




# PROSPECTA AMERICAS

Lima, Peru  
October 24-25, 2019



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# PROSPECTA AMERICAS

## FIRST INTERNATIONAL SEMINAR OF TECHNOLOGY FORESIGHT FOR THE AMERICAS

**October 24-25, 2019**

**Lima, Peru**

### OBJECTIVE

Launch a regional program on technology foresight to improve the social appropriation of knowledge of 10 major transformative technologies, namely Big Data; robotics; artificial intelligence; virtual reality; quantum computing; blockchain; synthetic biology; gene editing; biomedical engineering; and new nanostructured materials – and evaluate their possible economic, social and environmental impact on the countries of the Americas.

The long-term goal of Prospecta Americas is to create a regional network of experts on technology foresight to share good practices; support capacity building and training in the field and provide technical assistance and lead joint collaborative projects in the 10 aforementioned technologies.

The Seminar is a first step to support OAS member States interested in identifying and mapping future trends and technological developments in sectors of critical importance to the Americas, and provide useful insights as an input for decision making and the formulation of public policies. It is expected that Prospecta Americas will become an annual event, and will rotate every year in a different host country within the Americas.

### TARGET AUDIENCE

The Seminar is for entrepreneurs, researchers, academics, graduate students, private sector leaders, high level authorities and public officials from the Western Hemisphere and beyond interested in learning more and collaborating on the topics of technology foresight. It is expected that between the participants present at the event and the live webcast, the audience will reach over 5,000 attendees. The live webcast will be transmitted via streaming on two channels (one in English and one in Spanish).

### ORGANIZERS AND PARTNERS

Prospecta Americas is organized under the umbrella of the Inter-American Committee on Science and Technology (COMCYT), which includes the Ministries and National Secretariats of Science, Technology and Innovation of the 34 member countries of the Organization of American States (OAS). The proposal to increase regional efforts in the field of technology foresight and to launch Prospecta Americas was first introduced by the National Council of Science, Technology and Technological Innovation of Peru (CONCYTEC), during the Fifth Inter-American Meeting of Ministers and High Level Authorities of Science and Technology held in Medellin, Colombia, in November of 2017.



Hence, the Seminar is organized by the Organization of American States, in its capacity of Technical Secretariat of the COMCYT, in close collaboration with the National Council of Science, Technology and Technological Innovation of Peru (CONCYTEC) and the Administrative Department of Science, Technology and Innovation of Colombia (COLCIENCIAS) – respectively Vice-Chair and Chair of the COMCYT.

The initiative also has the support of the Pontifical Catholic University of Peru (PUCP); the Engineering and Technological University of Peru (UTEC) and the National Confederation of Private Business Institutions of Peru (CONFIEP).

## VENUE

Prospecta Americas will be held at the OPEN PUCP Campus of the Pontifical Catholic University of Peru (PUCP), located in the San Miguel District in Lima, Peru.

## DRAFT AGENDA

Over the two (2) days of the Seminar, specialized workshops and networking sessions will be conducted in the morning (9:00 to 13:00) of October 24<sup>th</sup> by experts in each of the 10 transformative technologies. During those sessions, technical details about ongoing studies and futures scenarios will be shared, as well as best practices in the field of technology foresight, in an effort to promote joint research projects; investments and other collaboration opportunities.

In the afternoons (15:30 to 20:30) of the October 24<sup>th</sup> and 25<sup>th</sup>, keynotes and special presenters will be invited to take the floor, and panels for each of the 10 technologies will be held. Open discussions between the audience and the panelists will be encouraged.

## DAY ONE

Thursday, October 24 <sup>th</sup> 2019	
<b>10:00 – 13:00</b>	<b>Specialized Parallel Workshops and Networking Sessions on:</b> <ul style="list-style-type: none"> <li>• New nanostructured materials</li> <li>• Nanosatellites and robotics for Space</li> <li>• Synthetic biology</li> <li>• Gene editing</li> <li>• Biomedical engineering</li> <li>• Big Data</li> <li>• Blockchain</li> <li>• Quantum computing</li> <li>• Augmented reality and virtual reality</li> <li>• Artificial intelligence</li> </ul>
<b>13:00 – 14:30</b>	<i>Lunch</i>
<b>14:30 – 15:00</b>	<i>Registration</i>



<b>Thursday, October 24<sup>th</sup> 2019 (continued)</b>	
<b>15:00 – 15:30</b>	<p><b>Opening Remarks</b></p> <ul style="list-style-type: none"> <li>- Domingo González, Administrative Vice President, Pontifical Catholic University of Peru (PUCP)</li> <li>- Fabiola Leon-Velarde, President, National Council of Science, Technology and Technological Innovation of Peru (CONCYTEC)</li> <li>- Sonia Monroy, Deputy Director, Administrative Department of Science, Technology and Innovation of Colombia (COLCIENCIAS)</li> <li>- Kim Osborne, Executive Secretary for Integral Development, Organization of Americas States (OAS)</li> </ul>
<b>15:30 – 16:15</b>	<p><b>Keynote : The Importance of Transformative Technologies for the Future of Humanity</b></p> <ul style="list-style-type: none"> <li>- Jerome Glenn, Founder and CEO, The Millenium Project</li> </ul>
<b>16:15 – 17:00</b>	<p><b>Keynote : Vision from Latin America of Technology Foresight</b></p> <ul style="list-style-type: none"> <li>- Francisco Jose Mojica, Director of the Center for Strategic Thinking and Foresight, Universidad Externado de Colombia</li> </ul>
<b>17:00 – 18:30</b>	<p><b>First Session: Transformative Technologies and Advanced Manufacturing</b></p> <p><b><u>New nanostructured materials</u></b></p> <ul style="list-style-type: none"> <li>- Ernesto Marinero, Professor of Materials Engineering, Purdue University, United States</li> </ul> <p><b><u>Nanosatelites and Robotics for Space</u></b></p> <ul style="list-style-type: none"> <li>- Gustavo Medina, Responsible of the Laboratory for Space Instrumentation (LINX), Nuclear Sciences Institute (NCI), National Autonomous University of Mexico (UNAM)</li> </ul> <p>Q&amp;A from audience</p>
<b>18:30 – 19:00</b>	<i>Coffee Break</i>



**Thursday, October 24<sup>th</sup> 2019 (continued)**

<p><b>19:00 – 21:00</b></p>	<p><b>Second Session: Transformative Technologies, Life Studies, Health and Medicine</b></p> <p><u>Synthetic biology</u></p> <ul style="list-style-type: none"> <li>- Fernando Segato, Assistant Professor of Biotechnology, Specialist in Genetics and Molecular Biology, University of Sao Paulo, Brazil</li> </ul> <p><u>Gene editing</u></p> <ul style="list-style-type: none"> <li>- Novartis (to be confirmed)</li> </ul> <p><u>Biomedical engineering</u></p> <ul style="list-style-type: none"> <li>- Natacha de Paola, Carol and Ed Kaplan Armour College Dean of Engineering and Professor of Biomedical Engineering, Illinois Institute of Technology</li> </ul> <p>Q&amp;A from audience</p>
<p><b>21:00</b></p>	<p><i>End of First Day</i></p>

**DAY TWO**

<p><b>Friday, October 25<sup>th</sup> 2019</b></p>	
<p><b>8:00 – 9:00</b></p>	<p><i>Registration</i></p>
<p><b>9:00 – 9:45</b></p>	<p><b>Keynote: Artificial Intelligence and its Implications of the Future of Society</b></p> <ul style="list-style-type: none"> <li>- Susan Schneider, NASA-Blumberg Chair, U.S. Library of Congress and NASA Astrobiology Institute; Director of AI, Minds and Society (AIMS Group), University of Connecticut</li> </ul>



**Friday, October 25<sup>th</sup> 2019 (continued)**

<p><b>9:44 – 11:45</b></p>	<p><b>Third Session: Transformative Technologies for the Digital Society</b></p> <p><b><u>Big data</u></b></p> <ul style="list-style-type: none"> <li>- Jose-Luis Guerrero-Cusumano, Profesor, Specialist of Big Data and Small Data, McDonough School of Business, Georgetown University, Washington D.C.</li> </ul> <p><b><u>Blockchain</u></b></p> <ul style="list-style-type: none"> <li>- Boris Monsalve, Vice President for LATAM, Kruger Corporation</li> </ul> <p><b><u>Augmented Reality and Virtual Reality</u></b></p> <ul style="list-style-type: none"> <li>- Alina Pina, Manager of Red XRBR, Brazil</li> </ul> <p>Q&amp;A from audience</p>
<p><b>11:45 – 12:25</b></p>	<p><b>Transversal Theme: The Impact of Blockchain on Regulation and IP Policy</b></p> <ul style="list-style-type: none"> <li>- Ignacio de León, CEO of IP PASSPORT, Serial Entrepreneur, Specialist in Blockchain, Intellectual Property and Global Public Policies</li> </ul> <p>Q&amp;A from audience</p>
<p><b>12:25 – 13:00</b></p>	<p><b>Transversal Theme: Transformative Technologies and Women’s role in the Industry 4.0</b></p> <ul style="list-style-type: none"> <li>- Adriana Paez, Dean of the Faculty of Engineering and Exact Sciences, University Sergio Arboleda, Colombia and Past-President of the Latin American and Caribbean Consortium of Engineering Institutions (LACCEI)</li> </ul> <p>Q&amp;A from audience</p>
<p><b>13:00 – 15:00</b></p>	<p><i>Lunch</i></p>



**Friday, October 25<sup>th</sup> 2019 (continued)**

**15:00 – 17:00**

**Fourth Session: Transformative Technologies and the Next Challenges**

**Artificial intelligence**

- Jeffrey Brown, Manager, Future of Work and Artificial Intelligence, Bertelsmann Foundation

**Data in the Quantum Computing Era**

- Carolina Torres, Manager for Google Clouds, Latin America Emerging Countries

**Transformative Technologies, Transdisciplinary Science-Policy Networks and Global Change**

- Ana Stewart, Scientific Director, Inter-American Institute for Global Change Research (IAI)

Q&A from audience

**17:00 – 18:30**

**Fifth Session: Good Practices in the Implementation and Use of Transformative Technologies for Economic and Social Development**

**Good practices on Technology Foresight from the State of Hidalgo, Mexico and the Mexican Synchrotron Project**

- Luis Alonso Huerta, Director General of the Council for Science, Technology and Innovation of Hidalgo and Chair of the National Network of Science and Technology Councils and Organizations of Mexico

**Projects using Transformative Technologies in Costa Rica**

- José Manuel Salazar, Former Deputy Director General and Regional Director for Latin America and the Caribbean, International Labour Organization (ILO)

**The National Plan of Artificial Intelligence of Argentina**

- Lara Medialdea, National Secretariat for Science, Technology and Productive Innovation, Argentina

**Good practices in technology management in CARICOM**

- Patricia Lewin, Senior technology Officer, National Commission on Science and Technology of Jamaica (NCST)

Q&A from audience



<b>Friday, October 25<sup>th</sup> 2019 (continued)</b>	
<b>18:30 – 19:00</b>	<i>Coffee Break</i>
<b>19:00 – 19:30</b>	<p><b>Launching of the Book “Work/Technology 2050: Scenarios and Actions” from The Millennium Project</b></p> <ul style="list-style-type: none"> <li>- Jerome Glenn, Founder and CEO, The Millenium Project</li> <li>- Javier Medina, Del Valle University, Cali, Colombia</li> </ul>
<b>19:30 – 20:00</b>	<p><b>Technology Foresight Initiatives from the COMCYT Presidency</b></p> <ul style="list-style-type: none"> <li>- Sonia Monroy, Deputy Director, Administrative Department of Science, Technology and Innovation of Colombia (COLCIENCIAS)</li> </ul>
<b>20:00 – 20:30</b>	<p><b>Closing ceremony</b></p> <ul style="list-style-type: none"> <li>- Domingo González, Administrative Vice President, Pontifical Catholic University of Peru (PUCP)</li> <li>- Fabiola León-Velarde, President, National Council of Science, Technology and Technological Innovation of Peru (CONCYTEC)</li> <li>- Sonia Monroy, Deputy Director, Administrative Department of Science, Technology and Innovation of Colombia (COLCIENCIAS)</li> <li>- Maryse Robert, Director, Department of Economic Development, Executive Secretariat for Integral Development, Organization of Americas States (OAS)</li> </ul>
<b>20:30</b>	<i>End of Second Day</i>