

Webinar Report

"The structure, organisation and institutional management of university research"

Virtual Forum prior to the IX Central American University Congress
Co-organised by CSUCA, OBREAL GLOBAL and EU-LAC FOUNDATION

18 March, 2021

Time: 9:00 am (Guatemalan time) // 16:00 CET

Agenda

| TIME | ACTIVITY |
|--|--|
| 09:00 - 09:10 (Guatemala) 16:00-16:10 (CET) | Opening of the webinar Dr Carlos Alvarado Cerezo , CSUCA Secretary General |
| 09:10 - 09:20 (Guatemala) 16:10-16:20 (CET) | Welcome from OBREAL Global and the EU-LAC Foundation Elizabeth Colucci , Project Director, OBREAL Global Dr Anna Barrera , Senior Programme Coordinator, EU-LAC Foundation |
| 09:20 - 10:45 (Guatemala) 16:20-17:45 (CET) | Interactive panel , moderated by Dr. Armando Euceda , President of the Central American and Caribbean Regional System for Research and Postgraduate Studies (SIRCIP/CSUCA) Dr José Miguel Sermeño , Director of Scientific Research, University of El Salvador Dr Elizabeth Bernal , Academic Director, ASCUN/Chair of the South American Chapter of OBREAL Global and Coordinator of the Andean Mimir project Dr Alfonso Marzal Reynolds , University of Extremadura, Spain |
| 10:45 – 11:00 (Guatemala) 16:45-18:00 (CET) | Conclusions and closure Dr Armando Euceda , President SIRCIP, CSUCA |

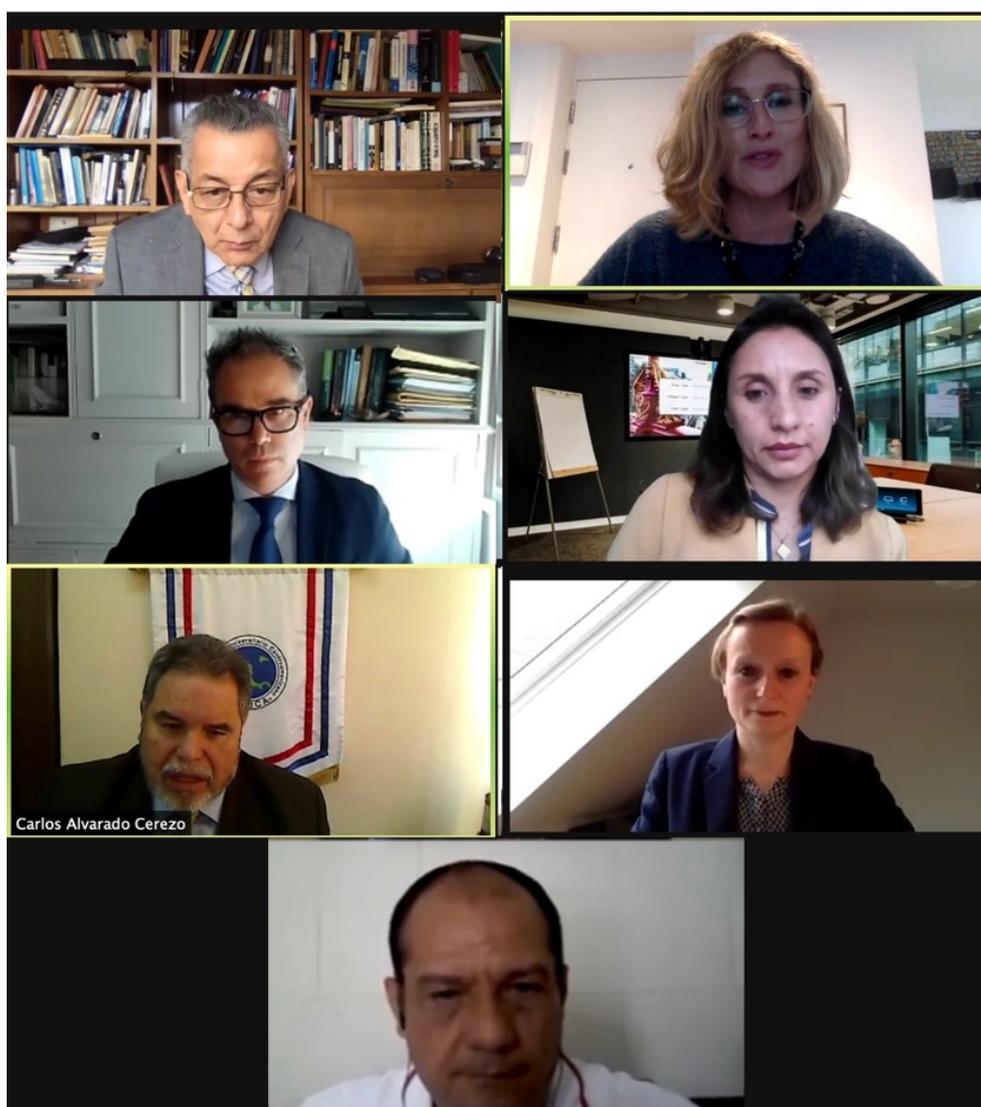
Introduction

In conditions of scarce human, material, and financial resources, how can research be organised and managed in order to generate scientific knowledge and technological solutions of quality, relevance and impact for the well-being and development of peoples and countries, while enhancing the meaningful learning of students?

This online forum was aimed at exchanging visions, experiences, good practices and proposals for regional, Central American and international collaboration in this field. It was introduced and moderated by the president of SIRCIP (Central American and Caribbean Regional System of

Research and Postgraduate Studies) of CSUCA, followed by three interventions, marking different experiences in research management:

- 1) the University of El Salvador (UES), highlighting the dynamics of the country and the Central American region, its challenges and needs in terms of capacity building;
- 2) the experience of the Mimir Andino project (<http://mimirandino.org/>), an Erasmus+ project coordinated by the Association of Colombian Universities (ASCUN) and OBREAL Global, which has developed a model for university management of research in Andean countries; and
- 3) the experience of a European regional university, the University of Extremadura in Spain, which can provide important lessons for university research and its relevance for regional development.



Opening remarks

Dr Francisco Herrera, Secretary General of CSUCA

Dr Francisco Herrera congratulated the three institutions CSUCA, Obreal Global and the EU-LAC Foundation for facilitating the webinar and the academic opportunity it provided to reflect on research work in different universities and to exchange experiences to contribute to the continuous improvement of Higher Education Institutions.

Research, according to Dr Herrera, is a fundamental task for human beings, as it allows them to establish contact with reality, to learn about the ways of life, its limitations, and strengths. Likewise, it should be a stimulus for intellectual activity that leads to an organisational form of problem solving.

Science, according to Dr Herrera, always offers solutions to the challenges of everyday life and helps to answer the great mysteries of humanity. It is one of the fundamental ways of accessing knowledge, as it responds to society's needs, to global challenges and develops new technologies with which products and services are created, allowing people to adapt to the environment and to meet their needs.

Dr Herrera stressed that the substantial and intrinsic characteristics of the university would be to constitute a space for the construction of knowledge based on its strategic functions: training, research, and social projection. The advances made by different countries were primarily due to research, science, and technology, which have contributed to the growth of their economies and the availability of better services for their social groups.

Interactive Panel

Dr José Miguel Sermeño, Director of Scientific Research, University of El Salvador

In the area of scientific research, the *Universidad del Salvador* has an organisational structure through the Secretariat that reports to the Rectorate, in addition to a Board of Directors of the Scientific Research Council and the Extended Scientific Research Council.

The Secretariat for Scientific Research has a system for organising scientific research that coordinates with the research institutes and centres of the different faculties of the University. In addition, it seeks to strengthen the infrastructure and equipment of the different areas for scientific research, as well as to create research programmes, researcher networks and to strengthen research groups in the University's 12 faculties. It also coordinates with the National System of Innovation, Science and Technology of El Salvador to carry out scientific research with the aim of reaching civil society with scientific projects of impact.

For its nine scientific research policies (organisation of research; allocation of resources; intellectual property; usufruct; linkage with the surroundings; homologation and internationalisation of research; research ethics; inclusion in research; application, publication, and dissemination of research results; human resources), the UES has defined four main objectives:

- Establishing a system to manage research from the Secretariat for Scientific Research and the SR Council, which integrates the scientific, technological, and humanistic activity of the



academic communities of researchers, institutes, centres and research units with undergraduate and postgraduate programmes, and their articulation with civil society.

- Structuring the scientific organisation of the University of El Salvador through the methodology of Research Programmes that are permanent and of greater impact.
- Strengthening the research system with policies and/or programmes for academic mobility and scientific exchanges with national and international institutions.
- Developing the planning, monitoring, evaluation, and control of these policies, so that the research system functions efficiently and publicising the science and technology indicators generated at the university.

Within these policies, the main axes are the linkage with the external sector, where researchers promote effective interaction with the academic and governmental sectors, NGOs, the productive sector, and international institutions; the transfer of research results; as well as the transfer of technology.

The University has an information system for the promotion of scientific research, the purposes of which are to improve performance, to increase the scope and guarantee better results on information management and to obtain bibliometric indicators on production, visibility, impact, and collaboration. This system facilitates the registration of research projects in five areas of knowledge: Scientific Production Information System (SIPC-UES); Researcher Network Information System (RI-UES); Open-Source Platform for the management and publication of Scientific Journals; dissemination of research through social networks (SIC-UES - Facebook, Twitter, Instagram); Television Programme "Scientific Research at the University of El Salvador".

Among the prospective actions of the UES, which at the same time constitute a challenge, the Secretariat is developing a project called "Computer System for the Management and Results of Research" (SIGRI-UES) which will contain artificial intelligence modules for planning, bibliographic review, generation of indicators on scientific production; management, control, monitoring and results of research projects; methodology for the organisation of research. The Academic Vice-Rectory will oversee the operationalisation of the results of the dependent units. Work is also being done on the creation of an Inter-institutional Committee and a protocol for the Care and Use of Laboratory Animals. In addition, the Office of Innovation and Technology Transfer is being implemented, which promotes entrepreneurship and the transfer of knowledge based on research results and the creation of technology-based companies. Among other challenges, he mentioned the promotion of doctoral studies and the increase of research projects in collaboration with other universities through academic networks.

Dr Elizabeth Bernal, Academic Director, ASCUN, Colombia

Colombia's relationship with the countries of Central America has been historic, permanent, and mutually beneficial. ASCUN has been a space for meeting and dialogue between higher education institutions for more than 60 years, as a non-governmental, non-profit organisation. It brings together 90% of Colombia's universities, public, private or from various local and regional areas.

Its current action plan takes on board the ongoing crisis and reflects on how the universities could help to address it from their areas of competence. For this purpose, an analysis was made of various aspects (economic, social, environmental, among others), and it was also noted that the universities also face some sustainability problems. It was decided to develop a first axis of work



aimed at the sustainability of universities so that they are in a better position to better contribute to the challenges of the country and the world. To this end, three paths were proposed:

- Supporting the sustainability (in financial, environmental terms, etc.) of higher education institutions in order to contribute to the sustainable development of the country; making their contribution visible in different areas and favouring spaces for dialogue and collaboration between actors that will allow for the required changes in universities and in public science and research policies.
- Ensuring ASCUN's financial sustainability; articulating quality management with strategic management; leveraging the strengths of partner institutions and continuing ASCUN's digital transformation.
- Promoting synergies between higher education institutions, networks, and other actors; strengthening international academic and scientific cooperation; and supporting digital transformation initiatives in higher education.

The current COVID-19 crisis has also shown that without cooperation it is very difficult to continue and to achieve the changes that society requires. Therefore, it was decided to promote synergies not only between ASCUN's partner institutions, but also between internal networks and instances where ASCUN is the vehicle for communication, dialogue and interaction.

ASCUN identified 14 key factors within the training needs for R+I+E (Research, Innovation and Entrepreneurship) in the Latin American region, such as decision-making based on strategic planning, leadership and decentralisation in the internal cooperation networks; management of resources to reduce dependence on the state; reflection on the autonomy of the universities' internal research institutes; review of the entire infrastructure; importance of transdisciplinarity; information management; articulation between research, innovation, appropriation, transfer and commercialisation; participation in regional ecosystems; internal and external communication of all research results; articulation with comprehensive training; and international cooperation in R&I.

Finally, the Mimir Andino project, financed by the Erasmus+ programme and coordinated by ASCUN and OBREAL Global, was presented as an example of how a contribution can be managed for the universities of a region. MIMIR Andino is made up of universities from six countries, where the participating universities selected did not necessarily have the best indicators. The project started with a self-diagnosis of the research and innovation management of these universities; then a series of visits and dialogues with experts were organised; and finally, a first research management model for the Andean region has been designed with key elements, principles of action and levels of involvement. Three project components (strategic, internal-relational, and organisational-administrative) were identified, and different indicators were defined to measure progress in the different components and the monitoring process of the proposed model. This model is flexible, so it could be adapted to the reality of Central American universities. However, it must also be strengthened through institutional ownership, permanent communication with other higher education institutions, the promotion of national policies, a territorialised approach, and the strengthening of autonomy, among others.

Dr Alfonso Marzal Reynolds, Professor, University of Extremadura, Spain

The University of Extremadura is participating, together with ASCUN, in the Andean MIMIR project, and is an example as a young European and regional institution of less than 50 years of

age, with certain similar characteristics to some universities in the aforementioned project. Since its creation, teaching and research work has been increased, which has led to the construction and remodelling of infrastructures to favour the university's research management system. The University is mostly linked to its territory, taking into consideration the peculiarity that the region is one of the largest in the southern Iberian Peninsula, as well as in southern Europe, but with a low population density; therefore, the University has four campuses to meet the demand of students from all over the region.

It is a campus of international excellence, with 20,000 students, of which 6% are international students, it offers more than 70 degrees and postgraduate courses, and counts 1,800 lecturers, 900 administrative and service staff, four technical departments and 224 research groups. Within these research groups, more than 2,500 researchers participate, working in various lines of research oriented to nine research fields, which are linked to the territory, as well as being important in the socio-economic development of the region.

To develop the area of research in less than 50 years, an important infrastructure was established. The university has an international postgraduate school; 11 research institutes that are associated with the region's productive sector; 13 technology and knowledge-based companies (spin-offs); a science and technology park. Furthermore, it develops R&D&I contracts with different public and private companies; promotes the development of patents and protection of research results with five sponsorship chairs; offers a support service for research and business development; has a service for the dissemination of scientific culture and a web portal. This model is being piloted in the universities of the Andean MIMIR project.

The University of Extremadura is based on the knowledge triangle and deems it is an example of linkage with the territory. Almost 90% of students find their first job within seven months of graduation; the University is responsible for 70% of university education in the region and more than 90% of scientific production in Extremadura.

The University has contributed enormously to the socio-economic development of the region, being the main reference for the training of university students and the development of research activities in Extremadura. The Institution has a significant impact on output, income, and employment in the region; it contributes more than 620.5 million euros, an income of 298.5 million euros and an occupation of 8,679 jobs. They are a public university financed mainly by the regional government, being this investment socially profitable since the university contributes to increase tax revenue by more than 220 million euros per year, which is more than 50% of the budget provided by the regional government.

Links of interest

Video of the Webinar in Spanish: <https://www.youtube.com/watch?v=5VTWU2G9f08>

Video of the Webinar in English: <https://www.youtube.com/watch?v=MGcWBDVIU9U&t=43s>

University of El Salvador: <https://www.ues.edu.sv/>

Mimir Andino Project: <http://mimirandino.org/>

Colombian Association of Universities: <https://www.ascun.org.co/>

University of Extremadura: <https://www.unex.es/>



This webinar was organised in the framework of OBREAL Global IN FOCUS 2021 "Charting the course for South-South-North cooperation and beyond" (<https://obrealglobalinfocus.obsglob.org/en/obreal-global-in-focus-2021/>) as well as the pre-congress activities for the IX Central American University Congress of the Central American University Superior Council (CSUCA) (<http://congreso2021.csuca.org/>).

The organisers of this virtual seminar and their representatives, Dr Carlos Alvarado Cerezo, Secretary General of CSUCA, Dr Adrián Bonilla from the EU-LAC Foundation, and Dr Ramón Torrent from OBREAL Global, thank the participants for their contributions and attendance.

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