MetaDocencia: Co-Creating and Teaching Open Science

For further information, please contact Dr. Laura Ación (laura.acion@metadocencia.org).

We are a community of researchers, technicians, and educators, primarily based in Spanish-speaking Latin America. This document summarizes what we do, our impact, and how we advance our mission.

Our Mission

To advance innovation with a local perspective that responsibly builds scientific and technical capacities by co-creating networks, learning spaces, and accessible resources for Spanish-speaking communities.

The Problem

Our community is based in countries with high inequity in scientific training. For Open Science, the most visible concepts and approaches are created in highly-resourced regions (such as areas with easier access to technology, internet connectivity, and stable economies and institutions). The current solutions are often incompatible with many barriers and limitations in Spanish-speaking and Latin American regions. For example, high-quality resources, events, networks, and other well-funded initiatives are mainly in English and often inaccessible to non-English-speaking regions. Furthermore, there is usually an insurmountable economic barrier associated with high-quality resources when they are available in Spanish.

Our Approach

Our approach to this problem is supported by three pillars:

- **Training** is the base of all the projects that build scientific and technical capacities in a responsible and accessible way.
- **Community** supports projects that liaise communities and generate networks so that the production, communication, and application of scientific and technical knowledge are globally equitable.
- **Contextualization** (from English to Spanish and vice versa) promotes the development of a Latin American perspective in all the projects where we co-create networks, learning spaces, and resources.



Our Impact

Training Pillar

In less than five years, we have reached 2.4k+ community members from 30 countries (on all continents except Antarctica!) and trained 1.4k of them. Over 80% of our trainees have completed our post-workshop surveys, expressing very high satisfaction (minimum Net Promoter Score (NPS): 71%, average NPS: 89%, where NPS = % of promoters - % of non-promoters and NPS > 50% is considered excellent).

Our training includes but is not limited to:

- ALTa Ciencia Abierta, part of NASA TOPS initiative to transform to Open Science: Free
 virtual cohort training where we teach introductory contextualized Open Science
 over 6 weeks and strengthen the Spanish-speaking Open Science community.
 - Only in 2024 did we reach 450+ participants from 26 countries. In addition to belonging to the Spanish-speaking community, 40%+ of our participants self-identify as members of underrepresented groups in the scientific community.
- Train the Trainer workshops in Spanish in partnership with <u>The Carpentries</u> or <u>CABANAnet</u>. In 5 editions, both online and in person, we certified almost 70 instructors to teach programming and data science skills to researchers.

Community Pillar

- Co-creation of our <u>Hive of Fellow Communities</u>, an initiative showcasing and linking efforts with 20+ communities worldwide.
- Participation in the development of cloud-native research and training resources for communities of practice in Latin America and Africa, in partnership with five other valued-aligned organizations: <u>2i2c</u>, <u>OLS</u>, <u>IOI</u>, <u>CSCCE</u>, and <u>The Carpentries</u> (<u>link to full project</u>).
- Guidance of **LABI's community-based governance development**.

Contextualization Pillar

- **Contextualization and live interpretation to Spanish** for <u>NASA TOPS Open Science 101</u> and other projects led by IOI and 2i2c.
- Advising and facilitating <u>CZI's</u> Open Science and Events Teams during the first <u>CZI event</u> in <u>Latin America</u>.
- Liaising, organizing, and facilitating a focus group with Spanish-speaking Latin
 American researchers for <u>CS&S' Landscape Report on Climate Sensitive Infectious Disease</u>
 Communities of Practice.



Our Team and Support

<u>MetaDocencia's team</u> includes outstanding professionals from multiple marginalized groups in Science. With its diversity in several intersections - gender, disability, migration status, first language, career stage, affiliation, geography, or discipline - MetaDocencia works to improve our realities based on each of our walks of life and aspirations. **MetaDocencia** currently has a fully remote-distributed team of 51 professionals in 16 cities and eight countries.

MetaDocencia started as a grassroots organization with 100% volunteer effort and now manages over US\$1.4M in successful grants and <u>consulting services</u> contracts received during less than five years **from 10+ sponsors**. We are fiscally sponsored by <u>Code for Science</u> & <u>Society</u>, a US-based 501(c)(3) nonprofit.

Selected Reports and Publications Over the Last Year

Most of our publications are Spanish/English bilingual and published in <u>MetaDocencia's</u> <u>Zenodo community</u>, which has 170+ publications.

Institutional

08/06 - MetaDocencia's Organizational Chart

03/24 - Creating Genuine Connections and Cultivating a Culture of Wellbeing in Team Events.

both In-Person and Virtual

01/24 - 2023 Report

11/23 - Spaces for Growth: Learning How to Give and Receive Positive Feedback

Projects

08/24 - <u>The Collaborative Experience of the First Contextualization into Spanish of the Open Science 101 Course Developed by NASA</u>

08/24 - Our Journey to Contextualize Knowledge and Teach Open Science in Spanish

07/24 - What Do We Mean When We Talk about Contextualization?

06/24 - <u>Grant Report. Ciencia Abierta Accesible: Community-Based Teaching of the TOPS</u>
OpenCore Online in Spanish

Topics

07/24 - Open Science in Action: Permanent Household Survey Case

06/24 - Open Science Conversations Collective Reflections

05/24 - Tips for Getting Invited to Write for an Academic Journal

03/24 - Contributing to the Discussion on the Decolonization of Health Research



11/23 - <u>Generative Al Poses Ethical Challenges to Open Science, a Comment for Nature Human Behaviour</u>

For our Immediate Future

- Leveling the Funding Field for Researchers from Spanish-Speaking Latin America
- Mapping of Open Science Communities, Organizations, and Events in Latin America

