



Technical terms of reference

Call for application for Research positions at the Research Center of Patagonian Ecosystems (CIEP)

Coyhaique, March 2018

Introduction

The Center for Research of Patagonian Ecosystems (CIEP) is the latest Regional Center created under the Regional Centers program of CONICYT, with the initial joint participation of Universidad de Concepción (UdeC), Universidad Austral de Chile (UACH) and the Regional Government of Aysén. In March 2015, CIEP became a privately-held, non-profit corporation dedicated to the study of marine and terrestrial Patagonian ecosystems as well as the archaeological heritage of the Aysén region. A central element of global significance in the work of CIEP is related to the concept of the Region of Aysén as a natural laboratory that allow us addressing global questions with local research. Our main research lines are:

- a) Line of Terrestrial Ecosystems
- b) Line of Aquatic Ecosystems
- c) Archaeology and Heritage

Added to these lines of scientific research, CIEP hosts two lines of applied knowledge (outreach lines) intended to connect the knowledge acquired with the needs of the private and public sectors of the Region of Aysén. The outreach lines of research are: 1) fishing and aquaculture and, 2) sustainable tourism.

Positions of the call for application

1.- Position: Researcher in climatology and coordinator of the Research initiative/program “Laboratorio Ecoclimático” of CIEP.

Description and objective of the position.

The researcher must contribute from his/her discipline to the discovery and understanding of the properties and ecosystem processes associated to Patagonian ecosystem responses to climate changes on different time scales. Particularly, the professional should aim to answer questions such as: to what extent climate influences ecosystem services (e.g., nutrient cycling, biodiversity) and natural and human populations responses to climate fluctuations. He/She is expected to interact closely with the lines of Terrestrial and Aquatic Ecosystems and Archaeology and Heritage in research projects concerning territorial and sustainable development of the region, among others.

Roles and responsibilities of the position

- To coordinate the program “Laboratorio Eco-climático” of the Center for Research of Patagonian Ecosystems (CIEP);
- To develop/promote scientific research that will contribute to establish links between climatic fluctuations on different time scales with Patagonian ecosystem responses in conjunction with the stated lines of research of CIEP;



- Formulation, procurement, execution and collaboration of research projects (for example, Fondecyt), development and innovation of regional, national and international grants in line with the objectives of the Center;
- Preparation of publications and scientific papers, with a minimum commitment of 2 ISI publications per year and 1 publication in other local or national media;
- Presentations at national and international scientific meetings;
- Contribution to knowledge transfer for application and use in the Region of Aysén, e.g. scientific-technical or specialized consultancies;
- Production of research networks and/or national or international collaboration;
- To interact regularly with other CIEP researchers, peers at other universities, national and international research centers, and with the general community and professionals from the productive sector.

Applicant requirements for the position

PhD in Biology, Marine Biology, Oceanography, Biochemistry, Forestry, Geosciences, Geomorphology or related research. It is desirable that the applicant should have a formation in Earth Sciences with emphasis in Climate studies.

Experience

- The applicant should possess demonstrable experience in formulation, management and implementation of projects of research and development;
- Should have demonstrable experience in elaboration of scientific publications. The applicant must be author or co-author of scientific publications in mainstream discipline journals (ISI), preferably in the indicated topics, and author or co-author of presentations at conferences;
- Must have experience in the use of statistical tools to manage big data sets and have skills in mathematical modeling;
- Must be experienced in field work and leading work groups.

Behavioural competencies

- Values: Honesty, empathy and cooperation;
- Attitudes: Pro-activity, trust, cordiality, openness to dialogue, motivation to continuously improve processes and overcome complex situations;
- Inherent talents: Willingness to work in multidisciplinary groups, clarity, creativity, capacity to create a favorable working climate, argumentation, organization capability, capacity for observation and attention, analytical ability of recognition and response, management skills, leadership, flexibility and ability to engage in positive interpersonal relationships at every level.



Methodological Competencies

- Ability to formulate, manage and implement projects of research and development applicable to regional needs (e.g. Fondecyt, Fondef, FIA, Corfo, FIC-r, international calls, NSF, National Geographic, etc.);
- Ability to attract external funding sources;
- Capacity to lead research which would have regional impact and yield publishable and/or protectable results to generate value from scientific and technological research;
- Ability to identify opportunities and problems that can be answered through scientific and technological activities;
- It is desirable that the applicant should be skilled in developing links and establishing networks, both nationally and internationally;
- Ability to build an effective research team and work towards scientific goals.

Other

- It is expected that the applicant has good command of English (written and spoken).
- Health compatible for work, availability and skilled for field work;
- Position headquarters, city of Coyhaique, Chile;
- Availability, starting 2 of May 2018.

Documents requested

- Updated CV (verbatim);
- Letter of intention indicating claims to income;
- Certified copy of qualifications, degrees and post-diplomas;
- Certificates of academic degrees;
- Two reference letters.

2.- Position: Post-Doctoral researcher in climate modelling

Description and objective of the position.

The researcher must contribute from his/her discipline in the discovery and understanding of the properties and ecosystem processes associated to Patagonian ecosystem responses to climate changes on different time scales. Particularly, the professional should aim to answer questions such as: to what extent climate influences ecosystem services (e.g., nutrient cycling, biodiversity) and natural populations response to climate fluctuations. He/She is expected to contribute closely with the line of Terrestrial and Aquatic Ecosystems in research projects concerning territorial and sustainable development of the region, among others.



Roles and responsibility of the position

- To develop/promote scientific research that will contribute to establish links between climatic fluctuations at different time scales with Patagonian ecosystems response in conjunction with the stated CIEP lines of research;
- Preparation of publications and scientific papers, with a minimum commitment of 2 ISI publications a year and 1 publication in other local or national media;
- Presentations at national and international scientific meetings;
- Contribution to knowledge transfer for application and use in the Region of Aysén, e.g. scientific-technical or specialized consultancies;
- To interact regularly with other CIEP researchers, peers at other universities, national and international research centers, and with the general community and professionals from the productive sector.

Applicant requirements for the position

PhD in Biology, Marine Biology, Oceanography, Biochemistry, Forestry, Geosciences, Geomorphology or related research. It is desirable that the applicant should have a formation in Earth Sciences with emphasis in Climate studies.

Experience

- Must have experience in the use of computational tools, management of big data sets and skills in the development of mathematical models;
- The applicant should have demonstrable experience in elaboration of scientific publications. The applicant must be author or co-author of scientific publications in mainstream discipline journals (ISI), preferably in the indicated topics, and author or co-author of presentations at conferences;
- Capacity to interact with multidisciplinary working groups and be able to work on scientific objectives;
- Experience in the use of statistical tools to manage big data sets and skills in mathematical modeling is desirable;

Behavioural competencies

- Values: Honesty, empathy and cooperation;
- Attitudes: Pro-activity, trust, cordiality, openness to dialogue, motivation to continuously improve processes and overcome complex situations;
- Inherent talents: Willingness to work in multidisciplinary groups, clarity, creativity, capacity to create a favorable working climate, argumentation, organization capability, capacity for observation and attention, analytical ability of recognition and response, management skills, leadership, flexibility and ability to engage in positive interpersonal relationships at every level.



Methodological Competencies

- Capacity to lead research which would have regional impact and yield publishable and/or protectable results to generate value from scientific and technological research;
- Ability to identify opportunities and problems that can be answered through scientific and technological activities;
- It is desirable that the applicant should be skilled in developing links and establishing networks, both nationally and internationally.

Other

- It is expected that the applicant has good command of English (written and spoken).
- Health compatible for work, availability and skilled for field work;
- Position headquarters, city of Coyhaique, Chile;
- Availability, starting 2 of May 2018.

Documents requested

- Updated CV (verbatim);
- Letter of introduction indicating claims to income;
- Certified copy of qualifications, degrees and post-diplomas;
- Certificates of academic degrees;
- Two reference letters.

3.- Position: Post-Doctoral researcher in Quaternary palaeoecology

Description and objective of the position.

The researcher must contribute from his/her discipline in the study of the evolution of past Patagonian ecosystems and their interaction with human populations. He/She is expected to interact closely with the line of Archaeology and Heritage in research projects concerning human/climate interactions at different time and spatial scales, among others.

Roles and responsibilities of the position

- To develop/promote scientific research that will contribute to establish links between climatic fluctuations at different time scales, the evolution of Patagonian ecosystems and human responses to such changes in conjunction with the stated CIEP lines of research;
- Preparation of publications and scientific papers, with a minimum commitment of 2 ISI publications a year and 1 publication in other local or national media;
- Presentations at national and international scientific meetings;
- Contribution to knowledge transfer for application and use in the Region of Aysén, e.g. scientific-technical or specialized consultancies;



- To interact regularly with other CIEP researchers, peers at other universities, national and international research centers, and with the general community and professionals from the productive sector.

Applicant requirements for the position

PhD in Biology, Ecology, Geosciences, Geomorphology or related research. It is desirable that the applicant should have a formation in Earth Sciences with emphasis in Climate studies.

Experience

- The applicant should have demonstrable experience in elaboration of scientific publications. The applicant must be author or co-author of scientific publications in mainstream discipline journals (ISI), and author or co-author of presentations at conferences;
- Must have experience in the use analytical tools and software in his/her line of work.
- Experienced in field work and leading work groups.

Behavioural competencies

- Values: Honesty, empathy and cooperation;
- Attitudes: Pro-activity, trust, cordiality, openness to dialogue, motivation to continuously improve processes and overcome complex situations;
- Inherent talents: Willingness to work in multidisciplinary groups, clarity, creativity, capacity to create a favorable working climate, argumentation, organization capability, capacity for observation and attention, analytical ability of recognition and response, management skills, leadership, flexibility and ability to engage in positive interpersonal relationships at every level.

Methodological Competencies

- Capacity to lead research with regional impact and yield publishable and/or protectable results to generate value from scientific and technological research;
- Ability to identify opportunities and problems that can be addressed through scientific and technological activities;
- It is desirable that the applicant should be skilled in establishing national and international networks;

Other

- It is expected that the applicant has good command of English (written and spoken).
- Health compatible for fieldwork; availability and skilled for field work;
- Position headquarters, city of Coyhaique, Chile;
- Availability, starting 2 of May 2018.



Documents requested

- Updated CV (verbatim);
- Letter of intention indicating claims to income;
- Certified copy of qualifications, degrees and post-diplomas;
- Certificates of academic degrees;
- Two reference letters.

About the applications (all three positions)

- a) The terms of reference are available in the Web page of CONICYT Regional Center Program, www.programaregional.cl and in the web page of the Centro de Investigación en Ecosistemas de la Patagonia (CIEP), www.ciep.cl
- b) Questions and information: Should be channelled through the institutional email address (contacto@ciep.cl) until April 12th 2018.
- c) Applicants should send all the required documentation to the email address contacto@ciep.cl or they can be hand delivered in a closed enveloped addressed to "Concurso Investigador" CIEP, Calle Moraleda 16, Coyhaique, Chile
- d) Applications will be received until 18th of April 2018, 16 hours (Chilean continental time).

About the evaluation

On April 19th 2018 the Executive Director of CIEP will certify in writing the number of Curriculum Vitae received.

Preselection

An evaluating commission composed by:

Dr. Giovanni Daneri (Executive Director of CIEP)
Dr. Felipe Elizalde (INIA)
Dr. Alex Fajardo (CIEP)
Dr. Cesar Mendez (CIEP)

The commission will revise the applications of the candidates. The commission may ask for further information in addition to the documentation presented. The new documentation will be incorporated to the evaluation process.

During the preselection stage the evaluating commission will select a maximum of three candidates that will be interviewed.

An executive report will be produced indicating the strength and weakness of the pre-selected candidates together with final recommendations stating priorities, preferences and recommendations. The commission will have 5 working days from the time of the opening act to produce the executive report.



Selection

The pre selected candidates will be called for an individual interview with the evaluating commission. The evaluating commission will select the candidate that better suit the position and will provide the name of the candidates in the second and third position.

Communication of the results

The executive Director will officially inform the selected candidate via mail and email in order to proceed with the hiring process. The final decision will be backed by an act of the evaluation session of the commission where the names of the candidate that obtained the second and third place.

Desist

In the case the elected applicant does not take up the position the position will be offered to the pre selected candidate ranked in the second position.



RESUME DU PROJET (en français)

Laboratoire Eco-Climatique Région de Aysén: pour approche écosystémique des conséquences du réchauffement climatique.

Objectif Général

Etablir dans la région Aysén un système intégré de surveillance environnementale (atmosphère, océan, bassins fluviaux) qui permet d'étudier les changements environnementaux à différentes échelles de temps (fluctuations saisonnières, interannuelles et inter-décennales): i) évaluer l'impact qu'ont eu et ont les variations et les changements globaux sur les écosystèmes de la Patagonie passés, présents et futurs et ii) produire des informations pour l'aide à la prise de décisions et qui contribuent à la durabilité des activités de développement productif dans l'agriculture, l'aquaculture, la sylviculture, le tourisme, la pêche et l'évaluation des risques en général.

Objectifs Spécifiques :

1. Constituer une équipe spécialisée dans le suivi et l'analyse des informations météorologiques et climatologiques afin de développer une plate-forme intégrée de collecte, de modélisation et d'interprétation des données.
2. Effectuer un diagnostic, l'étalonnage et la standardisation des différentes plates-formes de surveillance de l'environnement (atmosphère, océan, bassins fluviaux) existants dans la région afin de les intégrer à un système de collecte et de distribution de données.
3. Incorporer des mesures variables critiques (pH, rayonnement UV, débit) dans certains secteurs de la région qui aident à suivre la progression des changements environnementaux liés aux variations climatiques et à l'acidification des océans.
4. Incorporer des technologies de capture, transmission et de visualisation de données en accord avec les réalités territoriales de la région.
5. Prédire les impacts potentiels à différentes échelles dans les écosystèmes terrestres et marins, basés sur des prévisions générées par des modèles mathématiques régionaux complétés par des données générées à partir d'une plate-forme intégrée.
6. Fournir des services spécifiques (informations sur les risques de gel, les précipitations, les sécheresses, les changements physiques et chimiques des masses d'eau, dégel. Etc.) pour l'aide à la prise de décision dans des secteurs productifs (agriculture, pêche) et publique (Office Nationale des Catastrophes (ONEMI), Service Ministériel de la Santé, Service de la pêche et sous-secrétariat à la pêche).
7. Mettre au point un système de transfert d'informations aux partenaires du réseau du monitoring et des prévisions élaborés.