

## Chilean Postdoctoral Research Associate Grant Application

### Fondecyt Postdoctorado 2024

The Faculty of Agriculture and Forestry from Pontificia Universidad Católica de Chile ([agronomia.uc.cl](http://agronomia.uc.cl)) is seeking for dynamic, innovative, self-motivated, candidates interested to apply to the Chilean Postdoctoral Research Associate Grant Application (FONDECYT Postdoctoral 2024). Those interested should have ability to work under multicultural setting and ability to form part of an interdisciplinary team. Intermediate or advanced knowledge of the Spanish Language will be desirable, but not essential.

Please find the list of research projects offered by academics:

#### Ecology, Socioecology, Agricultural Economics, Climate Change

| Scientific disciplines  | Research proposal  | Investigación propuesta   | Investigador/a<br>Patrocinante |
|---|--|---|--------------------------------|
| Animal Ecology  | The effect of Black rat over small mammals in the temperate rainforest of Chile.   | Efecto de Rattus rattus sobre la biodiversidad de bosques templados de La Araucanía   | Cristian BONACIC               |
| Geomatics, Socio-ecology, Anthropology, Psychology                          | Integrating perception, emotion and OO ontology in socio-ecological data cube construction to support effective Climate Change decisions | Integración de la percepción, emoción y ontología orientada a objetos en un cubo de datos socio ecológico para apoyar decisiones efectivas sobre cambio climático           | Marcelo D. MIRANDA             |
| Natural Resources Economics, Experimental Economics, Agricultural Economics | Modeling farmers' climate change adaptation implementation decisions, using experimental economics tools                                 | Modelando las decisiones de implementación de medidas de adaptación al cambio climático de agricultores, usando herramientas de economía experimental                       | Oscar MELO                     |
| Economics, Economic Geography, Political Science, Anthropology              | Integrated Rural and Territorial Development   | Desarrollo Rural y Territorial Integrado  | Gustavo ANRÍQUEZ               |
| Wildfires, Remote Sensing, Climate Change, Risk Management                  | Better information and decision-support systems for wildfire prevention and fighting and associated threats on complex landscapes.       | Mejoramiento de la información base y de sistemas de apoyo para la prevención y combate de los incendios forestales y amenazas adicionales asociadas en paisajes complejos. | Horacio GILABERT               |

## Chilean Postdoctoral Research Associate Grant Application **Fondecyt Postdoctorado 2024**

Fruit Production, Plant Physiology, Entomology, Microbiology and Soil Science:

| Scientific disciplines  | Research proposal   | Investigación propuesta   | Investigador/a<br>Patrocinante |
|---|---|---|--------------------------------|
| Plant physiology,<br>Ecophysiology, Plant<br>biochemistry/molecular<br>biology                                      | Physiological bases of the response and<br>acclimatization to drought in different<br>grapevine cultivars ( <i>Vitis vinifera</i> )   | Bases fisiológicas de la respuesta y aclimatación a la<br>sequía en diferentes cultivares de vid ( <i>Vitis vinifera</i> )  | Alonso PÉREZ<br>DONOSO         |
| Horticulture, Plant<br>physiology,<br>Biochemistry,<br>Chemistry, Plant<br>mineral nutrition                        | Use of stable isotopes techniques in deciduous<br>fruit trees to study physiological and<br>nutritional aspects associated with sustainable<br>horticultural managements and high quality<br>fruit. | Uso de isótopos estables en frutales de hoja caduca con<br>la finalidad de estudiar aspectos fisiológicos y<br>nutricionales asociados a una producción agronómica<br>sustentable y de calidad. | Chita Marlene<br>AYALA ZAPATA  |
| Horticulture, Fruit<br>production, Tree<br>physiology,<br>Climatology, Climate<br>change, Sustainable<br>production | Study of environmental, physiological,<br>agronomical variables in sweet cherry orchards<br>( <i>Prunus avium</i> L.) established under plastic<br>covers.  | Estudio de variables ambientales, fisiológicas,<br>productivas y de calidad en huertos de cerezos ( <i>Prunus<br/>avium</i> L.) establecidos bajo cobertores plásticos.                         | Chita Marlene<br>AYALA ZAPATA  |
| Entomology,<br>Agroecology  | Conservation biological control using native<br>plants  | Control biológico por conservación usando plantas<br>nativas  | Tania ZAVIEZO                  |
| Microbiology,<br>Chemistry, Botany  | Bioprospecting national resources for natural<br>products with biological activity  | Obtención de productos naturales con actividad<br>biológica provenientes de matrices biológicas nativas o<br>endémicas de Chile   | Gloria<br>MONTENEGRO           |
| Soil Science  | Soil health indicators and GHG emissions in<br>vineyards under conventional an organic<br>management  | Indicadores de salud de suelo y emisiones de GEI en<br>viñedos bajo manejo orgánico y convencional  | Eduardo<br>ARELLANO<br>OGAZ    |

## Chilean Postdoctoral Research Associate Grant Application **Fondecyt Postdoctorado 2024**

### Food coating and waste

| Scientific disciplines                                  | Research proposal  | Investigación propuesta   | Investigador/a<br>Patrocinante |
|---|--|---|--------------------------------|
| Environmental Sciences, Agronomy, Materials Engineering | Agro-Industrial Waste Valorization through Hydrothermal Carbonization for Sustainable Agricultural and Environmental Solutions | Valorización de Residuos Agroindustriales a través de Carbonización Hidrotermal para Soluciones Agrícolas y Ambientales Sostenibles | Daniel SCHWANTES               |
| Processing and Food Technology                          | Development of coatings to extend shelf life in food   | Desarrollo de recubrimientos para extender vida útil en alimentos   | Romina ABARCA OYARCE           |

### Aquaculture

| Scientific disciplines | Research proposal                                      | Investigación propuesta                           | Investigador/a<br>Patrocinante |
|------------------------|--|---|--------------------------------|
| Aquaculture            | Melanosis in the musculature of farmed Atlantic salmon | Melanosis en el músculo del salmón del atlántico. | Sebastián ESCOBAR              |