

# De CLARA

Cooperación Latino Americana de Redes Avanzadas

BULLETIN

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**BELLA II:**  
Connectivity,  
cooperation and  
a shared digital  
future between  
Europe and Latin  
America

**Pilot Training  
Program in  
Bioinformatics  
and Artificial  
Intelligence**

**Honey in  
the Chain:  
Blockchain for  
Beekeeping**



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## A new year to strengthen our region's digital ecosystem

The beginning of a new year always invites us to reflect on the path travelled and look ahead to the future. For RedCLARA and the community of National Research and Education Networks across Latin America and the Caribbean, 2026 represents a particularly significant moment: a year in which we consolidate important progress and reaffirm our commitment to scientific cooperation, innovation, and the development of digital infrastructures in the service of knowledge.

For more than two decades, RedCLARA has worked to build a regional ecosystem that enables universities, research centres, and academic communities to collaborate beyond national borders. This collective effort has given rise to a digital infrastructure and a space for cooperation that today connects institutions, data, projects, and people, becoming a true public good for science and education in our region.

One of the most significant developments has been the creation and deployment of new experimental environments – known as testbeds – that enable researchers, universities, and innovation centres to explore emerging technologies and new projects in collaborative settings. Platforms in areas such as bioinformatics, artificial intelligence, blockchain, and high-

performance computing are opening new possibilities for scientific research and technological development across the region.

However, infrastructure alone is not enough. Its true value becomes evident when it is transformed into a practical tool for addressing real challenges. In this edition of DeCLARA, we present several examples that illustrate this process: from initiatives using blockchain technology to improve traceability and sustainability in productive sectors such as beekeeping, to training experiences that demonstrate how bioinformatics and artificial intelligence tools can accelerate scientific analysis and expand access to advanced capabilities for researchers and students.

This edition also examines the role that RedCLARA has been playing in promoting open science in Latin America and the Caribbean, an approach that seeks to broaden access to knowledge and strengthen collaboration among institutions, scientific communities, and countries. This work is complemented by international partnerships that continue to expand the reach of our cooperation networks.

One example is our collaboration with academic networks from other regions of the world, such as ASREN and LA Referencia, to strengthen open access to scientific production and facilitate the global exchange of knowledge. Initiatives such as these demonstrate that cooperation among research and

education networks not only connects infrastructures but also brings together scientific communities and shared development agendas.

Looking ahead, the challenge is not only to continue developing digital infrastructure, but also to ensure that these capabilities become fully integrated into the everyday work of our academic, scientific, and innovation communities. The infrastructure in the region today is the result of decades of cooperation, shared vision, and collective effort and represents a strategic platform for advancing new forms of research, collaboration, and knowledge creation.

The task now is to make full use of this shared capital. Expanding the use of these platforms, strengthening collaboration among our institutions, and continuing to connect scientific capacities at both regional and interregional levels will be essential in the years ahead. Ultimately, when cooperation translates into shared knowledge, innovation and opportunities for our communities, digital infrastructure ceases to be merely technology and becomes a true engine of development for Latin America and the Caribbean.

Interview with Luis Eliécer Cadenas,  
Executive Director of RedCLARA

## BELLA II: connectivity, cooperation and a shared digital future between Europe and Latin America

**As it enters its final year of implementation, BELLA II has established itself as a vital tool for fostering digital collaboration between Europe and Latin America and the Caribbean.**

Ixchel Pérez

Led by RedCLARA and co-funded by the European Union, the programme fosters collaboration within academic, scientific, and innovation ecosystems. This strengthens knowledge as a public good and contributes to inclusive and sustainable development.

In this interview, Luis Eliécer Cadenas, RedCLARA Executive Director, reflects on the origins of the project, its main achievements, the role of RedCLARA, and the impact that this cooperation is having, and will continue to have, on universities, research centres, governments, and communities.

**What is BELLA II, and what are its main objectives?**

BELLA II is a project implemented by RedCLARA and co-funded by the European Commission, which aims to strengthen digital cooperation. One of its core objectives is to expand advanced connectivity in five countries: Peru, Costa Rica, Guatemala, Honduras, and El Salvador, thereby helping to close gaps and achieve regional connectivity.

A second component consists of developing experimentation spaces for digital transformation technologies, which facilitate access to advanced

technologies for universities, research centres, and businesses, supporting the development of new solutions, knowledge generation, innovation, and the strengthening of research, among other areas.

The third objective is to facilitate stronger links between scientific and academic infrastructures in Europe and Latin America, and to promote the strategic use of connectivity services that enable deeper and more sustained collaboration between the two regions. In this sense, it also aims to better use the submarine cable we have that directly connects Europe and Latin America.

**How did BELLA II emerge, and what results did the previous phase deliver?**

BELLA II follows on from the initial phase of the BELLA project, which we now refer to as BELLA I in order to distinguish it. That project had two sub-components – BELLA-S and BELLA-T – and concluded in 2022.

BELLA-S focused on establishing, for the first time, a direct connection between Europe and Latin America through a new submarine cable. Stretching over 7,000 kilometres, the cable now links Sines, Portugal, with Fortaleza, Brazil. This infrastructure was designed specifically to meet the needs of the academic, research, and education sectors, offering high standards of capacity, speed, and security, as well as other features that enable multiple possibilities for cooperation.

BELLA-T, developed in a complementary and simultaneous manner, expanded connectivity to several countries in the region by leveraging that direct link – including Chile, Argentina (which is not part of the project, but through which the connectivity passes), Brazil, Panama, and Ecuador. These were the countries initially affected.

BELLA II is the continuation of that process, with the aim of reaching more countries and providing additional services and infrastructure capacities.

**What makes BELLA II such a strategically important initiative for both the region and the EU-Latin America and the Caribbean relations?**

First and foremost, because it helps to build and strengthen the regional digital ecosystem that supports research, education, and innovation activities in the region. By connecting Latin American universities and research centres with major capabilities to their European counterparts, broad spaces for cooperation are created – and that cooperation, in turn, represents opportunities for development, economic growth, the creation of new applications, and the further expansion of the areas in which Europe and Latin America work together.

Particularly in Latin America, given the differences – let us say – in the development of national education and innovation systems, it helps to “level the playing field” so that all actors, institutions, and organisations can have more or less equitable access to resources that are scarce yet essential to their work. For example, high-performance computing, artificial intelligence and cybersecurity: within a framework of cooperation such as that enabled by RedCLARA, these generate synergies that strengthen such projects far more.

**What role does RedCLARA play in implementing BELLA II, and how does it collaborate with European partners?**

RedCLARA is the lead implementer of BELLA II – the organisation driving it forward. Its engagement with European actors is formally framed within the EU-LAC Digital Alliance, announced at the

2023 EU-CELAC Summit. In this context, RedCLARA is an international technical cooperation organisation that has enabled a large number of investment projects supported and promoted by the European Commission itself. We are talking about around 12 projects, of which BELLA II is the most recent.

#### **What are BELLA II's main achievements so far?**

We have implemented several important services derived from the project. One of the most significant is the launch of three experimentation spaces, or testbeds. One focuses on blockchain technology and has been developed in partnership with LNet, enabling universities and research centres to experiment with and develop blockchain-based solutions. LNet is an organisation founded or created jointly by RedCLARA, LACNIC, and BidLAB.

We have another testbed dedicated to bioinformatics, which uses artificial intelligence and intelligent agents to help discover and develop knowledge in bioinformatics or cellular biology. The third space is high-performance computing (HPC), which leverages existing infrastructure in Latin America to provide the region with high-performance computing hours for projects of various kinds. These three are already in place. We are advancing other services that have reached a certain level of development but are not yet delivering services, including cybersecurity and artificial intelligence in a broader sense,

We have also progressed in negotiating and identifying options and are in a process of competitive dialogues with potential telecommunications providers in the region to deliver connectivity for the countries included in the project, through procurement or co-investment models that, I believe, could greatly

help evolve how National Research and Education Networks (NRENs) acquire their infrastructures.

These are the main achievements, along with the momentum we have been building for cooperation among countries within the framework of the Digital Alliance and its links with other projects, such as Copernicus, as well as other initiatives within the broader context of this cooperation.

#### **What stage is the project at now, and what are its future prospects?**

BELLA II is currently in its final phase of implementation, launched in January 2023 and scheduled to conclude in December 2026. With administrative closure processes, the submission of final reports, and the closure of certain initiatives, it should be completed in full by mid-2027.

During this final period, our main expectations follow two tracks. First, a significant increase in cooperation and work with the new countries that will complete their connectivity during this period, expanding capabilities, and using infrastructure and resources.

Second, a forward-looking perspective includes the possible expansion of the project into a phase three, in which additional countries would be incorporated. Our ambition is to connect all of Latin America and the Caribbean to this digital ecosystem. We therefore expect to continue working on successive associated projects.

#### **What impact does BELLA II have on people and communities beyond technology?**

The impact is twofold. First, there is clearly a direct impact on students and researchers, because BELLA II facilitates the use of technologies

and infrastructures that strengthen their academic and scientific work – and that would otherwise be difficult for many of them to access. Second, there is an indirect impact through the strengthening of national innovation systems and the contribution of scientific and educational cooperation to economic and social development. These are the two main impacts the project can have.

#### **What role should different stakeholders play to maximise the project's impact?**

Their active participation in the project model is essential. We have spoken about the possibility of working within the framework of public, motivated and, as they now call them, “personal” partnerships – the term 4P is now used – to strengthen cooperation as much as possible around these issues, which affect society as a whole.

To the extent that governments can contribute resources and support the development of other initiatives that also build greater capabilities within national systems in each country, as well as regionally, the impact will grow. The participation of all sectors of society is fundamental, so that the project can be fully leveraged, developed and used in the way we have planned.

#### **What final message would you like to share with stakeholders across the region?**

To make use of this infrastructure, developed collaboratively over 23–24 years through RedCLARA's work in these areas. It is a public infrastructure with the value of a public good, regardless of the fact that RedCLARA is a private non-governmental organisation. What has truly been built across the region is a public good that can be of great use to all social actors in each Latin American country.



Ultimately, the main message is to make the most of what we are building in pursuit of development objectives and economic and social growth in the countries of the region.

# Honey in the Chain: Blockchain for Beekeeping

**Each jar of honey holds a story we rarely know: that of the families who care for the hives and of the bees that pollinate crops and support ecosystems. Today, thanks to technology, that story can be tracked from the hive to the consumer through secure and accessible records. These records allow production and origin to be verified and are ready to connect to international data networks when needed. This benefit is one of the impacts amplified by the BELLA II blockchain testbed, made available to Latin American initiatives through the Early Adopters LATAM program, driven by RedCLARA and LNET.**

Jenny Flores

In rural beekeeping, there is no simple mechanism for producers to reliably demonstrate that their hives and honey come from sustainable practices and responsible sources. This lack of evidence limits access to sustainable markets, reduces transparency with authorities and buyers, and exposes small producers to fraud and loss of value. Traditional certifications are often slow, costly, and centralized, making them inaccessible to most.

Operating in rural areas of Colombia, Peru, Ecuador, and Bolivia, Colmena DAO, one of the four initiatives that reached the final phase of the Early Adopters Blockchain LATAM program, works to strengthen beekeeping in a sustainable and inclusive way. The project combines digital tools with community participation

to track honey production, organize decision-making democratically, and economically empower women and youth in rural communities.

Within the broader Colmena DAO project, this first functional prototype (MVP) is an initial step toward achieving full honey traceability. Thanks to it, each jar can show its story from the hive to the consumer's table, with secure and accessible records that allow verification of production and origin, ready to connect with international standards when necessary.

## The Challenge and First Steps

In 2022, together with beekeepers trained in sustainable apiculture from an institute in Ecuador, the need arose to address one

of the sector's main challenges: honey adulteration. Due to this concern, the development of technological solutions was promoted to certify product origin, ensuring authenticity for consumers and environmental sustainability in the processes. The initiative is part of a broader effort to strengthen traceability, technological innovation, and the professionalization of beekeeping, in coordination with sector stakeholders.

Collaboration among different actors has made Colmena DAO's success possible. Academic institutions from Colombia and Ecuador, among others, supported the technological implementation, while beekeepers actively participated throughout the process.

The initiative was led by Philippe Boland, a regenerative designer with experience in interinstitutional projects in Latin America and coordinator of international networks such as enREDO and Red Colmena, along with José Zárate, a technology intelligence specialist from Peru with over 25 years of experience in the tech sector and co-founder of Stamping.io, a platform that certifies, seals, and digitally verifies documents, data, and transactions using blockchain technology. Joining this effort was Laureano Carlosama, manager of a beekeeping company in Ecuador with extensive experience supplying honey to multinational companies, with whom blockchain-based traceability solutions were developed.

"We saw an opportunity in this specialized tool (the BELLA II blockchain testbed) for traceability in beekeeping, particularly for honey," explained Boland.

Carlosama highlighted the importance of making beekeepers' work visible and protecting environmental resources. "Caring for bees and natural resources ensures the quality of honey. If bees



disappear, many things important to people also disappear. That's why traceability is essential: it shows both the product and the beekeeper's work," he noted.

Other active participants in this initiative included CONAPI Peru, the UxTIC University Network, and the Ibero-American Cybersecurity Network (RIBCI), among other institutions and organizations, which played a key role in exchanging experiences and strengthening the network's collective capacities.

According to Boland, the first phase of the project focused on using the BELLA II blockchain technology to securely store information and ensure full production tracking, providing concrete support to beekeepers. Thanks to collaboration with

the university, the blockchain platform was introduced to producers, who initially perceived it only as a cryptocurrency tool and did not understand its usefulness for managing, securing, and controlling honey from the hive to the consumer.

In the long term, the initiative aims to create traceable pollination credits, linked to environmental monitoring via smart hives. The Colmena DAO team works with several universities to develop these hives using free and open-source software. In this context, the GNU/Linux Group of the Universidad Distrital (GLUD), an active member of Colmena DAO, took on the challenge of ensuring that all tools used operate exclusively on free technologies. As a first step, the team is developing Colmena, a server system deploying FLOSS software to enable secure communication and collaboration channels among beekeepers, universities, companies, and other project stakeholders.

This shared infrastructure seeks to reduce dependence on proprietary services and strengthen technological sovereignty, allowing each actor to maintain direct control over their data, processes, and tools. "It's important that a project like this is accessible to someone with a thousand hives as well as to someone with just one. That's why it must rely on a collaborative model where the ecosystem's benefit guides decisions," explained Cristian Guzmán, GLUD group leader.

The project is now moving toward territorial pilots, connected hives, monitoring systems, and income models based on pollination and the local bioeconomy.

For Julian Londoño, services analyst at RedCLARA, the goal of the Early Adopters initiative was achieved: "Blockchain has shown that emerging technology



testbed services, deployed through the BELLA II project, can help us tackle real challenges in the region, generate value in Latin America, and impact people's lives." As the implementer of the BELLA II project, RedCLARA has achieved tangible success, fully meeting its goal of providing participating teams not only with technological infrastructure but also expert guidance and access to applied knowledge, thus strengthening innovation and collaboration capabilities in the region.

The Early Adopters LATAM call, launched at the end of September 2025, invited proposals for innovative solutions that leveraged this infrastructure to address real regional challenges. The response was remarkable: we received nine proposals from seven countries. After evaluation, four projects advanced to the immersion and development phase, which included technical mentorship, specialized training, and the opportunity to develop and test early operational versions of their solutions in a real environment.

# BELLA II Develops a Pilot Training Program in Bioinformatics and Artificial Intelligence

Reducing weeks of scientific analysis to just hours is now a reality in Latin America. To achieve this, the BELLA II project created a training program to help researchers and academic teams use digital tools that make analyzing scientific information faster, reduce the time needed for work, and improve access to important research skills, even in places with limited resources.

Jenny Flores

The Testbed functions as a workspace and learning environment that facilitates the understanding of complex biological systems, the analysis of large volumes of scientific data, and the practical application of artificial intelligence tools across different research areas. This helps us come up with more specific research questions, plan better experiments, and speed up the process of gaining new knowledge.

Ten people, including students and faculty, took part in the pilot program. They worked in teams to come up with different practical cases. Through training activities and applied exercises, the groups implemented use cases focused on scientific challenges and research projects, including theses, receiving continuous support throughout the process. While the pilot

was running, participants worked with real data and analyzed topics such as biological processes, molecular-level interactions, and structured reviews of scientific information.

One of the cases addressed was the lactose operon, a bacterial system that regulates how cells use lactose (a type of sugar) depending on the availability of glucose (another sugar). The objective was to understand how certain genes are activated to produce enzymes that allow lactose metabolism only when glucose is scarce.

The program also talked about programmed cell death in plants, which is called the hypersensitive response (HR). This is how plants get rid of cells that are infected with pathogens. Through pathway modeling, the goal was to identify proteins or signaling events



shared between animals and plants, analyzing similarities with apoptotic factors in animal cells.

The pilot's main result was the quick adoption of these tools, even by novices. Expert academics from the University of the Andes in Venezuela (ULA) supported this process by providing continuous guidance throughout the training experience.

According to the pilot participants, the environment allowed them to significantly reduce analysis times, improve the use of information from various publications, and strengthen researchers' capacity to generate results with greater scientific impact.

Overall, the results validate the Bioinformatics and Artificial Intelligence Testbed as a key environment to promote advanced training, applied experimentation, and scientific innovation in Latin America. The cases developed during this pilot constitute

concrete evidence of its impact and lay the foundation for its growth and expansion within the BELLA II ecosystem, consolidating it as a strategic infrastructure serving the academic and scientific community of the region.

This testbed, like the Blockchain and High-Performance Computing (HPC) testbeds, is offered as a specialized service of BELLA II under a fee-based access model, designed to ensure its sustainability and continuity over time. Interested institutions and individuals can acquire detailed information and submit their requests through the service form available here.



## Academic Publication Highlights RedCLARA's Contribution to Open Science in the Region

The book *Open Science in Latin America*, published by the University of Costa Rica, the Latin American Council of Social Sciences (CLACSO), and Simon Fraser University of Canada, analyzes the progress of open science in the region and devotes one of its chapters to the role of RedCLARA in this process.

Jenny Flores

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The chapter, entitled "RedCLARA as a facilitator of open science in the digital ecosystem of Latin America and the Caribbean," written by Martha Galvis, information management analyst at the organization, presents open science as a space for cooperation in which sharing information, resources, and experiences is a pathway to expanding access to knowledge and generating solutions with social impact. In this context, RedCLARA is recognized as an actor that connects people, institutions, and countries to strengthen research and innovation.

The text highlights that collaboration among universities, research centers, and national networks is essential to expand access to knowledge and strengthen social and economic development in the region. In this process, RedCLARA acts as a digital bridge that connects the National Research and Education Networks (NRENs), facilitating the exchange of data, ideas, and projects.

One of the main examples of the organization's leadership and results is the BELLA Program, implemented together with GÉANT and with the support of the European Union. Since 2016, it has radically transformed connectivity between Latin America and Europe through the first fiber-optic cable linking Portugal and Brazil and a terrestrial network connecting Chile, Argentina, Brazil, Ecuador, and Panama.

In 2023, this initiative was expanded with the BELLA II project, aimed at integrating more countries, expanding collaboration opportunities, and strengthening the regional digital ecosystem.

Among the main outcomes of BELLA II, the chapter highlights the testbeds developed in areas such as HPC, bioinformatics, and blockchain. These advanced processing environments allow researchers to explore new solutions and generate knowledge to address the region's challenges.

Another RedCLARA service that promotes open science is identity federations, which provide fast and secure access to various digital services in the region and worldwide. The text also highlights the Open Desk (Ventanilla Abierta), a space that guides researchers and scientific communities in finding support for connectivity, storage, and digital tools, promoting integration and collaborative work.

The chapter dedicated to RedCLARA concludes that open science is only possible when stakeholders work in a coordinated manner. Along this path, the organization continues to consolidate itself as an essential bridge for knowledge to circulate, be shared, and generate real benefits for society.

The complete publication, which includes the chapter mentioned as well as contributions from other representatives of the region, [can be downloaded here](#).

# RedCLARA Strengthens Interregional Cooperation with the Launch of Tibr alongside ASREN and LA Referencia



**Cooperation between Latin America and the Arab region reached a new milestone with the official launch of Tibr, the Arab Regional Open Access Harvester, presented during the 15th ASREN International Conference, e-AGE25, held in Jordan on 1-2 December 2025.**

Ixchel Pérez

Developed by ASREN (Arab States Research and Education Network) in collaboration with LA Referencia and RedCLARA, the platform unifies and connects the scientific output of the Arab States through a single access point, strengthening the exchange of critical scientific data in strategic areas such as Earth observation, climate change, and sustainability.

Tibr uses the open-source software developed by LA Referencia—widely adopted across Latin America—which enables the harvesting, validation, enrichment, and publication of scientific metadata in accordance with international standards. The initiative also received support from GÉANT, within the framework of the EUMEDplus project, reinforcing cooperation between research and education networks across regions.

“Tibr is not just a platform; it is the demonstration of the impact we achieve when we share capabilities, vision, and technology across regions. ASREN and RedCLARA have built this pathway step by step, and today we celebrate a digital bridge that strengthens Open Science in the Arab States,” said Luis Eliécer Cárdenas, Executive Director of RedCLARA.

Tibr is being advanced within the framework of the EUMEDplus project, which promotes the establishment of a Regional Open Science Cloud through the adoption of LA Referencia technology, strengthened repository interoperability, and regional capacity

building. This effort represents a key step toward creating an integrated, standards-based regional discovery platform for open access scientific content.

## A Partnership Built Over Time

Collaboration between ASREN and RedCLARA is grounded in more than two decades of joint work and strategic agreements supported by the European Union. In 2022, ASREN, RedCLARA, and GÉANT signed the Katowice Declaration, a trilateral commitment to enhance the exchange of critical scientific data and strengthen the digital infrastructure necessary for evidence-based decision-making.

That same year, ASREN and RedCLARA signed an agreement within the framework of the Confederation of Open Access Repositories (COAR) and the LIBSENSE initiative, through which ASREN adopted LA Referencia software to build its own regional scientific metadata platform. Tibr is the tangible outcome of that technical and strategic cooperation.

## e-AGE25: Uniting Capacities and Regions

The e-AGE25 conference, organised by ASREN and the Jordanian Universities Network with the support of the European Union, brought together experts in digital transformation, artificial intelligence, energy, data, sustainability, and open science under the theme “Uniting Minds.”

During the opening session, RedCLARA and the BELLA II project participated actively, highlighting the value of interregional cooperation as a driver for expanding scientific connectivity and consolidating open, globally connected digital ecosystems.

“Collaboration between ASREN and RedCLARA is not new; it has been built



over many years of trust, coordination, and shared infrastructure. This relationship continues to grow and opens new opportunities for our scientific communities to work more effectively together,” Cárdenas noted.

The programme also included participation from representatives of the German Jordanian University, ASREN leadership, European Union delegations, regional science and technology centres, and international experts. Initiatives such as the Women in STEM space and the Next Generation of Innovators platform—highlighting young scientists from across the Arab world—were also featured.

Partnerships between Latin America, the Caribbean, the Arab States, and Europe continue to strengthen an open, inclusive, and globally connected digital ecosystem, accelerating scientific innovation, expanding academic exchange, and reinforcing collective capacity to address challenges such as climate change, data management, and digital transformation.



## BIO+IA Early Adopters: A regional boost for bioinformatics and artificial intelligence research

**The Early Adopters programme of the Bioinformatics and Artificial Intelligence Testbed (BIO+IA) was launched in mid-March during a webinar that brought together over 100 researchers and representatives from the scientific community across eight countries interested in exploring new capabilities for molecular interaction network analysis.**

The initiative aims to strengthen research capacities in bioinformatics and artificial intelligence across Latin America and the Caribbean by providing access to specialised training and technical support, as well as an AI-assisted testing platform.

During the session, the participation requirements and the scope of the BIO+IA Testbed were presented. This new testing

platform has been developed within the BELLA II project framework.

The BIO+IA Testbed is a specialised platform for analysing molecular interaction networks that combines generative AI with logical reasoning. It automatically connects to major global biomedical knowledge systems such as PubMed, the Protein Data Bank and Gene Ontology, producing results that include

the supporting bibliographic references. This enables researchers to verify and build upon the platform's findings.

Through the Early Adopters programme, RedCLARA and its academic partners aim to promote the effective use of the Testbed by supporting selected teams in generating scientific results by applying bioinformatics and AI to the analysis of molecular interaction networks with regional impact.

"This initiative responds to the growing use of AI-supported bioinformatics, a key tool for understanding complex diseases, developing more precise therapies, and accelerating scientific discovery," explained Julián Londoño, Services Analyst at RedCLARA. "The programme seeks to support proposals that generate useful knowledge for the region."

### Participation from the regional scientific ecosystem

The call is open to universities, research centres, university hospitals, start-ups, academic spin-offs, research groups, and doctoral and thesis researchers working in life sciences innovation within the National Research and Education Networks (NRENs) ecosystem.

Four to five initiatives will be selected to participate in the programme, running from April to June 2026. Teams must present a clearly defined research problem, demonstrate the necessary expertise and commit to working 10–15 hours per week for eight weeks. Proposals may be submitted until 27 March 2026.

The programme includes four stages: a launch event and call for proposals, proposal evaluation, training and work on the platform, and a final Demo Day where teams will present their results.

Selected initiatives will receive three months of free access to the testbed, specialised training, technical and scientific mentoring, a certificate of participation, regional visibility, and the opportunity to present their results at the closing event.

This initiative is being implemented as part of the BELLA II project, in collaboration with the NRENs of Mexico (CUDI), Colombia (RENATA), and Chile (REUNA), the University of the Andes in Venezuela (ULA), and other academic and scientific partners.

### Infrastructure for experimentation and innovation

BELLA II testbeds are specialised, secure, controlled technological environments designed for experimenting with, testing, and evaluating technologies and systems. They replicate real operational conditions as closely as possible, enabling researchers and developers to identify challenges, test solutions, and assess the performance of innovations prior to deployment in production environments.

BELLA II is a regional project led by RedCLARA and co-funded by the European Union. Its aim is to strengthen and expand the digital ecosystem of Latin America and the Caribbean. It facilitates collaboration between companies, research centres, educational institutions, and national research and education networks, thereby contributing to the development of essential digital infrastructure for science, technology, education, and innovation throughout the region.

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