

Application Process for Postdoctoral Positions
Universidad de O'Higgins
March 2023

General Information

1. This document presents the conditions and requirements for the March 2023 Application Process, for postdoctoral positions at Universidad de O'Higgins in Chile.
2. Universidad de O'Higgins is a Higher Education institution that undertakes the scientific research with excellence, giving people a comprehensive educational development, and with first and foremost contribution to the cultural, material, and social development in *Libertador General Bernardo O'Higgins* Region.
3. The academic organisation in Universidad de O'Higgins considers the existence of:
 - (i) Research Institutes and a multidisciplinary connection with the community;
 - (ii) Undergraduate and Postgraduate Schools.
4. The selected applicants will be appointed as fulltime postdoctoral researchers at the Institutes for a maximum of 2 years, and will be required to teach one course each year (3 class hours per week during one semester in the year) as part of their appointment.
5. Within the applicants, the university will select and appoint postdoctoral researchers (no minimum or maximum number per area), who will be destined to the following Institutes:
 - Social Sciences,
 - Educational Sciences,
 - Engineering Sciences,
 - Agrofood, Animal and Environmental Sciences,
 - and Health Sciences.

Applicant profile

6. The candidates should be in possession of a Doctoral Degree (obtained in the last 5 years), they should demonstrate potential to do research at an international level and to collaborate with the faculty members of the institute of adscription.
7. In addition to the research work, the postdoctoral researcher will assign part of their time for undergraduate teaching in their areas of specialty, teaching one semester

course per year (they will be able to teach up to two semester courses per year, if they deem it fit). It is expected that the fulltime postdoctoral researcher will contribute significantly to the development of the academic project, and to the O'Higgins region as well, in their area.

8. To be part of the Social Sciences Institute, the university invites to apply researchers with an international standard of quality coming from different disciplines of Social Sciences. a) Economics and related disciplines. We seek candidates with a Ph.D in Economics, Applied Economics or related disciplines. Even though the call is open to all areas of Economic Sciences, candidates with proven research experience in topics of particular relevance for the O'Higgins Region will be prioritized. These areas include Rural and Regional Development, Natural Resources and Climate Change, Digital Economy, Circular Economy, Gender Economics and Public Economic. b) Law. We seek candidates with a Ph.D in fields of Public Law, Private Law, Theory of Law and Philosophy of Law. c) Psychology. We seek candidates with Ph.D in Environmental psychology (climate change; environmental social movements: environmental behaviour; public acceptability of clean energy technologies and innovations in the energy sector), and Social and political psychology (Intergroup relations; social movements and collective action; design and analysis of public opinion surveys; mass media and social media analysis, life-cycle of riots; policing, citizen security); and Experimental Psychology or related fields, with expertise and experience in the study of basic psychological processes, particularly in Learning. Experience and knowledge in programming are required. Experience in animal and human models, particularly in fear and appetitive conditioning, and taste aversion, will be highly valued.

Applicants are expected to have skills to work in multidisciplinary environments and to be highly motivated to develop research lines with regional relevance. Proven research experience in topics of particular importance for the O'Higgins Region will be specially considered.

9. To be part of the Health Sciences Institute, we invite to apply researchers and professionals from Health and Biomedical Sciences or related fields, preferable with specialization in the following areas: a) Pathophysiology of chronic diseases: communicable, non-communicable; b) Pathophysiology of obesity and its comorbidities; c) Environmental health: diseases related to environmental pollutants, environmental health; d) Public Health, Epidemiology and Social Determinants of Health; e) Mental Health and Inclusion; f) Occupational Health; g) Sensory and Cognitive Neuroscience; h) Effects of physical activity, nutrition and/or functional foods throughout the life cycle; i) Bioactive compounds of natural origin and their effect on Health; j) Cell signalling; k) Endocrinology and

metabolism; l) Neurodegenerative diseases; m) Study of molecular, genomic, and epigenetic mechanisms of health and disease.

It is expected that those selected will work collaboratively with the Institute of Health Sciences' faculty to generate their own lines of research, contribute to areas of linkage with the environment in line with the development of the Institute and the University.

10. To join the Institute of Education Sciences, we encourage applications from researchers working at an international level in the following specific topics:

Teaching and learning: Study of teaching/learning processes and interactions in the school or university classroom through observation and audiovisual recording. Use of eye-tracking technologies to observe the development of knowledge/skills/competencies; Educational evaluation and statistics. Development of psychometric and explanatory models based on quantitative analysis and international comparisons. Desirable experience in analyzing national and international assessments (PISA – PIRLS – SIMCE).

Identities, integration and socialization: Mediatization of power, inequality, and xenophobia; multiculturalism and interculturality in the classroom, educational policies, and/or public/media discourses; Inclusion in education, migration and the school system, citizenship training, educational justice, democratic/anti-democratic beliefs in the educational field, diversity in the educational system, value conflicts in the educational system, regulations, and education (for example, the right to education, senses of interculturality).

Pedagogy and childhood: Family and institutions for early childhood in contexts of social vulnerability and migration; exercise of citizenship in childhood; meanings of preschool education for educational communities. Focus on the rights, voice, and agency of children; Childhood, play, and learning; child development in linguistic, cognitive, or other aspects; education of children in the initial and basic stage; training professionals in initial, basic, and special education. Playful interactions (or others) with small groups of boys and girls through observation and audiovisual recording.

Profession and teacher training: Processes of initial teacher training, teacher professional development and continuing education, development of teacher identity; analysis of teachers' pedagogical practices in training and practice, the role of the practicum and reflective practice in teacher training programs; Historical research of teacher training; role, voice, and agency of teachers; policies for regulating the teaching profession and teacher training.

11. To join the Institute of Agrifood, Animal and Environmental Sciences (ICA3), whose priority research areas are: one health, climate change, sustainable development and rural development, the following profiles are required: (i) Microbiology, with

emphasis on zoonotic bacteria; (ii) Virology, with emphasis on zoonotic viruses or viruses with zoonotic potential; (iii) Ecotoxicology, with emphasis on priority and emerging pollutants; (iv) Dynamics and conservation of wetlands; (v) Aquatic or terrestrial biodiversity; (vi) Ecological restoration of Mediterranean-type ecosystems (emphasis on landscape scale); (vii) Integrated basin-scale hydrological modeling; (viii) Air quality/Atmospheric contaminations; (ix) Bioclimatology/Agrometeorology; (x) Viticulture, comprehensive management of different agronomic practices in vineyards, and strategies for mitigation and adaptation to adverse climate scenarios; (xi) Animal welfare, with emphasis on animal production systems; (xii) Sustainable production ruminants or non-ruminants; (xiii) Economics (Agricultural, livestock, and environmental); (xiv) Biostimulants and regulators of agricultural growth, with emphasis on characterization of the molecular response and generation of biotechnological products; (xv) Sustainable enology, with emphasis on winemaking, sensory analysis, biotechnological innovations and solutions, and consumer trends; (xvi) Microbiota in the reproductive success of arthropods, with emphasis on molecular mechanisms and synthesis of growth regulators, to develop integrated control strategies; (xvii) Sustainable soil management through bioindicators and parasite-host interaction (nematode-plant).

12. The Engineering Sciences Institute invites to apply researchers from all areas of engineering, and in particular candidates who can enhance the research areas currently being developed by the Institute: a) **AI and Robotics**; b) **Applied Mathematics**; c) **Biotechnology and Bioinformatics**; d) **Geosciences**; e) **Operations Research**; f) **Physics, Mechanics and Materials**; g) **Power Electronics and Control Systems**.

Experience and interest in areas related to Biomechanics, Circular Economy, Climate Change, Computer Science, Electromobility, Energy, Geological Hazard, Industrial Engineering, Metallurgy, Mining, Precision Agriculture, Pollution, Transportation and Water Resources Management, will be positively considered.

Requirements and documentation to apply

13. To be admitted in the application process, the applicants should meet the following requirements:
- a) Hold a Doctoral Degree obtained in the last 5 years (or soon to be obtained within 3 months from the time of application),
 - b) Demonstrate research ability at an international level, and

- c) Show potential of collaboration with one or more faculty members from the Institute of application. (To guarantee this collaboration, one or more faculty members will be required to commit as tutor(s) for the postdoctoral researcher)
14. To certify the fulfilment of the requirements, the applicants will provide the following documentation (in PDF):
- a) Curriculum Vitae
 - b) Academic and Professional Degrees
 - c) References: Name, position, institution, phone number and email address of three faculty in their area, available to issue a recommendation letter (they could be requested directly from the Academic Vice-Rector's office)
 - d) A proposal for their research plan (maximum 3 pages long), that accounts for the specific research area that they will develop, that includes the general exposition of the line of research and their relevance, precisising the innovative aspects to be developed, the focus currently being used, theoretical foundations and bibliographical analysis in which it is sustained, working hypothesis to guide their research, general and specific objectives to be obtained, methods and technologies to be used, activities and work plan for the next 2 years.
 - e) Identification of research lines(s) and/or faculty from the Institute with whom the applicant could collaborate and make a significant research contribution. Relevant information about the Institutes and their research lines and faculty at www.uoh.cl
15. The original or certified copies of the required documentation to appoint the candidates, will be asked for after the selection process, when the appointment takes place.

Application deadline

16. The applicants can apply for these positions and send the required documentation until April 14th, 2023 at 16:00 hours (Chilean time), through the available platform for this purpose at www.uoh.cl/concurso/postdoctorado (in Spanish).

Academic applications committee

17. The applicants will be selected by a Postdoctoral Application Committee, from now on referred as 'the Committee', which will be composed by:
- a) The Academic Vice-Rector, as president,
 - b) Three faculty members, designated by the Rector.
18. The members of the Committee will analyse the documentation of each candidate and, if they find it pertinent, will call them for an interview, in person or online.
19. The Committee will inform the Rector the results of the process, indicating the selected applicants according to the evaluation carried out.

Application process results

20. The Rector will confirm or reject partially or in full the propositions of the Postdoctoral Applications Committee, ending the process.
21. The University's General Secretary will notify the selected professionals, informing the deadline to accept the position and also the documentation they need to send to appoint them and the respective deadlines.

Stages and dates of the process

22. The stages and dates for the process will be the following:

Constitution of the Postdoctoral Applications Committee	March 16 th , 2023
Publication of the application process regulations	March 17 th , 2023
Response to questions	March 17 th to 31 st , 2023
Reception of applications deadline	April 14 th , 2023; 16:00 hrs
Evaluation of applicants' background information	April 17 th to May 8 th , 2023
Final Report by the Academic Applications Committee	May 9 th , 2023
Results report to the Rector	May 10 th , 2023
Decision by the Rector	May 11 th , 2023
Notification to applicants	May 12 th , 2023

Conditions of affiliation to the university

23. The selected candidates will be appointed as postdoctoral researchers of Universidad de O'Higgins, for one year and, according to evaluation, their contract will be extended for an additional year.

24. The gross salary of a postdoctoral researcher will be \$1900000 Chilean pesos, equivalent to US\$2350 dollars app. (as of March 6th 2023)
25. During each year of appointment, the postdoctoral researcher will have at their disposition a research-related activities mobility fund of \$2500000 Chilean pesos, equivalent to US\$3100 dollars app. (as of March 6th 2023)

Application and questions

26. The applicants can ask questions to the email: concursoacademico@uoh.cl, they can also download the requirements and send their applications and documentation through the platform, available at: www.uoh.cl/concurso/postdoctorado, no later than April 14th 2023 at 16:00 hours (Chilean time).
27. Questions can be asked from March 17th to 31st, 2023 to the email address identified in previous point.

Final observation

We especially remark that this postdoctoral positions do not constitute a direct entry point to a Faculty position at Universidad de O'Higgins. Faculty positions are offered through open and competitive academic processes, which are permanently put in place for this purpose and in which all applicants, be them internal or external, are equally considered.

Rancagua, March 17th 2023