scientific activities in the country may be subject to a 20% Additional Tax on their Chilean-source remuneration, pursuant to Article 60 of the Chilean Income Tax Law. This tax generally applies during the initial period before acquiring tax residence in Chile. The specific tax treatment will depend on the individual circumstances of the selected candidate and applicable Chilean tax regulations.

The employing institution will be P. Universidad Católica de Chile. Position is granted for one year or subject to modification in accordance with the project PIs and the funding agency.

The postdoc location will be based at Department of Fruit production and Enology of the School of Agriculture and Natural Systems, Pontificia Universidad Católica de Chile located in Vicuña Mackenna 4860, Macul, Santiago associated to Dr. Pilar Gil's group, nonetheless, the applicant should be willing to spend short stays across the institutions associated with this project, mainly at Valparaíso city with Dr. Freddy Saavedra at UPLA. Finally, the applicant must be capable to carry out extensive fieldwork in rural areas across the Valparaíso region.

Evaluation criteria:

Applicants will be evaluated and selected by the Project PI's following the criteria below:

- Thematic affinity with the project goals and requirements: 20%
- Number and quality of scientific publications in the last five years (since 2015): 20%
- Letters of interest and recommendation: 25%
- Personal interview: 35%

An evaluation rubric including a Likert scale from 1 to 5 will be used for each criterion

Content	Classification	Score
The applicant fulfills all the requirements in an outstanding way:	Excellent	5
The applicant complies very well although minimal improvements are required:	Very good	4

The applicant meets a good standard, but some improvements are required:	Good	3
The applicant generally meets the requirements, but there are significant deficiencies:	Regular	2
The applicant does not adequately fulfill the requirements:	Deficient	1

Specification notes:

1. Project PI's reserve the right to declare the competition void if applicants do not meet the Project's thematic affinity criteria.
2. Project PI's will prepare a cut-off score, from which applicants will be selected to move on to the interview stage.
3. Project PIs will establish a hierarchical list of applicants and will identify the person selected as first choice, and a waiting list of those who meet the "affinity with the project goals and requirements" according to the score obtained. In the event that the first selected applicant does not accept the offer, the waiting list will run towards the following applicant in the list.

Postdoctoral responsibilities:

- i Full-time dedication to the project
- ii Coordination of undergraduate and graduate students
- iii Design, development, and management of field/lab experiments and fieldwork within rural Chile
- iv Data analysis and manuscript preparation.
- v Publish scientific publications with the project PIs, acknowledging "Proyecto Anillo ATE250049"
- vi Strict confidentiality of unpublished results from the project
- vii Participation in national and international scientific meetings
- viii Participation in outreach activities
- ix Presentation of an annual report of activities

Important dates:

1. Application deadline is October 16th, 2026, 18:00 h (Chilean continental time)
2. Notification of interview for suitable candidates: after October 20th, 2026
3. Online interviews are expected to be October 26-30th



4. Results will be notified after the approval and ratification of the funding agency (Departamento de Iniciativas de Focalización Estratégica ANID – Agencia Nacional de Investigación y Desarrollo) (approximately November 15th, 2026)
5. Starting date is expected to be December 1st 2026

To apply please send an email to freddy.saavedra@upla.cl, enclosing:

- 1) A letter of interest
- 2) Two recommendation letters.
- 3) Curriculum Vitae and a short description of maximum five papers, explaining how these are relevant to the development of this project
- 4) Copy of the PhD diploma or certificate
- 5) Copy of the passport or DNI.

Please use the subject "anillo-FruitSAP-application" in your email and do not hesitate to ask for an email receipt confirmation. Applications must be in English. For more information and for any questions, do not hesitate to contact us at freddy.saavedra@upla.cl.