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**1. Describe your academic expertise, with special focus on your expertise in permafrost:**

My name is Sebastián Ruiz-Pereira, involved in permafrost science since 2014. I am BSc in Biotechnology with a MSc in Antarctic Sciences (2015) and PhD in Geography (2021). Both postgrads were in the topic of permafrost science. I have published on permafrost topics and focus on mountain cryosphere in the Andean regions ([scholar.google.com/citations?user=Spw9r7MAAAAJ&hl=en&oi=ao](https://scholar.google.com/citations?user=Spw9r7MAAAAJ&hl=en&oi=ao)). In specific, I try to assess the impacts of future warming on permafrost regions, therefore I collaborate with the PermaChile (.com) monitoring network enacted by ELTE (Hungary), which will continue to expand from 27-51°S towards 53°S this next summer.

I am currently a postdoc researcher at Engineering Department and Adjunct Instructor at Geography Institute at Pontifical Catholic University of Chile. I have communicated about permafrost science and its links to hydric resources for the last couple of years and was also involved in the Expert Panel for discussion of Glacial/Periglacial environment law in Chile, giving priority to the vulnerability of permafrost environments in the high mountains.

**2. Describe your experience as a supervisor for student projects:**

In the last years I have been conjoint supervisor for fieldwork activities for people from ELTE in the PermaChile monitoring network. In November I will supervise fieldwork for PhD student from ELTE in glacial areas in central Chile and in January, I will do the same with other students in Ojos del Salado and Tierra del Fuego, Chile. These students/professionals come through Erasmus+ via ELTE-Hungary and/or through my national grant's funding.

**3. Describe the students at your home institutions, including the academic programs and any teaching on permafrost:**

At Major in Engineering Program, I have done some capsules about permafrost topics in the course 'Surface risks and processes'. Again, this is only a minor part of the overall courses and Programs, even though they are always present in mountain engineering. In the Engineering and Geology domains, my Institution only covers Surface Dynamics and Risks from geotechnical views, while in Geography the whole geocryology area is focused on periglacial geomorphology linked to paleoclimate and glaciogenic rock-glaciers. The lesser exposure to permafrost concepts and sciences as a whole, makes it relevant to even have a basic introductory course material, covering theory and practical impacts and ecological risks.

**4. Describe how your home institution is currently working with internships (e.g. compulsory part of education, offered as courses, no internship opportunities offered, etc.). Please provide as much information as possible regarding the formal structure and possibilities for students:**

The concept of internship linked to credit acquisition in contrast to ad-honorem internship, is in the PhD Programs a mandatory matter but fairly loose in terms of its dynamic. It need to be registered by the sixth semester but can happen earlier. In the Engineering Dep., there's a Working-internship-I (1 month, cycle 1, bachelor's degree) and Internship-II (2 months, cycle 2, professional title) which are mandatory.

On the other hand, both MSc and PhD students can take elective courses outside of schedule, in which case a special project is set up for the student(s) together with a supervisor. Nevertheless, this will only happen if the topic is strictly related to the thesis Project itself.

**5. Describe any mandatory parts of internships at your institution and how they may complement or overlap with the mandatory parts of the PermaIntern program (project plan, midway presentation, final project report)**

In undergrad school:

Both Working internship/practice I and II require a final project report. The Eng. Degree title requires the presentation of a project plan, midway presentation, final project report, and final oral presentation.

On the other hand, postgrad school has mandatory internships through the Doctoral Program Collegiate which can be done from year-1 and basically depend on the approval of the Thesis Supervisor. This applies to both Geography and Engineering PhD programs at my faculty. As Academy and non-private sector, the mandatory parts of the PermaIntern program are in line with a typical examination of any internship-project, in contrast let's say with a strictly working internship at some company.

**6. Provide a reflection on your role as a supervisor for interns in the PermaIntern program, in the context of your answers to questions 1-6 above:**

In Andean research, it is very important to gain insights into permafrost science as it is an undeveloped area of research and concern. In this sense, internship projects on permafrost topics represent the possibility to establish a critical derivative connected to regional priorities given by, e.g., IPCC reports demanding more monitoring sites and filling up data-deserts in dry areas. Such a plan, should cover the theoretical basis and contemporary underpinnings of permafrost science, interlinking domains of concern attempting to deliver relevance for a myriad of stakeholders (transdisciplinary outputs, discussion). Therefore a project should be drawn and systematized in realistic terms covering partial examination for theory basis, methodological strategy, preliminary project defense and final defense plus scoring. Such products should serve as input for reports at regional level and communicated when possible with regional IPA representatives, a short briefing for the Water Directory Department, the Chilean Cryosphere Society and/or the National Antarctic Institute (Ministry of Foreign Affairs) when necessary.

Overall, I do believe that this PermaIntern program offers vast possibilities in permafrost science to expand the expertise and networks of early researchers and stakeholders involved in hydric resources. This is a necessary step in a topic which unfortunately remains unfamiliar to most decision makers and geoscientists in Andean regions.