Northwestern

Intergenerational Justice in a Post-Pandemic World

The Second Annual U7+ Presidential Summit

Hosted by Northwestern University, on behalf of the US sponsoring committee:
Columbia University – Georgetown University – University of California, Berkeley

Welcome Message from Northwestern University

Dear U7+ Alliance Leaders,

On behalf of the U7+ Executive Committee and U.S. Planning Committee, I welcome you to the 2020 U7+ Presidential Summit. Northwestern University is honored to host the second annual Summit, on the theme of *Intergenerational Justice in a Post-Pandemic World.*

"Intergenerational Justice" means the challenge of taking the interests of youth and future generations into account as we address global problems of all kinds—from climate change, to science and innovation, to peace and security, to economic policy. As universities, we are in a unique position to prepare a new generation of global leaders to build a more just and sustainable future. Through our teaching, research and public engagement, the U7+ Alliance can spur action toward these ends.

At the Summit we will come together as university presidents to commit to promoting intergenerational justice through the principles and actions of the U7+. We will also call on multilateral organizations, including the G7, to join us in working to create new opportunities for mutual understanding and equitable resource sharing across generations.

This year's Summit will take place over the course of two virtual sessions. Although I certainly wish we could host you in person at Northwestern University, I look forward to seeing you virtually for what promises to be a rich and meaningful series of discussions.

Morton Schapiro
President and Professor
Northwestern University

Agenda at a glance

2020 U7+ Presidential Summit: Intergenerational Justice in a Post-Pandemic World

Day 1: November 22 or 23 (depending on time zone)
Dialogue on the role U7+ Alliance universities can play in fostering intergenerational justice

- Welcome and introductions
- Proposed actions for the U7+ in 2021
- Presidential discussions on intergenerational justice

Day 2: November 24 or 25 (depending on time zone)
Defining actions universities can take to address global challenges and promote intergenerational justice

- Welcome and summary of Day One discussions
- Adoption of collective statement on intergenerational justice
- Adoption of U7+ / G7 engagement proposal
- Perspectives and reflections on the role of universities as global actors
- Closing ceremony

Thank you to all who made this Summit possible

2020 U7+ Presidential Summit Cosponsors

- Columbia University
- Georgetown University
- University of California, Berkeley

U7+ Alliance Founding University and Executive Committee Chair Sciences Po

U7+ Executive Committee

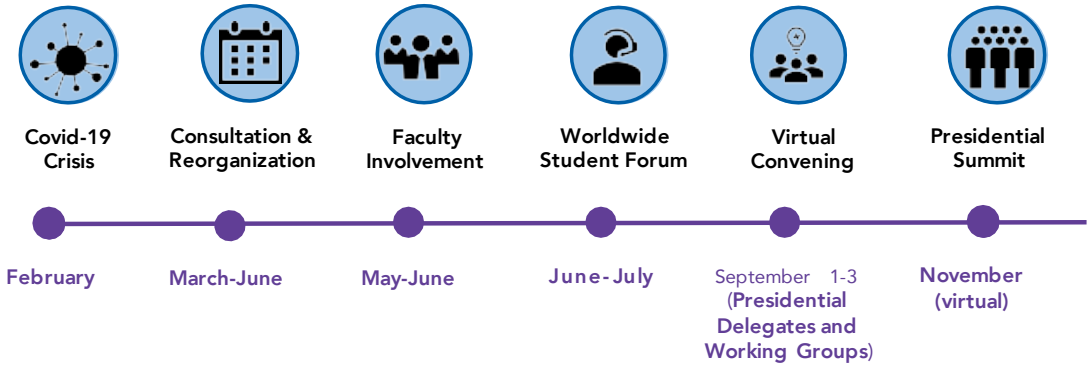
- Columbia University
- École Polytechnique
- HEC Paris
- Keio University
- McGill University
- Université Paris Sciences et Lettres
- Sciences Po
- The London School of Economics and Political Science
- Università Bocconi
- Université d'Ottawa
- Université de Bordeaux
- Université de Montréal
- University College London
- University of British Columbia
- University of Edinburgh
- Universität Mannheim
- University of Toronto

A special thanks to Roberta Buffett Elliott

Content of this briefing book

Click on the titles below for links to each section of this briefing book

1. Timeline for the U7+ in 2020



2. Summary of the U7+ Worldwide Student Forum

- Northwestern hosts inaugural U7+ Worldwide Student Forum (August 18, 2020)

3. Summary of the U7+ Virtual Convening of Presidential Delegates

- Future of higher ed: impactful global action starts on the local level (October 6, 2020)

4. Updates from the U7+ Working Groups

- Executive summaries from the U7+ Working Groups (Updated November 14, 2020)

5. Participant List

6. Participant Bios

- Bios of participating presidents and presidential delegates

1. U7+ Collective Statement on the Importance of Intergenerational Justice

- To be adopted by vote on Day 2 of the Summit

2. G7 Engagement and Influence

- To be adopted by vote on Day 2 of the Summit

3. U7+ Artificial Intelligence Ethics Project

- The Innovative University: Renewing the role of universities in the digital innovation and artificial intelligence ecosystem (Proposal from U7+ Working Group 5.4, led by Université de Montréal)

4. U7+ Intergenerational Roundtables

- Proposal from Northwestern University

Dialogue on the role U7+ Alliance universities can play in fostering intergenerational justice

On Day 1, presidents will meet in small groups, arranged for convenience of local time zones. This means that the same discussion will run three separate times on November 22 and 23. Presidential delegates (sherpas) join the same section as their president.

Day 1, Section 1
Nov 22, 7-8:30pm Chicago (UTC -6) / Nov 23, 10-11:30am Japan (UTC +9)

Day 1, Section 2
Nov 23, 7-8:30am Chicago (UTC -6) / Nov 23, 2-3:30pm France (UTC +1)

Day 1, Section 3
Nov 23, 10-11:30am Chicago (UTC -6) / Nov 23, 5-6:30pm France (UTC +1)

Welcome and Introductions – 25 minutes

- Words of welcome
  - Chicago Mayor Lori Lightfoot
  - U7+ U.S. Presidents:
    - Morton Schapiro, Northwestern University
    - Paul Alivisatos, University of California-Berkeley
    - Lee Bollinger, Columbia University
    - John J. DeGioia, Georgetown University
- Overview of the U7+ history and progress in 2020
- U7+ Worldwide Student Forum statement

Presentations of proposed actions for the U7+ in 2021 – 15 minutes

- G7 Engagement and Influence (Northwestern University Ambassador-in-Residence Ian Kelly)
- U7+ Artificial Intelligence Ethics Project (Université de Montréal Vice President for Strategic Planning Catherine Régis)
- U7+ Intergenerational Roundtables (Northwestern University Associate Provost for Global Affairs Annelise Riles)

Presidential discussions – 35 minutes

U7+ presidents and their delegates will meet in small groups for discussion. Our conversation will be divided into three parts that represent the three pillars of U7+ activities—Share, Advocate and Act.

Discussion questions:

- *Share: The context of your university*
  - *How has the COVID-19 global pandemic shaped your university's efforts to address global issues or to engage globally?*
  - *The pandemic has forced us all to focus a lot of attention on the short-term. But how are you now thinking about your university's longer-term contributions—such as preparing next generations of leaders, sustainability, or innovation and scientific discovery?*

- *Advocate: U7+ engagement with the G7*
  - *We just heard a short proposal from a U7+ task force for engaging the G7 in a more strategic and focused way. What do you think of this proposal? How can we collectively better advocate to governments around global challenges? What issues should we focus on in our advocacy towards the G7 and other international institutions and groups?*

- *Act: The impact of U7+ actions*
  - *There are three other kinds of actions for 2021 outlined in the briefing book:*
    - *A proposal to create a U7+ Artificial Intelligence Ethics "Lab"*
    - *A proposal to create U7+ Intergenerational Roundtables*
    - *Ongoing work of our U7+ working groups and, notably, the addition of a new exploratory working group on Academic Freedom*
  - *What responses do you have to any or all of these initiatives?*
  - *What other actions would you like to see the U7+ take in the months or years ahead?*

Reports from breakout groups and discussion – 15 minutes

Thank you and preparations for Day 2

Defining actions universities can take to address global challenges and promote intergenerational justice

Day 2
Nov 24, 8-10am Chicago (UTC -6) / Nov 24, 3-5pm France (UTC +1) / Nov 24, 11pm-1am on Nov 25 Japan (UTC +9)

Welcome and Introductions – 10 minutes

Summary of discussions and recommendations from U7+ presidents – 10 minutes

Discussion facilitators from day 1 will provide coordinated overviews of the issues raised during the previous day's discussions on the proposed U7+ actions for 2021

- Presenters:
  - Justin Pearlman, Columbia University
  - Tom Banchoff, Georgetown University
  - Dévora Grynspan, Northwestern University
  - Susan Hyde, University of California Berkeley
  - Daniel Sargent, University of California, Berkeley

Adoption of the Collective Statement on the Importance of Intergenerational Justice – 5 minutes

Adoption of the U7+ / G7 Engagement Proposal – 5 minutes

Please note: A livestream of the plenary session for press and the broader public will begin here.

Plenary: Perspectives on the role of universities as global actors – 5 minutes

- UN Secretary-General's Special Envoy for Youth Ms. Jayathma Wickramanayake

Fireside Chat: Reflections on the role of universities as global actors and their impact in addressing global challenges – 45 minutes

- Moderator — Annelise Riles, Northwestern University
- Speakers:
  - Paul Alivisatos, University of California-Berkeley
  - John DeGioia, Georgetown University
  - Peter Mathieson, University of Edinburgh
  - Frédéric Mion, Sciences Po President and Chair of the U7+ Executive Committee
  - Gerald Rosberg, Columbia University
  - Morton Schapiro, Northwestern University

Closing ceremony and announcement of 2021 U7+ hosts – 10 minutes

- Northwestern University student *a capella* group Purple Haze
- Announcement of 2021 U7+ Presidential Summit hosts

Connecting to the meetings

1. Register for the meetings

- Day 1
  The first day will offer three identical sessions for convenience across time zones. Presidential delegates attend the same meeting as their presidents.

  If you have not yet registered or if you do not have a link to join the meetings, please complete the following Zoom registration forms:
  - Day 1, Section 1 Zoom registration link
  - Day 1, Section 2 Zoom registration link
  - Day 1, Section 3 Zoom registration link

- Day 2
  The second day of the Presidential Summit will be one synchronous plenary. If you have not yet registered or if you do not have a link to join the meetings, please complete the following Zoom registration form:
  - Day 2 Zoom registration link

2. Prepare to connect via Zoom

The U7+ Presidential Summit will be held using Zoom. In order to ensure that you are able to connect to the meeting, please ensure that you have the most up-to-date version of Zoom.

If you would like to test your connection, camera and microphone, we have set up a Zoom test room which will open 30 minutes before the start of each meeting of the U7+ Presidential Summit, and remain open for the duration of each meeting. Please use the test room if you would like to connect with a representative of Northwestern's technology support team.

U7+ Presidential Summit Zoom Test Room Details

For optional testing of U7 + devices, connections, camera, and/or microphone.

Join Zoom Meeting
- https://northwestern.zoom.us/j/96939863807
- Meeting ID: 969 3986 3807

Dial by your location
- +1 312 626 6799 US (Chicago)
- Find your local number: https://northwestern.zoom.us/u/aeCel9mBva

Join by SIP
- 96939863807@zoomcrc.com

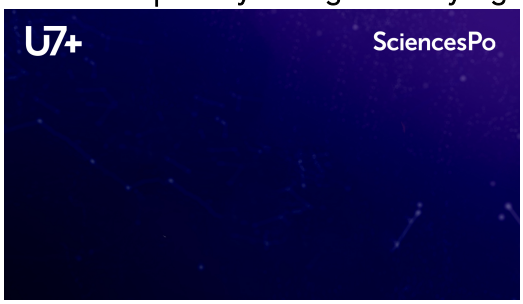
3. Use the provided U7+ Zoom backgrounds – customizable for your university

We have created special Zoom backgrounds for the U7+ Presidential Summit. You can use the templates as they are, or you can customize by adding your logo, as shown below.

- Access the U7+ Zoom backgrounds here

U7+ Zoom background (sample)

Example of a customized template by adding university logo



Inviting your university stakeholders to the plenary on Day 2

We welcome you to invite your university stakeholders to the public plenary on Day 2 (November 24-25). For your convenience, a template invitation is provided below.

Northwestern University will host this year's U7+ Alliance of World Universities Presidential Summit in partnership with Columbia University, Georgetown University and the University of California, Berkeley.

We invite you to attend the main plenary session of the Summit as special guests. The Summit will convene the presidents of universities around the world to explore actions higher education institutions can take to address pressing global challenges and foster intergenerational justice as the novel coronavirus pandemic disproportionately impacts youth worldwide.

The plenary will feature a special address from the United Nations Office of the Secretary-General's Envoy on Youth, Ms. Jayathma Wickramanayake, and a conversation of higher education leaders on the role of universities as global actors.

You can find additional information on the plenary session program and register to join here.

U7+ Worldwide Student Forum Summary

Northwestern hosts inaugural U7+ Worldwide Student Forum – Published by Northwestern University on August 18, 2020

This summer, 85 students from 22 universities in 12 countries convened virtually to address one big question: *How should universities best prepare students for life after graduation in light of the global COVID-19 pandemic and global and local events since its onset?* The students participated in the inaugural U7+ Worldwide Student Forum, which Northwestern University hosted as a precursor to this year's U7+ Alliance of World Universities Summit.

The U7+ Alliance of World Universities is the first alliance of university presidents aimed at defining concrete actions universities can take to collectively address global challenges in coordination with government leaders in G7 countries and beyond. Northwestern will host this year's Summit in partnership with U.S. co-sponsoring institutions, Georgetown University, Columbia University and the University of California, Berkeley. The inaugural summit, held last year in France, included 47 universities representing 20 countries and more than two million students. This year's Summit will build on work initiated in France to establish the role higher education institutions can play in addressing key global issues from COVID-19 to climate change—and students' voices will be heard.

The students who participated in this summer's U7+ Worldwide Student Forum prepared video messages for their institutions' leaders, with recommendations on U7+ Alliance Commitments, Principles and Actions, and creating meaningful learning experiences amid COVID-19. Here are some of the top takeaways and recommendations from students' forum discussions:

- **Student mental health must be a priority.**
  Students are under such pressure in university, and especially in this time of lockdown and limited human interaction. Forum participants called on U7+ Presidents to create pathways for students to seek support throughout their time in university, including during the pandemic when they may be off-campus. "At the end of the day, we can't be part of making change unless we are healthy," students reported.

- **Universities should help students filter through misinformation, and play a stronger role correcting falsehoods.**
  Students noted that universities are the champions of truth and scientific inquiry and are uniquely positioned to help vet and preserve the integrity of information that reaches the public and shapes decision-making at all levels of society. They also recommended programming designed to teach students to parse fact from fiction. "Truth is what you study in university. After graduation, we will have to venture out and find the truth for ourselves," they said.

- **Build support of the arts into the commitments of the U7+.**
  Students asserted that the arts, in addition to the sciences, are a powerful tool for fostering dialogue across cultures and called on U7+ leaders to recognize their importance. "To omit the arts from the commitments of the U7+ is to ignore an important aspect of our humanity," they said.

- **Digital technologies are replacing in-person experiences, and the U7+ can work to improve the quality of digital learning.**

During the COVID-19 pandemic classes were moved online very quickly in many countries around the world. While classroom learning migrated to a new format, many of the other experiences that students expect during their time in university—such as internships and study abroad programs—were cancelled. Moving forward, students called for online learning opportunities that foster engagement not just with their university professors, but also with their classmates, with community leaders and with future employers across professional sectors.

- **Universities should do more to equalize the experience of domestic and international students.**
  Students recommended that university leaders work together to provide a better and more supportive experience for international students, calling for lower tuition rates and more funding opportunities for international students, in particular. "International students are bringing their cultures to campus with them. Universities are not just giving a service to international students, but they are benefiting from them as well," they said. Students also called for more engagement between domestic students and international students. "We need to talk more—to talk to people with diverse experiences and backgrounds."

- **There should be more emphasis on the cultivation of personal abilities in addition to knowledge development.**
  Students recommended university leaders create more programs to support the development of skills and accumulation of life experiences during their time in school. They recognized the links and gaps between classroom learning and action in their communities, and encouraged their universities to prioritize programming that will prepare them for careers beyond academia. "Internship programs and experiential learning opportunities would support student preparation for creating the futures they want to be part of," students said.

- **Create concrete goals and accountability measures as part of the U7+ actions.**
  Students recommended U7+ university leaders develop targets to measure the progress of U7+ universities toward broad, far-reaching U7+ Alliance goals such as "equity and inclusiveness in the world" and "combatting polarization in society." They suggested setting improvement targets for each U7+ institution, regardless of its starting point in a particular area, and recommended creating baseline requirements for U7+ Alliance membership.

- **Expand opportunities for U7+ student engagement, including at the Presidential Summits.**
  Students called for more communication about the U7+ Alliance and what universities are doing as part of the network. "More students would be interested and more students would be part of supporting the actions of the U7+ if they knew more about it," they said. In light of that, students suggested making the U7+ Worldwide Student Forum an annual convening, creating a U7+ student board to ensure ongoing communication with U7+ university leaders, and ensuring student representation at the U7+ Presidential Summits or creating opportunities for students to participate in work to achieve U7+ Alliance goals. "Our discussions are important enough that they need to be [covered] in depth with university presidents," they said.

U7+ university leaders will have an opportunity to hear students' video messages and engage in discussions about their recommendations during this November's U7+ Summit.

Future of higher ed: impactful global action starts on the local level – Published by Northwestern University on October 6, 2020

The work that universities do on the local, regional and national levels plays a critical role in addressing global challenges, a group of leaders from schools around the world affirmed during a convention hosted recently by Northwestern University.

Held online through Zoom, the first virtual Convening of Presidential Delegates from the U7+ Alliance of World Universities attracted more than 100 senior officials and faculty from 33 universities across 13 countries for two days of discussion on the role and future of higher education and how universities can operate as global actors and help solve global challenges.

The U7+ Alliance is the first coalition of university presidents dedicated to defining concrete actions universities can take to collectively address global challenges in coordination with government leaders in G7 countries and beyond.

"Universities are in a unique position to provide intellectual and scientific leadership that advances initiatives to address shared global challenges," said Annelise Riles, Northwestern's associate provost for global affairs and executive director of the Northwestern Roberta Buffett Institute for Global Affairs. "We have an opportunity to work in coordinated and collaborative ways to foster the next generation of global leaders and catalyze action toward a more just and sustainable future."

September's virtual convening of U7+ Alliance Presidential Delegates set the stage for the 2020 U7+ Summit, which Northwestern University will host this November in partnership with Columbia University, Georgetown University and the University of California, Berkeley in November.

Here are three takeaways from the September event:

Universities' work in local communities serves as a foundation for global collaboration

The concrete actions universities take at the local, regional and national levels play a critical role in addressing global challenges.

"Our role is to help solve problems within our communities and act as mentors. Especially during the pandemic, we have a responsibility to connect the local to the global and vice versa," said Gabriel Capitelli, Rector of the University of Buenos Aires in Argentina.

In fact, deep work at the local level is viewed as foundational to global collaboration, in the sense that it enables the kind of cross-national comparison necessary to identify promising approaches to addressing global challenges within particular cultural and sociopolitical contexts.

"As universities, we have a public mission to contribute to global society. Universities are civil society actors that educate global citizens and promote global service," said Genta Kawahara, Executive Vice President of Global Engagement and Student Support at Osaka University in Japan.

Yet there was also the sense that comparative analysis is not enough — that coordination and collaboration across geographic and disciplinary silos is more important now than ever as global challenges grow increasingly complex.

"For universities to be truly effective global actors, they need to act on the basis of humility not hubris, compassion not competition, and engagement not estrangement," said Murali Chandrakshekaran, Vice Provost, International at the University of British Columbia. "None of the global problems we face can be addressed within disciplinary or institutional silos, so the idea of partnership and process are important." By leveraging new networks such as the U7+ Alliance and linking their actions to existing frameworks for addressing global changes, such as the United Nations Sustainable Development Goals, universities have the opportunity to develop a collective voice greater than the sum of their parts.

Connections to and influence of the G7: How close is too close?

While U7+ delegates agreed universities need to better position themselves as global actors, they expressed disparate views of and a degree of discomfort with the U7+ Alliance actively striving to influence the G7 agenda. On the one hand, delegates recognized the U7+ Alliance's potential to serve as a powerful advocate of science and evidence-based policymaking. They acknowledged the U7+ Alliance has a real opportunity to become an influential conduit of ideas and information on a global scale. Yet they felt becoming too intertwined with the political agenda of the G7 could compromise higher education institutions' neutrality and alienate universities based outside of G7 countries, particularly those in the Global South.

The U7+ Alliance's diversity is seen as one of its greatest strengths, and there was a sense that it needs to position itself as an independent advocate for global cooperation and the open mobility of ideas, individuals and resources, unencumbered by outside political agendas.
"When we take actions, it should position us as actors, rather than advisors," said Vanessa Scherrer, Vice President for International Affairs at Science Po in France.

Looking ahead to the 2020 U7+ summit and imagining a post-COVID world

Delegates agreed that COVID-19 poses massive challenges, but universities need to look beyond the pandemic to address other imminent threats such as climate change and the erosion of academic freedom.

They expressed a desire to build off of the Commitments, Principles, and Actions established during last year's U7+ Summit while identifying new areas of focus rooted in student feedback.
The U7+ needs "to ensure that, as we define our objectives, we're not doing it in an abstract way, but with the key stakeholders — our students," said Jeremy Ghez, associate professor of Economics and International Affairs at HEC Paris.

Alliance of world universities

Executive Summaries of the U7+ Working Groups

For the Presidential Summit
November 23-25, 2020

Hosted by Northwestern University

On behalf of the US Steering Committee:
Columbia University - Georgetown University -
University of California, Berkeley

Introduction

Out of the First Summit of the Alliance in 2019, in illustration of the 6 principles that were voted on by the Presidents, working groups were created around actions that several universities have chosen to implement. Each group has been championed by one or two U7+ universities throughout the year, and each U7+ university has had the choice to implement as many actions as they wanted to.

Prior to the Presidential Summit, each Working Group Champion has submitted a one-page executive summary synthesizing the key advancements of their group, exposing their plan for the future and discussing the relation between their action and the Summit's theme. This document is a synthesis of those executive summaries and thus gives an overview of the progress made by the working groups throughout their first year of functioning.

Acknowledgments

We are extremely grateful to the 13 champion universities whose support made this report possible.

École Polytechnique
Benoît Deveaud, *Directeur adjoint de l'enseignement et de la recherche*
Gaëlle Le Goff, *Director for International Affairs*

HEC Paris
François Collin, *Associate Dean for International*
Marie-Pierre Seyfried, *International Project Director*

London School of Economics
Simon Hix, *Pro-Director for Research & Harold Laski Professor of Political Science*

McGill University
Louis Arseneault, *Vice-principal*
Susan Murley, *Senior Director, Integrated Strategy and Planning*

Paris Sciences et Lettres
Emilienne Baneth, *Vice-President for International Relations*
Guillaume Signorino, *Program Manager*

Sciences PO
Vanessa Scherrer, *Vice President for International Affairs*

Georgetown University
Tom Benchoff, *Vice President for Global Engagement*

Universita Bocconi
Stefano Caselli, *Vice President for International Affairs*

Université de Bordeaux
Stéphanie Debette, *Vice-President for External Relations*

Université de Montréal
Catherine Régis, *Professor of Law*
Jean-Louis Denis, *Professor, Department of Health Management*

Université d'Ottawa
Adel El Zaim, *Chief Internationalization Officer*

University College of London
Clare Goudy, *Chief of Staff to Professor Michael Arthur*

University of British Columbia
Emily MacDougall, *Director for Global Partnerships*
Murali Chandrashekaran, *Vice-Provost International*

University of Edinburgh
James Smith, *Vice-Principal International*

University of Toronto
Gwen Burrows, *International Executive Director*

U7+
Alliance of world universities

Table of contents

Principle 2

We recognize that our universities have a distinctive responsibility to train and nurture responsible and active citizens who will contribute to society, from the local to the global level.

Principle 2, Action 1 - University of British Columbia

Increasing the scope of our partnerships so that our institutions work with a wide variety of actors in their communities and beyond.

Aix-Marseille Université, Ashesi University, Indian Institute of Technology Bombay, INP-HB, McGill University, Università degli Studi di Milano, Université Côte d'Azur, Université de Paris, Université Grenoble Alpes, University of Cape Town, University of British Columbia, University of Edinburgh, University of Ibadan, University of Mannheim, University of Naples Federico II, University of Toronto

Overview

The U7+ Alliance has embraced the notion of the role of universities as global actors in a highly interconnected world, across a multilateral agenda. A commitment to addressing the most pressing global challenges of our time requires a broad partnership ecosystem, reaching beyond universities and Colleges, to include Citizens, Community organizations and NGOs, Corporates, Cities, Countries, and supra-country organizations.

What has emerged through our working group so far is that the 6Cs framework reflects the broad partnership canvas that already strongly exists, through strong connections between our institutions and the world locally, regionally and globally. There is significant breadth and depth to the types of partnerships, programs, and the impact of these various partnerships across our institutions. Overall, we see a compelling narrative emerging that supports the role of the U7+ Alliance as a network *of* global actors, *acting* as global actors, in partnership for the betterment of societies and the world. We see exciting and necessary stories to tell that will support the network's mandate more broadly, which we see as our next steps.

Most important outcomes

- University-City Relationship: A very strong narrative that has emerged is the deep relationship and interconnection between institutions and cities, both the city in which they are found as well as cities more generally around the world. These partnerships reflect shared goals that include transforming cities and regions through innovation, technology, economic development, industry connections, entrepreneurial ecosystems, job creation, and urban resilience.
- Impact on Students: With specific reference to Principle 2, there is strong evidence in the 6C partnership examples so far of the commitment of our institutions to training and nurturing active citizens who will contribute to society, from the local to the global level. This includes 6C partnerships that support the experience of, and impact on, students through experiential learning as a pedagogical model, creating employment opportunities and developing future employees, and cultivating values of social responsibility and active citizenship.
- Replication and Expansion Potential: So far, there is potential for replication, expansion, and/or application of projects and partnerships to other cities, countries, and universities.

About next year

Action 2.1 will merge with Action 2.2 and Action 4.3 which cover similar and overlapping themes, including community engagement, broad partnerships, and reaching beyond the scope of academia. There is an opportunity to elevate these priorities for the Alliance, building upon the collective work and progress so far, strengthening the membership of these groups, and creating synergy between these efforts. We thus propose to form a new action : Committing to the core principle of engagement, we deeply value and highly prioritize local and global engagement beyond the scope of academia, in broad partnerships with a range of organizations and in our community engagement

endeavours. Such engagement and partnership ecosystems are essential to training and nurturing responsible and active citizens who will contribute to society, and to addressing the most pressing global challenges of our time.

About Intergenerational Justice

The key to addressing intergenerational justice is collaboration with a range of stakeholders and not just with academic institutions. By specifically committing to partnering with colleges and universities, corporations, community organizations, cities and countries, the U7+ advances an inclusive, equitable and authentic partnership platform to holistically address issues of global relevance that underpin intergenerational justice.

Principle 2, Action 2 - Sciences Po and University of British Columbia

Emphasizing the educational and civic value of community engagement.

Ashesi University, Sciences Po, The London School of Economics and Political Science (LSE), Université de Montréal, Université Mohammed VI Polytechnique (UM6P), University of British Columbia, University of Edinburgh, University of Ibadan, University of Naples Federico II

Overview

The working group so far has surfaced very interesting actions that demonstrate how our institutions value and emphasize the educational and civic value of community engagement. Actions collected so far demonstrate both through a variety of opportunities for community engagement available to students, and through the value placed on prior community engagement experience as a sought after quality for admission.
Our next steps will be focused on gathering more actions from the whole group, and engaging more deeply within our working group to discuss the emerging narrative and our next steps as a group looking forward.

Most important outcomes

- Wide variety of civic engagement paths available to students: through the actions gathered so far, there is a wide variety of opportunities available to students to engage meaningfully with the community. Community engagement options include curricular, co-curricular, volunteer, etc. Some are available to all students, while other examples are faculty or program specific initiatives. There are also different approaches in terms of mandatory versus optional programs available to, or required of all, students.
- Recognition: There are a variety of ways to recognize, acknowledge, and reward students for community engagement, whether it be through credit, fulfilment of graduation requirements, or rewards, certificates and other methods of recognition.
- Stages of implementation: For example, Université Mohammed VI Polytechnique (UM6P) is working on a civic engagement learning program to be a mandatory part of the bachelor curriculum, whereas Sciences Po has already implemented the mandatory Civic Learning Programme as a part of all undergraduate education.

About next year

Action 2.2 will merge with Action 2.1 and Action 4.3 which cover similar and overlapping themes, including community engagement, broad partnerships, and reaching beyond the scope of academia. There is an opportunity to elevate these priorities for the Alliance, building upon the collective work and progress so far, strengthening the membership of these groups, and creating synergy between these efforts. We thus propose to form a new action : Committing to the core principle of engagement, we deeply value and highly prioritize local and global engagement beyond the scope of academia, in broad partnerships with a range of organizations and in our community engagement endeavours. Such engagement and partnership ecosystems are essential to training and nurturing responsible and active citizens who will contribute to society, and to addressing the most pressing global challenges of our time.

Principle 2, Action 3 - Università Bocconi & Sciences Po

Underlining the importance of exposure to international experience for our students.

Aix-Marseille Université, Freie Universitat Berlin, HEC Paris, Hitotsubashi University, Indian Institute of Technology Bombay, Keio University, McGill University, Paris Sciences et Lettres (PSL), Sapienza University of Rome, Sciences Po, Seoul National University, Technical University of Munich (TUM), The London School of Economics and Political Science (LSE), The University of Tokyo, Università Bocconi, Universidad de Buenos Aires, Université d'Ottawa, Université de Bordeaux, Université de Montréal, Université Grenoble Alpes, Université Mohammed VI Polytechnique (UM6P), Université Paris Saclay, University of British Columbia, University of Cape Town, University of Edinburgh, University of Ibadan, University of Mannheim, University of Toronto

Overview

On the occasion of the first U7+ summit in Paris, July 2019, a dozen universities committed to Principle 2 Action 3 (A3), which emphasized the importance of an exposure to international experience in training the new generation of leaders and actors, given the impact this has on international dialogue and peace, on research and knowledge, and on the efficiency of national, regional and global policies.

Most important outcomes

With the COVID-19 crisis, we want to reiterate that the civic importance of a strong international commitment from universities like ours is more urgent than ever. In a "post-mobility" world that has been shaking universities worldwide, our commitment to guaranteeing an international education and an international academic experience to all of our students remains a top priority. Furthermore, we collectively recognize the purpose and motivation for universities, even while committing to enhancing global citizenship, to consider physical mobility as an important element of a portfolio of value activities and of the international experience of students. We commit to reducing any barriers and will strive to reduce inequality and elitism amongst our student population. International mobility, in all its forms, has to become a "distinctive feature" for all students and a responsibility for all of us.

About next year

Action 2.3 will continue as we have not yet explored the full spectrum of the action.
We ask our teams to join forces in reflecting on all the possible formats to attain this goal as we re-shape international mobility at different levels:

1. Ensuring that we continue to welcome international students in our student body;
2. Ensuring that student mobility (physical and/or digital if needed), remains available and a priority milestone for our students;
3. Ensuring that we use innovative formats to develop more joint international curriculum, combining traditional long experience (i.e., one semester or one year) with shorter ones (i.e., one-week and one-month experience, using study tours, boot-camps, small-network-online-courses, etc…) aimed at diversifying the multiple options available for students, to enrich their CVs;
4. Ensuring that regional mobility will also be fully exploited throughout the macro-regions of the World;
5. Ensuring that student (physical) mobility, while hugely beneficial to students themselves and universities, is but one modality of enhancing global citizenship competencies among students;

6. Ensuring that the interest and the motivation of our students for international mobility and international experience overall will remain high and will increase continuously;
7. Ensuring that we continue to recruit internationally for a diverse faculty body;
8. Ensuring that we reflect on the impact of the crisis on tuition fees and other costs of international higher education;
9. Ensuring that we think and we work about how to reduce barriers (financial, psychological and physical) that enable a much larger number of students to benefit from international mobility in any form;
10. Ensuring that our impactful international strategy is well perceived as a key priority of our universities;
11. Ensuring that purpose and learning objectives should be the starting point of a "global citizenship" perspective, as opposed to mobility for mobility's sake;
12. Ensuring that despite the above points, it is necessary to identify physical mobility as a means worth preserving and, very importantly, improving upon.

About Intergenerational Justice

We commit to reducing any barriers to international mobility and will strive to reduce inequality and elitism amongst our student population. International mobility, in all its forms, has to become a "distinctive feature" for all students and a responsibility for all of us. It is a crucial topic to foster intergenerational justice.

Principle 3

We recognize that our universities have a major role to play in addressing the environmental issues and challenges to sustainability such as climate change, biodiversity and energy transition. This should include leading by example on our own campuses.

Principle 3, Action 1 - University of Toronto, Université Paris Sciences et Lettres and University of Edinburgh

Promoting that all students of our universities will have access to courses related to climate, biodiversity and sustainability.

Aix-Marseille Université, Ecole polytechnique, Freie Universitat Berlin, HEC Paris, Hitotsubashi University, Indian Institute of Technology Bombay, McGill University, Sapienza University of Rome, Sciences Po, Sorbonne Université, LES, Universidad de Buenos Aires, Università degli Studi di Milano, Universität Heidelberg, Université Cheikh Anta Diop (UCAD), Université de Bordeaux, Université de Lyon, Université de Paris, Université Grenoble Alpes, Université Mohammed VI Polytechnique, Université Paris Saclay, UCL, University of British Columbia, University of Cape Town, University of Ibadan, University of Mannheim

Overview

Champion universities of Principle 3 Action 1 developed a framework for reporting on progress on Action 1, consisting of a set of questions about participating universities' existing policies/curricula that contribute to meeting Actions 1: to determine a baseline of current activity regarding sustainability courses for all students against which progress can be measured; to collectively set measurable targets for increased activity over time; to share a set of best practices from universities so that they can learn from one another, and to also share those within the broader U7+ Alliance; to develop a set of recommendations to be adopted by participating universities – and any broader U7+ Alliance members who choose to do so – to contribute to overall increased impact.

Most important outcomes

- Collectively preparing a standard survey of state-of-the-art sustainability teachings and future projects related to sustainability educational programs.
- Due to the nature of Action 1 under Principle 3, while it was initially thought a quantitative baseline for collective action could be set by counting the number of courses offered, determining what sustainability curricular pathways exist at participating universities, practices – and definitions – vary widely across institutions and need further discussion.
- Action 1 also provides an opportunity to connect academic champions at the lead universities, to share best practices; this connection can stimulate important discussions on joint goals, core competencies, and strategies to engage a broader set of students and members of the public.

About next year

Action 3.1 will continue as we have not yet explored the full spectrum of the action.
Survey results have been shared with working group members at the U7+ meeting in August and again at an early October meeting. At the October meeting next steps were discussed and it was agreed a best practice sharing meeting on sustainability course development, course inventories, and curricular pathways was needed, in order to learn from one another and to come to an agreement on terminology so as to set a collective goal. Members of this working group also discussed the possibility of having a sub-committee develop a joint U7+ MOOC in this area – this would have the advantage of engaging a broader community, including members of the public and other universities. Drafting an advocacy paper grounded in the idea of key competencies we want students to develop was also proposed and PSL has volunteered to lead this. Finally, it was felt that a visible U7+ initiative in this area, such as sponsoring a student video competition on sustainability for students at U7+ universities, building on an initiative that Hitotsubashi University has led at their institution, would be a positive way to engage students.

About Intergenerational Justice

Action 3.1 and 3.2 both focus on climate change and sustainability, and hence are at their core about intergenerational justice, given it is our young people and future generations who will be most affected by the significant impacts of changes to our planet brought about by climate change. A1, which focussed on ensuring "all students of our universities will have access to courses related to climate, biodiversity and sustainability" makes explicit the importance of engaging the current generation of students in tackling these challenges.

Principle 3, Action 2 - University of Toronto and University of Edinburgh

Improving energy efficiency and reducing GHG emissions from 2018 levels by 2030, and at a minimum developing and publishing a specific target for this reduction by 2020.

Australian National University, Columbia University, Ecole polytechnique, HEC Paris, McGill University, Paris Sciences et Lettres (PSL), Sciences Po, Seoul National University, LSE, Université Cheikh Anta Diop (UCAD), Université d'Ottawa, Université de Bordeaux, Université de Montréal, Université Mohammed VI Polytechnique, Université Paris Saclay, UCL, University of British Columbia, University of Cambridge, University of Ibadan

Overview

Champion universities of Principle 3 Action 2 developed a framework to inventory how many signatory universities are monitoring and have set targets for reduction of scope 1 (direct emissions from owned or controlled sources), 2 (indirect emissions from the generation of purchased energy) and 3 (all indirect emissions not included in scope 2) GHG emissions that occur in the value chain of the university.

The framework was developed with the goal of relatively easily aggregating data and being able to both inform a narrative for G7 and others about the collective impact universities are having/can have in addressing climate change as well as ensuring collective progress in this area.

Most important outcomes

- Collectively preparing a standard survey of universities' plans to contribute to addressing climate change through reduction of scopes 1, 2, and 3 emissions
- Developing a better understanding of universities who have prioritized climate change action as part of their institutional strategic commitments.
- Facilitate meetings of university leads on GhG emissions to share best practices/policies, and encourage collective action. These meetings have included a discussion on local and global travel policies and carbon offsets as well as a more general discussion on how best to develop carbon offsets for emissions.

About next year

Action 3.1 will continue as we have not yet explored the full spectrum of the action.

Data has been shared with the working group members and it was agreed that the most valuable next step would be to zero in on a few areas where universities are still developing policies/frameworks, in order to learn from one another. This fall, universities identified appropriate environmental champions from their campuses to meet and discuss frameworks for reducing the impact of business travel and local (commuter) travel. Policies and offset plans were discussed and shared after the meeting. Upcoming meetings will discuss procurement & purchasing, and investments framework. A 1-2 page curated list of best practices/recommended approaches will be produced after each discussion, which would help inform an "ideal"institutional policy in each area. These 1-pagers will be shared with the larger U7+ Alliance to encourage broader action on Principle 3, with the goal of being able to track collective progress on the measurable targets over time.

About Intergenerational Justice

P3 A1 and A2 both focus on climate change and sustainability, and hence are at their core about intergenerational justice, given it is our young people and future generations who will be most affected by the significant impacts of changes to our planet brought about by climate change. A2 makes explicit our commitment to change right now as institutions.

Principle 4

We recognize that universities have a distinctive and major responsibility in widening access to education and promoting inclusion and opportunity. We will also foster respectful and evidence-based public debate, in order to combat polarization in our society.

Principle 4, Action 1 - London School of Economics and Political Science

Widening access and success for students by promoting routes to university and accompanying students from marginalized backgrounds.

Aix-Marseille Université, Ashesi University, Ecole polytechnique, HEC Paris, Imperial College London, McGill University, Paris Sciences et Lettres (PSL), Sciences Po, Seoul National University, Université Cheikh Anta Diop (UCAD), Université de Bordeaux, Université de Lyon, Université de Montréal, Université de Strasbourg, Université Grenoble Alpes, Université Paris Saclay, University of Cape Town, University of Edinburgh, University of Ibadan, University of Mannheim, University of Naples Federico II, University of Toronto, Ludwig-Maximilians-Universität München

Overview

We conducted a survey of the 24 participating universities, to identify their approaches and policies toward widening participation/access for students from marginalised or disadvantaged backgrounds, as well as approaches and policies towards enabling these students to be successful at university.

Most important outcomes

- Common objective, but diverse target groups: all the universities who signed up to this action share a common objective: to promote greater access to university for students from disadvantaged backgrounds. But, the universities defined disadvantaged groups in slightly different ways, with most mentioning low socio-economic status, both individually and at the local/regional level, and several universities adding other groups, such as under-represented ethnic groups, students with disabilities, and students in social care.
- Admissions targets or access support? The main difference in approaches centered around whether a university has a set of targets for these groups, and are able to have flexible admissions arrangements to meet these targets (such as taking family or local "contexts" into account), or whether the universities focus on providing direct support to individuals or schools, to enable applicants to meet the required admissions' standards.
- Biggest challenges: The universities listed a number of significant challenges, from resource constraints (particular in the current climate), to the inability to provide adequate support to individuals and skills, to the lack of visibility and awareness of access policies.

About next year

- To systematically collect best practices for access and support, and disseminate to the group.
- To look more systematically at the trade-offs between admissions targets vs. access support, and whether one approach is more successful than the other, or how they can be combined.
- In the spirit of rotating the roles so that other institutions have an opportunity to bring fresh perspectives, and as being among the 2021's Summits hosts - we would like to offer the leadership of the working group to another university.

About Intergenerational Justice

Universities have a unique position as engines of social change. Although we operate in different communities with varying local contexts, our shared goal remains the same globally: to widen access to university and to raise the aspirations and attainments of young people from marginalised backgrounds. By facilitating this diversification of our student body, we provide a transformative effect on intergenerational justice by ensuring that we empower traditionally under-represented groups with the requisite skills, knowledge and confidence to succeed, which in turn can reduce inequality and bridge gaps in society.

Principle 4, Action 2 - University of Ottawa and Université de Bordeaux

Developing students' inclusive leadership and global citizenship competencies.

HEC Paris, McGill University, Osaka University, Sorbonne Université, Università Bocconi, Università degli Studi di Milano, University College of London (UCL), University of British Columbia, University of Cape Town, University of Mannheim, University of Toronto

Overview

Plan of action of the group:

- Adopt a **common definition** of Inclusive leadership and of global citizenship
- Identify, describe and share **existing initiatives, programs or courses** that develop competencies in inclusive leadership and in global citizenship in the table below
- Identify **new ways of developing the expected competencies**
- Identify and share **joint project ideas** (to develop and implement jointly) that we can develop to ensure our commitment to educating students as global citizens who can contribute on the international level to address local and global issues, and to promote inclusive leadership

Most important outcomes

- Global citizenship and Inclusive leadership are two different skill sets (and mindsets) that need to be considered separately. The group decided to prioritize global citizenship competencies. Data collected (separate document) include however some projects in the area of Inclusive leadership;
- Several programs, courses and initiatives at participant universities are identified and described. This constitutes already an interesting corpus to work with.
- Cultural and social aspects may play a role in the definition and acceptation of the concept and skill set of global citizenship. Given the diversity of the participant universities, it would be useful to develop a comprehensive definition.

About next year

Action 4.2 will continue as we have not yet explored the full spectrum of the action.
We will shortly schedule our next meeting for 2021, asking all participating universities to confirm their intention and delegate a representative who could cover the academic and programmatic (content) aspects of global citizenship training. In the next year the group will: finalize the data collection in order to characterize existing good practices; adopt one or more common **framework(s) of global citizenship competencies** to develop; discuss global citizenship competencies **in the light of the current public health crisis** (Covid-19); identify a **joint programme or initiative** in the area of global citizenship development that could be implemented across interested U7+ partner universities; plan **communication** around the output of our working group through a whitepaper and/or conference presentations.

About Intergenerational Justice

We do believe that action 4.2 directly addresses these three commitments: "training and nurturing responsible and active citizens; combatting polarization in society and working toward equality and inclusiveness; promoting interdisciplinary education and research and engaging with stakeholders to solve complex global issues".
U7+ could achieve these commitments by encouraging the development of more internationalized programs and extracurricular activities like the ones our group has identified. A U7+ common joint program on global citizenship could even increase the impacts of such training and raise the reputation of the Alliance by granting a badge of achievement, or other alike certification of global citizenship study achievement.

Principle 4, Action 3 - McGill University

Ensuring that our universities continue to reach beyond the scope of academia, to engage with the wider public in local communities and organisations.

Aix-Marseille Université, Ecole polytechnique, Hitotsubashi University, Keio University, , McGill University, Osaka University, Paris Sciences et Lettres (PSL), Seoul National University, Université Cheikh Anta Diop (UCAD), Université Côte d'Azur, Université d'Ottawa, Université de Bordeaux, Université de Lyon, Université de Montréal, Université Paris Saclay, University of British Columbia, University of Cape Town, University of Edinburgh, University of Ibadan, University of Mannheim, University of Naples Federico II

Overview

The working group for Principle 4, Action 3 has been meeting since January 2020, focusing on community engagement, including the sharing of research results on key societal challenges. During that time, we have compiled a list of some of our universities' key community engagement projects and defined some of the factors that have led to their success. We are working on a report that brings together key learnings, which will be available this summer. In the longer term, we are looking to explore scaling up some initiatives to create new international collaborations among the members of this working group.

Most important outcomes

- Creating a strong working partnership and relationship among the members of our working group, which we hope will lead to future collaborations on new community engagement initiatives.
- Creating a substantial list of successful community engagement initiatives from our different universities, including the success factors and in some cases, the challenges.
- An awareness of some of the common success factors and best practices involved in our initiatives as well as some of the common ways in which we engage with our different communities, even though our local contexts are very different.

About next year

Action 4.3 will merge with Action 2.1 and Action 2.2 which cover similar and overlapping themes, including community engagement, broad partnerships, and reaching beyond the scope of academia. There is an opportunity to elevate these priorities for the Alliance, building upon the collective work and progress so far, strengthening the membership of these groups, and creating synergy between these efforts. We thus propose to form a new action : Committing to the core principle of engagement, we deeply value and highly prioritize local and global engagement beyond the scope of academia, in broad partnerships with a range of organizations and in our community engagement endeavours. Such engagement and partnership ecosystems are essential to training and nurturing responsible and active citizens who will contribute to society, and to addressing the most pressing global challenges of our time.

About Intergenerational Justice

The theme of the Summit is a very good fit with this action. The group centers around engaging with community partners. A strong theme of community engagement is service learning, where students learn the skills to become global citizens and leaders. Many projects work with community partners to build skills and confidence in youth from low-income and underprivileged backgrounds, and work to encourage students from underrepresented communities to attend universities.

Principle 4, Action 4 - HEC Paris

Leveraging our existing capacities in entrepreneurship, social innovation and incubation in order to create economic value and ensure societal impact.

Aix-Marseille Université, Ecole polytechnique, Freie Universitat Berlin, HEC Paris, McGill University, Paris Sciences et Lettres (PSL), Sciences Po, Università degli Studi di Milano, Universität Heidelberg, Université Côte d'Azur, Université de Bordeaux, University of Cambridge, University of Cape Town, University of Mannheim, University of Naples Federico II and Northwestern University.

Overview

First it was decided to gather input from partners (about existing entrepreneurship programs, incubators, identification of any social dimension and existing methodology in the accompaniment of startup projects) through a short questionnaire. Then early April, a conference call gathering 15 partner universities helped to deepen and benchmark practices.

Most important outcomes

- A common trigger for universities to get involved in "social entrepreneurship/impact entrepreneurship":
    - Most partners identified this as "part of their mission/ role in society" often triggered by their own communities (companies, foundations, students, research faculty/ fellows and alumni).
    - Also, the importance of changing mindsets. Fostering a mindset of impact and teaching purposeful leadership is considered as part of universities' missions.
- Across countries and cultures, a similar definition of what social innovation and impact entrepreneurship should be :
    - Social innovation is viewed as an emergent process of new practices enabling social transformation and collective value co-creation to increase actors' wellbeing and ecosystem's viability. All partners put emphasis on the strong link with their own ecosystem.
    - However, institutions seem to tackle social environment issues from different perspectives and sectors and a few of them highlight this distinction: "with impact = profit driven" and "for impact = if they make profit fine, but not an objective per se".
- Uncertainties about universities & social entrepreneurship in post-COVID era:
    - On profiles/ diversity/ attractive sectors : Any difference before / after the crisis ?
    - Necessity to redesign programs for entrepreneurs (incubator, accelerator, hackathon, other initiatives) to develop new skills ?
    - Will funding for social entrepreneurs be easier or more difficult ?

About next year

Action 4.4 will continue as we have not yet explored the full spectrum of the action.
However, as Champion University, we realize that we miss necessary resources to successfully carry on with this initiative. We propose to pass on the championship to other partner universities and are currently in the discussion process about that. In the next year the group will start by conducting one-to-one interviews with each partner to explore possible impacts in the post-covid era.

About Intergenerational Justice

We consider entrepreneurship and social innovation as a way to reduce social inequalities and to foster more inclusiveness and intergenerational justice.

Principle 5

To engage with stakeholders and solve complex issues of global relevance we recognize that universities must promote interdisciplinary research and learning, in particular bridging in our research and teaching between social sciences, humanities, the life sciences and STEM disciplines.

Principle 5, Action 1 - University College London (UCL)

Collectively pursuing and creating interdisciplinary and cross-border research projects that have a societal impact on the areas captured by the UN Sustainable Development Goals.

Aix-Marseille Université, Ashesi University, Ecole polytechnique, HEC Paris, Hitotsubashi University, Imperial College London, Indian Institute of Technology Bombay, INP-HB, Keio University, McGill University, Paris Sciences et Lettres (PSL), Sciences Po, The London School of Economics and Political Science (LSE), The University of Tokyo, Universidad de Buenos Aires, Universität Heidelberg, University College London, Université Côte d'Azur, Université de Bordeaux, Université de Lyon, Université de Montréal, Université de Paris, Université Paris Saclay, University of British Columbia, University of Cape Town, University of Edinburgh, University of Mannheim, University of Naples Federico II, University of Toronto

Overview

UCL had been planning to hold a small 'Global Goals' focused internal conference originally in June 2020. This was initially intended as an internal event to convene UCL's academics with the involvement of students and professional services staff to discuss UCL's current approach to the Sustainable Development Goals (SDGs), and how we could move forward on improving cross-disciplinary and cross-boundary approaches, including with the U7+. Three themes were identified (from J Waage et al, 2015 paper) as plenaries: Wellbeing; Inequality; Energy; Infrastructure and Natural Environment, with the opportunity for U7+ members to join and participate in sessions virtually. Our proposal was that this would be a first step towards holding a larger, more externally facing conference on the SDGs in 2021-22, where we would have hoped to bring together U7+ members virtually and physically via sustainable travel.

In parallel, UCL planned to explore creating a small seed fund with U7+ members to help initiate interdisciplinary and cross-border SDG collaborative research projects.

Planning work for these initiatives was significantly impacted by COVID-19 and we have been unable to progress our proposals to a stage where we could have communicated these to members at this stage. Instead UCL moved the October event online and invited U7+ members to join virtually. We will be exploring with our Working Group, post-Conference how we can build on the fruitful discussions that took place at the online event over the 20-21 academic year. We also recently launched an internal seed funding scheme to support research collaboration and have encouraged UCL academic to initiate SDG focused projects with U7+ members. This will close in late November when we hope to bring together relevant projects with U7+ members to explore any cross-cutting themes and possible next steps.

About next year

Action 5.1 will continue as we have not yet explored the full spectrum of the action.

Since the July U7+ event, UCL has been undertaking a comprehensive, internal institution-wide mapping exercise of all UN SDG-related activity to help inform our approach towards SDG research projects and other initiatives with partners. We would encourage other U7+ partners to undertake the same exercise as a first step if they have not already done so. UCL would be happy to share more about our approach to this mapping to support U7+ members where useful.

We hope the virtual event in October will help inform further planning for the group once the medium-term impact of the pandemic on travel and on our work on the SDGs becomes clearer.

We also hope, in time, to develop further initiatives that could include joint student activities working towards the SDGs within the U7+ Alliance. We would welcome any suggestions from members on working towards Principle 5.1 in the meantime

About Intergenerational Justice

The principle of intergenerational justice is fundamental to the sustainable development goals and to our conception of the grand challenges for research. We will explore with the working group how we can draw out these issues in our work and amplify them through our connection with the U7+.

Principle 5, Action 3 - University of Ottawa

Convening objective-driven fora using various mediums to explore research-driven actionable options to manage the impact of technology on society, the economy, and the labor market.

Ecole polytechnique, HEC Paris, McGill University, Université Cheikh Anta Diop (UCAD), Université d'Ottawa, Université de Montréal, Université Mohammed VI Polytechnique (UM6P)

Overview

University of Ottawa is leading a team tasked with Action 5.3. The article was revised as follows to put more focus on the study of the interplay between technology and culture: Convening objective-driven forums using various mediums to explore how technology is impacting our society (from the arts to the economy and labor force) and how society is contributing to shape technology. A better understanding of the interaction between technology and culture will inform how universities can play a leading role on major social issues among academia, government, employers and the broader public. The results of these forums will be accumulated to create U7+ "agenda for action" to be reviewed by member universities at the end of 2020.
A fundamental premise of article 5.3 is the interdependence between technology and culture, a two-way relationship at work simultaneously. The digital boom in our society is changing practices and behaviours in all areas of life and major challenges are emerging. Therefore, we are creating a network of people, skills, information, knowledge, content, methods, tools and technologies to understand and adapt to the digital age. We believe that a better understanding of the interaction between technology and culture will affect how university institutions can play a leading role on major social issues in our society.

Most important outcomes

- We have completed an action plan defining the deliverables and tasks to be carried out to fulfill the objective of article 5.3. This includes the allocation of responsibility, with University of Ottawa initiating the process and establishing the framework, then expanding to have increased involvement from all partner institutions to carry out interviews and prepare the final report. See the attached page containing a flowchart showing all action plan items and allocation of responsibility.
- We have completed an inventory of University of Ottawa activities in three areas closely aligned with the objective of article 5.3: interdisciplinary studies, Digital Humanities and STEAM (science, technology, engineering, arts, and mathematics)
- We have completed the content analysis of several forums hosted by the University of Ottawa in which invited guests from across Canada and other parts of the world spoke about the interaction between technology and society. Speakers represented a broad spectrum of professionals from academia (17 speakers including 4 students), the private sector (8), the public sector (5), and the nonprofit sector (2).

About next year

Action 5.3 will continue as we have not yet explored the full spectrum of the action.
In the next year the group will: finalize interview guide and identify key players; conduct interviews and report results; prepare final report and recommendations.

Principle 5, Action 4 - University of Montreal

Exercising strong leadership, alongside tech companies and governments, in developing and promoting guidelines about how data sciences and digital innovation should be handled.

Université Aix-Marseille, Indian Institute of Technology Bombay, École polytechnique, HEC Paris, Imperial College London, Osaka University, Université Côte d'Azur, Université de Bordeaux, Université de Lyon, Université Grenoble Alpes, Université Paris Saclay, University College of London

Overview

This working group collaborated to produce a position paper that explores how universities can become more essential players in the digital innovation and artificial intelligence (DI&AI) ecosystem and increase their capacity to support the "responsible" development and use of these technologies. The paper provides an overview of the opportunities and challenges DI&AI presents to universities in their core missions (i.e. research, education, knowledge transfer and civic leadership), as well as in how they accomplish their work (i.e. administrative tasks). It also analyzes how universities might bolster their leadership role in the responsible use of technology in society: 16 specific recommendations are made.

Most important outcomes

- The production of a position paper that explores some of the most pressing opportunities and issues in DI&AI for the academic world. This hopes to stimulate international dialogue, given that universities will need to be creative and energetic in facing the coming digital wave (U7+ Report Innovative University by UMontreal).
- The sharing of best academic practices on DI&AI.
- The proposition of a next working phase with the universities involved in this working group, and others that would like to join, toward the creation of the U7+ DI&AI Lab that will work on a regular basis to explore these issues and share best practices.

About next year - the U7+ DI&AI Lab

Action 5.4 will continue and will evolve into the U7+ DI&AI Lab.

The U7+ DI&AI Lab is a new entity that the U7+ universities which took part in the Working Group 5.4 in 2019/2020 - led by the Université de Montréal - propose to create. It is designed to promote cooperation between universities, public agencies, firms and civil society organizations, in order to develop collective responses to the issues and opportunities raised by DI&AI. It is based on the importance of networks as a means to assemble the conditions of collaborative governance across autonomous yet interdependent organizations and groups.

The U7+ DI&AI Lab goals are to promote dialogue and research on responsible DI&AI; develop, share and promote best practices and tools that contribute to embedding responsible innovation principles and mechanisms; develop innovative solutions through collaborative, transdisciplinary and international research on responsible DI&AI; and speak as a single voice on core DI&AI issues.

The lab focuses on three key projects (aligned with the three missions of the U7+ Alliance): Conduct a study on how digital technologies will impact the business models, strategies and processes of universities; Produce a practical guide on steps universities could take to become responsible and

efficient users of digital technologies and better accomplish their missions and Create knowledge exchange forums and online courses on the topic of DI&AI for different university players.

Though it remains to be completed, a strong basis for its operations has been defined : universities would adhere to the Network on a voluntary basis, with participation fees staggered according to the resources of a university's country of origin. A steering committee comprising representatives from four universities along with four non-academic members would be created to develop the Network's plan and program of activities, as well as the framework used to evaluate network performance.

From the U7+ Alliance standpoint, the U7+ DI&AI Lab initiative will serve as a base ground for catalysing our impact - by becoming the epitome of how a smaller group of universities can go deeper in embodying the key missions of the U7+ Alliance.

Academic Freedom - Georgetown University

Georgetown University, University of Tokyo, Free University of Berlin, Sciences Po, Northwestern University, London School of Economics and University of Montreal

Overview

Over the course of the 2020-21 academic year the U7+ Academic Freedom Working Group proposes to convene a global consultation among member universities about threats to academic freedom around the world and how to address them. The consultation will culminate in a report and recommendations to be taken up by the U7+ presidents at their 2021 summit.

Academic freedom is in crisis around the world. The resurgence of autocracy has stripped many universities of the autonomy necessary to fulfill their core mission -- the creation of knowledge and education of future generations. At the same time, the crisis of democracy, evident in rising political extremism and polarization, has threatened the freedom of some university faculty to address controversial topics in their research and teaching.
Given its foundational commitment to academic freedom and its global reach, the U7+ is well positioned to convene a year-long conversation among its members on the global crisis of academic freedom and how to confront it.

About next year: point of departure

Academic freedom has two interrelated components -- institutional and individual. At the institutional level, universities must have the capacity to organize the pursuit and transmission of knowledge free of political interference. Universities vary in their dependence on governments for institutional support and financial resources. But even universities tied to the state must be assured ample freedom to execute their academic mission free of partisan political pressure.

At the individual level, university faculty must be free to express themselves in the classroom and in publications. This freedom of research and teaching is not absolute. Faculty are expected to adhere to professional standards in their work. And even in democracies their freedom of expression has justified limits, as in the case of prohibitions on anti-Semitic and racist speech.

The basic ambiguity in both components of academic freedom -- both must be protected, yet neither is absolute -- can serve as a starting point for a global conversation about challenges to the freedom of universities and academics and how best address them in practice.

The group has already identified lead questions for U7+ Consultation: Have your institutions faced academic freedom controversies on your home campuses and/or in your international partnerships? What lessons have you learned? How can academic freedom be maximized within political, cultural, and other constraints? What principles and practices might serve as models across national contexts? What recommendations might the U7+ develop for the higher education sector and for the G7?

Dukgeun Ahn, Dean of International Affairs, Seoul National University, South Korea

Armand Paul Alivisatos, Executive Vice Chancellor, Provost, University of California Berkeley, United States

Louis Arseneault, Vice-Principal, Communications and External Relations, McGill University, Canada

Patrick Gyimah Awuah Jr, Founder and President, Ashesi University, Ghana

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Thomas Banchoff, Vice President for Global Engagement, Georgetown University, United States

Emilienne Baneth-Nouailhetas, Vice-President for International Relations, Université PSL, France

Verena Blechinger-Talcott, Professor, Freie Universität Berlin, Germany

Kadiatou Bouadou Kouadio, Director of Human Resources, Institut National Félix Houphouët-Boigny, Côte d'Ivoire

Jeanick Brisswalter, Full Professor, Université Côte d´Azur France

Gwen Burrows, Executive Director, International, University of Toronto, Canada

Gabriel Capitelli, Vice Rector, University of Buenos Aires, Argentina

Stefano Caselli, Vice Rector for International Affairs, Bocconi University, Italy

Murali Chandrashekaran, Vice Provost, International, University of British Columbia, Canada

Subhasis Chaudhuri, Director, Indian Institute of Technology Bombay, India

Giovanna Chimini, Vice Rector of International Affairs, Aix Marseille University, France

François Collin, Director for Climate Initiatives and Environmental Sustainability, HEC Paris, France

Jonathan Dampney, Deputy Director, International Strategy & Partnerships, Australian National University, Australia

Stéphanie Debette, Vice-President for External Relations, University of Bordeaux, France

John DeGioia, President, Georgetown University, United States

Michel Deneken, President, University of Strasbourg, France

Hicham El Habti, President, Mohammed VI Polytechnic University, Morocco

Adel El Zaim, Chief Internationalization Officer, University of Ottawa, Canada

Eilís Ferran, Pro-Vice-Chancellor for Institutional and International Relations, University of Cambridge, United Kingdom

Suzanne Fortier, Principal and Vice-Chancellor, McGill University, Canada

Elio Franzinni, Rector, Università degli Studi di Milano, Italy

Jacques Frémont, President and Vice-Vice Chancellor, University of Ottawa, Canada

Alain Fuchs, President, Université PSL (Paris Sciences & Lettres), France

Alice P. Gast, President, Imperial College London, United Kingdom

Hazel Genn, Vice-Provost International & Advancement, University College London, United Kingdom

Meric Gertler, President, University of Toronto, Canada

Herbert Grieshop, Director, Division of International Affairs, Freie Universität Berlin, Germany

Dévora Grynspan, Vice President for International Relations, Northwestern University, United States

Akira Haseyama, President, Keio University, Japan

Simon Hix, Pro-Director for Research, London School of Economics and Political Science, United Kingdom

Susan D. Hyde, Professor, University of California Berkeley, United States

Mayumi Ishikawa, Director, Planning Unit, Center for Global Initiatives, Osaka University, Japan

Daniel Jutras, Recteur, Université de Montréal, Canada

Genta Kawahara, Executive Vice President of Global Engagement, Osaka University, Japan

Eric Labaye, President, École Polytechnique, France

Sandrine Lacombe, Vice President, International Relations, Paris-Saclay University, France

Javier Laguna, Director, Autónoma de México en Chicago, United States

Yassine Lakhnech, President, Université Grenoble Alpes, France

Gaëlle Le Goff, Director for International Affairs, École Polytechnique, France

Matteo Lorito, Rector, University of Naples Federico II, Italy

Jean-Francois Marchi, Vice-President Delegate For Mobility and Partnerships, Aix Marseille University, France

Stéphane Martinot, Interim President, Université de Lyon, France

Peter Mathieson, Principal and Vice-Chancellor, University of Edinburgh, United Kingdom

Frédéric Mion, President, Sciences Po, France

Mario Monti, President, Bocconi University, Italy

Ciaran Moynihan, Head of Global Partnerships, University College London, United Kingdom

Satoshi Nakano, President, Hitotsubashi University, Japan

Carolyn Newton, Director, Global Engagement, University of Cape Town, South Africa

Koffi N'Guessan, Director General, Institut national polytechnique Félix Houphouët-Boigny, Côte d'Ivoire

Shinnosuke Obi, Vice-President for International Collaboration, Keio University, Japan

Se-Jung Oh, President, Seoul National University, South Korea

Santa J. Ono, President and Vice-Chancellor, University of British Columbia, Canada

Angela Owusu-Ansah, Provost, Ashesi University, Ghana

Swati Patankar, Dean for International Relations, Indian Institute of Technology Bombay, India

Justin Pearlman, Vice Provost for Communications and Engagement, Columbia University, United States

Elisabeth Pécou, Professor, Université Côte d'Azur, France

Mamokgethi Phakeng, Vice-Chancellor, University of Cape Town, South Africa

Thomas Puhl, President, University of Mannheim, Germany

Catherine Régis, Associate Vice-President, Université de Montréal, Canada

Sylvie Retailleau, President, Université Paris-Saclay, France

Annelise Riles, Executive Director, Northwestern Roberta Buffett Institute for Global Affairs, Associate Provost for Global Affairs, Northwestern University, United States

Gerald Rosberg, Senior Vice President, Columbia University, United States

Daniel J. Sargent, Associate Professor, University of California Berkeley, United States

Luciano Saso, Deputy Rector for European University Networks, Sapienza University of Rome, Italy

Marcelo Scaglione, U7+ Special Unit leader, University of Buenos Aires, Argentina

Morton Schapiro, President, Northwestern University, United States

Vanessa Scherrer, Vice President for International Affairs, Sciences Po, France

Ursula Schlichter, Officer International Research Affairs, University of Mannheim, Germany

Minouche Shafik, Director, The London School of Economics and Political Science, United Kingdom

Victor Shim, Associate Vice President for Global Relations, National University of Singapore, Singapore

Sawako Shirahase, Executive Vice President, International Affairs, University of Tokyo, Japan

Dirk Simons, Vice President for Strategic Planning, Scientific Infrastructure and Internationalization, University of Mannheim, Germany

James Smith, Vice-Principal International, University of Edinburgh, United Kingdom

Jon Sudholt, Strategic Partnerships Coordinator, University of Cambridge, United Kingdom

Hideko Sumita, Director, Global Engagement Office, Keio University, Japan

Tan Eng Chye, President, National University of Singapore, Singapore

Irini Tsamadou-Jacoberger, Vice President for International Affairs, University of Strasbourg, France

Manuel Tunon de Lara, President, University of Bordeaux, France

Sally Wheeler, Pro Vice-Chancellor for International Strategy, Australian National University, Australia

Atsushi Yamada, Vice President for International Affairs, Hitotsubashi University, Japan

Sanni Yaya, Vice-President, International and Francophonie, University of Ottawa, Canada

Kazuya Yuasa, Chief, Osaka University, Japan

Günter M. Ziegler, President, Freie Universität Berlin, Germany

Participant Bios (updated November 20)

Dukgeun Ahn, Dean of International Affairs, Seoul National University, South Korea

Dukgeun AHN is Professor of International Trade Law and Policy/Director of Center for International Commerce and Strategy in Graduate School of International Studies (GSIS), Seoul National University (SNU). He is currently serving as Dean of International Affairs for SNU.

Professor Ahn has taught at various universities including Columbia University, Singapore National University, University of Hong Kong, University of Barcelona in Spain, World Trade Institute in Switzerland and the KDI School of Public Policy and Management in Korea as well as regularly at the Regional Trade Policy Course arranged by the World Trade Organization (WTO) for government officials. In addition, he has advised several developing country governments, international organizations as well as various Korean ministries on trade law and policy issues such as WTO disputes, trade negotiation and trade policy making. He is contributing to many academic journals, as editorial board member for Journal of International Economic Law (Oxford Univ. Press), Journal of World Trade (Kluwer Law International), and as Editor-in-chief for Korean Journal of International Economic Law (Korean Society of International Economic Law).

Professor Ahn served, among others, as Commissioner of the Korea Trade Commission, Chair for CPTPP Forum, Chair for TBT Policy Forum, and a Member of National Economic Advisory Council, the constitutional body chaired by the President of Korea. He is also listed as a panelist candidate for the WTO dispute settlement as well as the Korea-U.S. FTA and Korea-EU FTA. His academic publication covers a wide range of WTO and Free Trade Agreement topics, which renders him Simdang Academic Excellence Award in 2012. He also received the Medal of Industrial Honors (2019) and the awards by the Deputy Prime Minister (Minister of Strategy and Finance, 2017), Minister of the Interior (2015), Prime Minister (2005), and Minister of Commerce, Industry and Energy (2004). In 2017, his academic and educational contribution was recognized by the Seoul National University Education Award.

Professor Ahn holds both Ph. D. in Economics and J.D. (Member of New York Bar) from the University of Michigan, after having B.A. from Seoul National University.

Armand Paul Alivisatos, Executive Vice Chancellor, Provost, University of California Berkeley, United States

Dr. Armand Paul Alivisatos is the University of California Berkeley's Executive Vice Chancellor and Provost and Samsung Distinguished Professor of Nanoscience and Nanotechnology. He is also the Director Emeritus of Lawrence Berkeley National Laboratory, founding director of the Kavli Energy Nanoscience Institute (ENSI), and a founder of two prominent nanotechnology companies, Nanosys, Inc., and Quantum Dot Corp, now a part of Thermo Fisher Scientific.

Groundbreaking contributions to the fundamental physical chemistry of nanocrystals are the hallmarks of Dr. Alivisatos' scientific career. His research accomplishments include studies of the scaling laws governing the optical, electrical, structural, and thermodynamic properties of nanocrystals. He developed methods to synthesize size- and shape-controlled nanocrystals, and for preparing branched, hollow, nested, and segmented nanocrystals. In his research, he has demonstrated key applications of nanocrystals in biological imaging, renewable energy, and electronic displays, including the widely used quantum dot television technology. He played a critical role in the establishment of the Molecular Foundry, a U.S. Department of Energy Nanoscale Science Research Center; and was the facility's founding director. He was an early and prominent advocate for both the US National Nanotechnology Initiative and the US National BRAIN (Brain Research through Advancing Innovative Neurotechnologies) Initiative. He is the founding editor of Nano Letters, a leading scientific publication of the American Chemical Society in nanoscience.

Dr. Alivisatos has previously been recognized for his accomplishments with awards such as the Dan David Prize, the US National Medal of Science, the Wolf Prize in Chemistry, the Wilhelm Exner Medal, the Priestley Medal, the Welch Award, the Spiers Memorial Award, Axion Award, the Von Hippel Award, the Linus Pauling Medal, Computation and Engineering’s Nanoscience Prize, the Ernest Orlando Lawrence Award, the Rank Prize for Optoelectronics, the Eni Award for Energy and Environment, Colloid and Surface Chemistry Award, Coblentz Award for Molecular Spectroscopy and the Thomas Wilson Memorial Prize.

He is a member of the US National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, and the US National Academy of Inventors.

Dr. Alivisatos received a Bachelor's degree in Chemistry in 1981 from the University of Chicago and Ph.D. in Chemistry from UC Berkeley in 1986. He began his career with UC Berkeley in 1988 and with Berkeley Lab in 1991.

Louis Arseneault, Vice-Principal, Communications and External Relations, McGill University, Canada

Louis Arseneault is Vice-Principal (Communications and External Relations) at McGill University since February 1, 2017. His areas of expertise include strategic communications and marketing, public affairs, economic development, talent attraction, government and media relations, as well as issues management. Mr. Arseneault came to McGill after 11 years with Montréal International, an economic development agency serving the Greater Montreal area, where he worked as Vice-President (Talent Attraction, Promotion and Communications), successfully developing and implementing an international talent attraction strategy and service offering. Prior to joining Montréal International, he worked as Senior Director of corporate communications at Bell Canada, a leading national telecommunications company.

A native of Québec, Mr. Arseneault holds a Bachelor's degree in Communications from the Université du Québec à Montréal and a Master's degree in Sociology (Information and Communications) from the Université Paris VII in France. He serves as an officer of the board of Opéra de Montréal. Mr. Arseneault is a member of the World 100 University Reputation Network and of the Canadian Public Relations Society.

As Vice-Principal (Communications and External Relations), Mr. Arseneault is a member of McGill's senior management team and is responsible for government relations, community engagement and the University's overall communications, public affairs, external relations and marketing portfolio.

Patrick Gyimah Awuah Jr, Founder and President, Ashesi University, Ghana

Patrick Gyimah Awuah Jr is the Founder and President of Ashesi University, a private, not-for-profit institution that in Ghana. Patrick was educated at Swarthmore on a near-full scholarship in 1985. In 2001, Patrick who was a Program Manager at Microsoft returned to Ghana to found Ashesi University. He holds Bachelor degrees in Engineering and Economics from Swarthmore College; an MBA from UC Berkeley's Haas School of Business; and honorary doctorates from Swarthmore College, and Babson College. Patrick has won many awards including the Order of the Volta by His Excellency, President J.A. Kufuor, the Elise and Walter A. Haas International Award, an Elon Medal for Entrepreneurial Leadership, the McNulty Prize and the MacArthur Fellowship and named one the 50 greatest leaders in the world by Fortune Magazine. Patrick was recognized by Africa Leadership Initiative — West Africa (ALIWA) as a "Genius Fellow" an honour reserved for only 20 people around the world. The Qatar Foundation named Patrick the 2017 WISE Prize for Education Laureate. The United Nations Educational, Scientific and Cultural Organization (UNESCO) named Patrick to a new 16-member International Commission as part of UNESCO's Futures

of Education initiative. He is a Fellow of the Africa Leadership Initiative; a member of the Council on Foreign Relations; and a member of the Tau Beta Pi honor society for excellence in engineering.

Antonella Baldi, Vice-Rector for International Affairs, University of Milan, Italy

Since 2018, she is Vice-Rector for international Affairs at the University of Milan. In this capacity, she is also Delegate of the Rector for LERU – League of European Research Universities activities and, since 2019, member of the Management Committee of the 4EU+ European University Alliance. With regard to her background, since 2000, she is Full Professor in Animal Nutrition at the Department of Health, Animal Science and Food Safety where she was also chair (2011-2017) of the Biotechnology in Veterinary Science MA Program. Her main research interests relate to the role of animal nutrition and welfare in the production of high quality and healthy food of animal origin, and the role of nutrition in animal health with special emphasis on micronutrients and antioxidants. In these fields, she is author of about 200 publications, has been Council member of EAAP (European Federation of Animal Science) and Vice-Chair of the Board of the Italian Animal Science and Production Association (ASPA). She was also the Italian Delegate for the Cooperation in the Science and Technology (COST) European Program (2006-2014) in the Domain of Food and Agriculture and coordinator of a COST Action on "Mammary gland development, function and Cancer". She has been supervisor of several national and international PhD programs. In particular, since 2017, she is supervisor in the European Joint Doctorate (MANNA) in the International Training Network Framework. She also served as evaluator in the framework of the 6th and 7th EU Framework Programs and of Horizon 2020. From 2009 to 2015, she acted as expert in the evaluation of European Research Council's LS-9 Panel (ERC Starting and consolidator Grant).

Thomas Banchoff, Vice President for Global Engagement, Georgetown University, United States

Thomas Banchoff is vice president for global engagement at Georgetown University and professor in the Department of Government and Walsh School of Foreign Service. He serves as a senior fellow in the Berkley Center for Religion, Peace, and World Affairs, which he led as founding director from 2006 to 2017.

Banchoff's scholarship centers on ethical and religious issues in world politics. His most recent books are *The Jesuits and Globalization: Historical Legacies and Contemporary Challenges* (Georgetown University Press, 2016), co-edited with José Casanova, and *Embryo Politics: Ethics and Policy in Atlantic Democracies* (Cornell University Press, 2011). He is also the author of several edited volumes, including *Religion and the Global Politics of Human Rights*, co-edited with Robert Wuthnow (Oxford University Press, 2011); *Religious Pluralism, Globalization, and World Politics* (Oxford University Press, 2008); and *Democracy and the New Religious Pluralism* (Oxford University Press, 2007). Two of Banchoff's previous books explored the intersection of history,

institutions, and values in European politics: *The German Problem Transformed: Institutions, Politics, and Foreign Policy, 1945-1995* (University of Michigan Press, 1999) and *Legitimacy and the European Union: The Contested Polity*, co-edited with Mitchell Smith (Routledge, 1999).

Banchoff received his B.A. from Yale University in 1986, an M.A. from the University of Bonn in 1988, and a Ph.D. in politics from Princeton in 1993. He held a James Bryant Conant Post-Doctoral Fellowship at Harvard's Center for European Studies from 1997 to 1998 and was a Humboldt Fellow at the University of Bonn from 2000 to 2001. Banchoff was awarded the DAAD Prize for Distinguished Scholarship in German studies in 2003.

Emilienne Baneth-Nouailhetas, Vice-President for International Relations, Université PSL, France

Professor Baneth-Nouailhetas, a former student of the Ecole Normale Supérieure of Fontenay-Saint-Cloud, holds a PhD in Literature from Université Paris III. She is a Professor at Université Rennes 2 and was the Director of International Relations at the Institut national des sciences appliquées Centre Val de Loire. Formerly, she was Vice-President for International Relations at Université Rennes 2, deputy scientific Director at the CNRS's Department of Humanities and Social Sciences, director of an international research center between the CNRS and New York University; she has held the position of Attaché for cooperation in two embassies. Her research focuses on colonial and post-colonial anglophone literature.

Mrs Baneth-Nouailhetas succeeds Mrs Minh-Hà Pham, who has joined the French Embassy in London as an adviser for science and technology.

Kadiatou Bouadou Kouadio, Director of Human Resources, Institut National Félix Houphouët-Boigny, Côte d'Ivoire

As Director of Human Resources at the Institut National Félix Houphouët-Boigny (INP-HB) of Yamoussoukro since October 2012, Kadiatou Bouadou Kouadio is responsible for the usual tasks of human resources management. These tasks lie in steering and monitoring the Institute's HR strategy. In addition, it provides a link between staff and the Branch to whom it acts as an HR advisor.

One of her successes in this position has been to secure payroll and compensation for staff by making their processes consistent with national standards. The participatory management that has been established gives employees a freedom of action source of surpassing themselves and efficiency in initiatives.

Working in an institute that trains in technical and technological occupations, that are valued by men and often neglected by women, Kadiatou takes pleasure in making young girls aware of scientific careers.

She therefore places gender issues at the heart of her priorities in order to offer girls and boys the same opportunities.

Kadiatou Bouadou is also a lecture of modern literature at the Ecole Normale Supérieure in Abidjan. Her passions outside of work are gardening and agriculture. In this sector, she attaches a price to respect for the environment by using neither pesticides nor chemical fertilizers.

Jeanick Brisswalter, Full Professor, Université Côte d´Azur France

Jeanick Brisswalter has been full professor at the University of Nice Sophia Antipolis since 2010. After a doctorate in applied physiology at the University Paris V (Université Paris) , he began his career as a researcher in the Physiology and Biomechanics Laboratory of the National Institute of Sport, Expertise and Performance (INSEP) where he spent 11 years. Then, he became a lecturer at the University of Poitiers then a university professor. He joined the University of Toulon in 1999, where he was head of the Sports Ergonomics Laboratory, before joining the University of Nice Sophia Antipolis, where he created and directed the Human Movement, Expertise, Sports and Health laboratory (LAMHESS). His research interests are in the substrates regulation during exercise in relationship with brain function in application with high sport performance or aging. He has published numerous international papers in the fields of exercise physiology, neuroscience and psychophysiology. He is an expert on several national and international evaluation bodies and committees in the fields of life and health sciences, public health and sports sciences. He was Dean of the Faculty of Sports Sciences from 2014 to 2016, when he took on the responsibility of Vice President of the Research Commission of the University of Nice Sophia Antipolis and Vice President of Research of the CoMue Université Côte d´Azur. After the fusion of the CoMue and the University of Nice Sophia Antipolis into one institution, he was elected President of Université Côte d'Azur in January 2020.

Gwen Burrows, Executive Director, International, University of Toronto, Canada

Gwen Burrows is Executive Director, International at the University of Toronto (U of T). As part of the executive team of the Office of the Vice President International, she is responsible for strategy development and for leading the implementation of U of T's International Strategic Plan, working in close collaboration with partners across the University. Her portfolio includes deepening international engagement and partnerships, as well as a focus on internationalizing U of T through student engagement.

A senior leader in the research and health sectors, Gwen served in various leadership roles at The Hospital for Sick Children (SickKids) before joining U of T in August 2017. From 2013-17, Gwen was the

Executive Director, Communications, Public Affairs and Advocacy at SickKids, where she led executive communications, issues management, communications strategy development, and media relations. From 2006 to 2013, Gwen was Director of Strategic Projects at the

SickKids Research Institute, leading the Research Institute's strategic plan; co-developing the successful funding proposal for a new Research and Education building and its subsequent implementation; leading the development of multi-disciplinary Centres at SickKids; and developing the Research Institute's international engagement strategy.

Gwen began her career at SickKids in the Foundation's National Grants Program – a Canada-wide funding program for child health research — in 1997. There she held the role of Director, National Grants Program for 5 years, where she led a peer-reviewed granting program which supported child health researchers across the country.

Gwen has been an active volunteer in the charitable sector, including as President for the Couchiching Institute on Public Affairs from 2009-2011. Gwen holds a Master's in Philosophy from Johns Hopkins and a BA from McGill University.

Gabriel Capitelli, Vice Rector for International Affairs, University of Buenos Aires, Argentina

Doctor (UBA) Veterinary Science. Psychologist, diplómate in Social and Political Anthropology.
Professor Head in Biology, faculty of Medical Sciences-CBC in University of Buenos Aires
Former Director of both postgraduate carrers in Animal Production and Welfare.
Areas of research: Human and Vet Vaccines, animal behavior and welfare of reservoirs of zoonoses.
Former director of CEBASEV (OIE) education centers for Veterinary Service for World Animal Health Organization.
Coordinator of vaccine research UBATeC (UBA TTU), and UBA Covid 19 Vaccine Project.
Visiting professor in University of Messina (Italy). Honorary professor in University of Alcala de Henares (Spain).

Stefano Caselli, Vice Rector for International Affairs, Bocconi University, Italy

Stefano Caselli is Vice Rector for International Affairs at Bocconi University since 2012, where is a Full Professor of Banking and Finance at Department of Finance and Algebris Chair in "Long-Term Investment and Absolute return". He is member of the management board of SDA Bocconi School of Management.

He covers several roles within the most relevant academic networks: he is member of the Steering Committee of CIVICA, the University of Social Sciences; he is member of the management board of CEMS, the Global Alliance in Management Education; he is Chair for the EMEA Region of PIM, Partnership in International Management; he is Executive Secretary of the External Advisory Board of the School of Transnational Governance at EUI, the European University Institute in Firenze.

His research activities focus on the relationship between banking and industrial system. He is the author of numerous books and articles on the subject, published in Journal of Financial Intermediation, Journal of Banking and Finance, Journal of Financial Services Research, Journal of Applied Corporate Finance. He acts as columnist on "L'Economia del Corriere della Sera". His course on Private Equity and Venture Capital reached 100,000 participants and it is available on Coursera https://www.coursera.org/learn/private-equity.

He has a long experience as independent director in several boards (among them: at present Generali Real Estate, Credito Valtellinese as Vice-Chairman, Fondazione Cassa di Risparmio di Padova e Rovigo, Istituto Diocesano di Sostentamento del Clero della Diocesi di Milano; in the past Santander Consumer Bank, SIAS S.p.A., Manutencoop S.p.A. and MP Venture SGR. He is research fellow of BAFFI-CAREFIN, whereas is charge of the Unit Investment Banking and he supervises the project on Capital Markets with Equita Group.

Murali Chandrashekaran, Vice Provost, International, University of British Columbia, Canada

Murali Chandrashekaran is the Vice Provost (International), at the University of British Columbia (UBC), Canada, and the Fred H. Siller Professor of Marketing and Behavioural Science at UBC's Sauder School of Business. As Vice-Provost, International, Dr. Chandrashekaran provides leadership in shepherding the University's diverse and complex international activities on both campuses, and in advancing UBC's international strategic priorities.

Dr. Chandrashekaran obtained his B.Tech in Electrical Engineering from the Indian Institute of Technology–Madras, and his Ph.D. in Marketing from Arizona State University.

Prior to coming to UBC in 2011, Dr. Chandrashekaran held professorial and administrative positions in the business schools at the University of Cincinnati and the University of New South Wales.

He is widely published in leading academic business journals in the areas of metrics and valuation. His current research is in the area of resilience valuation and asset management – specifying measures, monitoring systems, and estimation models to derive metrics that capture the short-term and long-term impact of assets and investments on resilience of neighborhoods, cities and regions. Murali lives in Vancouver with his wife and three daughters, and has taken up competitive curling as a new hobby.

Subhasis Chaudhuri, Director, Indian Institute of Technology Bombay, India

Prof. Subhasis Chaudhuri is currently the Director of IIT Bombay, prior to which he has been the K.N. Bajaj Chair Professor in the Department of Electrical Engineering. He did his B.Tech. in Electronics & Communication Engineering from IIT Kharagpur in 1985, M.Sc. in Electrical Engineering from University of Calgary in 1987 and Ph.D. in Electrical Engineering in 1990 from University of California, San Diego. He joined IIT Bombay as an Assistant Professor in the Department of Electrical Engineering in November 1990 and has been here since then. He has held a number of important administrative positions at IIT Bombay, such as Gymkhana Chairman (Cultural), Convener of UGAPEC, Professor Incharge of IIT Bombay-Monash Research Academy, Head of the Department of Electrical Engineering, Dean (International Relations) and Deputy Director (Academic & Infrastructure Affairs). He has received major awards recognizing his research excellence, which include the Shanti Swarup Bhatnagar Prize (CSIR), Swarnajayanti Fellowship (DST), J.C. Bose Fellowship (DST), Dr. Vikram Sarabhai Research Award, NASI-Reliance Award, the G.D. Birla Research Award and "TUM Ambassador" Award among several others. He is a Fellow of Indian National Science Academy (INSA), Indian Academy of Sciences (IASc), Indian National Academy of Engineering (INAE), National Academy of Science India (NASI) and IEEE, USA, and has also served on the Council of INSA. He has been recognized as a Distinguished Alumnus of IIT Kharagpur. Prof. Chaudhuri is a member of the Expert Committee of Institution of Eminence, Govt. of India., member of the Institute Body of AIIMS, Nagpur and member of the Governing Board of Indo-US Science & Technology Forum (IUSSTF). His research area includes computer vision, machine learning and computational haptics. He has over one hundred journal publications and over two hundred conference presentations. He has authored 7 monographs published by Springer NY, and filed 13 National/International Patents. He has served in the editorial board of several International journals like IEEE Trans. PAMI, International Journal of Computer Vision, and SIAM Journal of Imaging Science. He has guided over 25 Ph.D. Students and 100 M.Tech. students.

Giovanna Chimini, Vice Rector of International Affairs, Aix Marseille University, France

Of Italian origins, Giovanna Chimini graduated in Medicine in 1981, and embraced scientific research in Academia in France, where she entered the National Center for Research (CNRS) as tenure scientist at Center of Immunology of Marseille Luminy (CIML) in 1989. Always interested in cell biology and membrane dynamics applied to Immunological questions she pioneered the discovery and functional characterization of the family of ATP Binding Cassette transporters in mammals. At CIML she led a research team for almost 20 years and dedicated her studies to ABCA1, the membrane transporters in charge of controlling cholesterol efflux from peripheral cells and thus exerting a crucial role in the development of several conditions at the crossroads of metabolism and immunology, e.g. atherosclerosis. She drew attention in the late 90's to the complex interaction between circuits controlling cholesterol metabolism and macrophage functions and published along her career more than 100 original papers on the subject.

The interest to broaden her scientific horizon led Giovanna to the directorship of an internationally renowned and interdisciplinary CNRS center for the dissemination of sciences among expert peers; she held this position from 2008 to 2018.

These experiences and the comprehensive scientific vision contributed to the fulfilling of her position as Vice Dean for Research and International Relations at the Faculty of Sciences at Aix Marseille University from 2016 to 2020. Here she exerted her services to improve the attractiveness of sciences and in particular of research for the students.

In January 2020, she has been appointed Vice Rector for international Affairs at Aix Marseille University. She is hence a major actor in the deployment of the university's international policy and outreach practice.

François Collin, Director for Climate Initiatives and Environmental Sustainability, HEC Paris, France

François Collin is the Director for Climate Initiatives and Environmental Sustainability at HEC Paris. He acts as Senior Advisor to the Dean for the School's ecological and responsible transition. His mission spans across academic affairs, program curriculum, campus transformation, partnerships and outreach initiatives.

In his previous role, he has been the Associate Dean for International Affairs at HEC Paris from 2012 to 2020. His role involved managing strategic alliances and partnerships for the School across the programme portfolio, overlooking global initiatives outside of France and developing strategies for HEC's international development.

He has been the Executive Director of CEMS Global Alliance in Management Education from 2004 to 2012, at the CEMS Head Office in Paris. The alliance, co-founded by HEC in 1988, brings together 30 premier academic institutions from 4 continents and more than 70 international corporate partners.

From 1995 to 2004, François Collin was the Director of International Executive Programmes at HEC Paris. He designed custom executive development programmes for large corporate universities and a number of open programmes in partnership with international business schools. He is one of the founders of the TRIUM Executive MBA, a joint degree of HEC, LSE and NYU Stern, that became a leader on its segment.

François graduated from HEC Paris in 1987. He started his career at the French embassy in Austria for university relations, and continued with corporate positions in international development and consulting.

Jonathan Dampney, Deputy Director, International Strategy & Partnerships, Australian National University, Australia

Jonathan was appointed Deputy Director, International Strategy & Partnerships at the Australian National University in July 2019, following 18 months as Acting Director. Jonathan was previously appointed Manager, Strategic Partnerships in July 2016. Jonathan provides strategic advice and briefings on international engagement to the university executive. He also manages key university partnerships, including membership of the International Alliance of Research Universities (IARU) and Association of Pacific Rim Universities (APRU). This appointment follows seven years working in the ANU Joint Colleges of Science as Executive Officer (International Development) and Manager of Student Recruitment. Jonathan holds a Bachelor of Advanced Science (Honours) from the University of Sydney and a Graduate Diploma in Science Communication from the ANU. He has 10 years' experience in science communication and has worked in the higher education sector for ten years.

Stéphanie Debette, Vice-President for External Relations, University of Bordeaux, France

Stéphanie Debette, MD PhD, is Vice-President for External Relations at the University of Bordeaux (UB) since 2018. She is also a Professor of Epidemiology at UB-INSERM Bordeaux Population Health research center, where she directs a team on the genetic epidemiology of vascular and neurological diseases, and a practicing Neurologist at the University Hospital of Bordeaux. Prof. Debette has been leading large collaborative genomic and epidemiological studies on stroke, dementia and imaging markers of brain aging (> 200 peer-reviewed articles), aiming to decipher the biological mechanisms underlying brain aging and to improve prevention and treatment of stroke and dementia. Prof. Debette leads a European Research Council grant and is principal investigator of national investment for the future and European grants. She has been awarded the Claude Pompidou Foundation prize for dementia research and the scientific excellence award of the European Stroke

Organization. A former Fulbright fellow and adjunct associate professor at Boston University, she was also a visiting professor at Kyoto University. As Vice-President, one of the important focuses of her mandate has been to reinforce strategic partnerships of the University of Bordeaux, with a special focus on building new collaboration networks in Europe and strengthening partnerships on the African continent, including novel triangular cooperation through UB's strategic partnership with Kyoto University. She has been strongly involved in the construction of the ENLIGHT European University Alliance, of which she chairs the Board of Directors. Prof. Debette serves on the university council of the Ludwig-Maximilian University in Munich. She has further been committed to reinforcing the global engagement of UB and serves as the President's Sherpa within the U7+ Alliance.

John DeGioia, President, Georgetown University, United States

For close to four decades, John J. DeGioia has helped to define and strengthen Georgetown University as a premier institution for education and research. A Georgetown alumnus, Dr. DeGioia served as a senior administrator and as a faculty member in the Department of Philosophy before becoming Georgetown's 48th president in 2001.

As President, Dr. DeGioia is dedicated to deepening Georgetown's tradition of academic excellence, its commitment to its Catholic and Jesuit identity, its engagement with the Washington, D.C. community, and its global mission. Under his leadership, Georgetown has become a leader in shaping the future landscape of higher education and has recently completed a $1.5 billion fund-raising campaign dedicated to enhancing the lifelong value of a Georgetown education.

Dr. DeGioia is a leading voice in addressing broader issues in education. He previously served as Chair of the Board of Directors of the American Council on Education and is currently Chair of the Board of Directors of the Forum for the Future of Higher Education. He is a member of the Board of Directors of the Carnegie Corporation of New York, the National Association of Independent Schools, and the Business-Higher Education Forum. He currently serves as the Chair of the NCAA Board of Governors, as a member of the NCAA Division 1 Board of Directors and is Chair of the Division I Committee on

Academics, and he previously served as a commissioner on the Knight Commission on Intercollegiate Athletics.

Michel Deneken, President, University of Strasbourg, France

Professor Michel Deneken completed his studies in Catholic Theology in 1979 and a doctorate in Catholic Theology at the UNISTRA in 1986 and habilitated in 2001. He became a full professor for Catholic Theology in Strasbourg (since 2001) and was Dean of the Catholic theology faculty of the UNISTRA (2000-2009). In 2014 he was appointed Knight of the French National Order of Merit.

From 2009-2012 and from 2013-2016 he was first vice-president of the UNISTRA, for "Finances" during the first period, then for "Learning and Teaching" for the second period. Since 2017 Michel Deneken is president of the UNISTRA. He leads the regional cluster for higher education alongside the University of Haute-Alsace and 5 other engineering schools located in Strasbourg. The UNISTRA being a founding member of LERU (League of European Research Universities) and its equivalent network in France (CURIF), Michel Deneken strongly believes that both learning and research play an essential role in the innovation process and significantly contribute to the progress of society.

Hicham El Habti, President, Mohammed VI Polytechnic University, Morocco

Hicham El Habti, currently the President of Mohammed VI Polytechnic University upon recent appointment, has served UM6P in his capacity of General Secretary and Executive Vice President for Science and Technology for the last couple of years. He has previously led the “Movement” initiative at OCP where he has led to the creation of many innovative initiatives, programs and Business Units. With a combination of both corporate as well as Higher education management and administration skills and leadership capabilities and innovative management model, he continues fostering organizational Development, leading formulation and implementation of the university’s strategic vision and transformation aspirations, promoting the implementation of effective procedures and institutional reforms and building impactful collaborations and linkages at the local and international levels.

Hicham El Habti has for the last few years been extensively working on bridging the link between the corporate and Higher Education and Research worlds through putting in place a solid collaboration approach; such a link has led to the creation of very strong, multidisciplinary and multifaceted collaboration ties bringing forward a new model of collaboration that has successfully evolved and that could serve as a an example of such types of partnerships could build long lasting impact locally and internationally.

Hicham El Habti his corporate linked journey at OCP back in January 2013 where he has served in various positions before being appointed Deputy General Secretary of the company. Prior to joining OCP, he has undertaken several strategic and managerial roles including piloting strategic and operational projects, Financial Risk Management, managing investments and providing consultancy services and guidance to leading companies in Morocco and Worldwide.

With an educational background and an expertise in Applied Mathematics and Economics, Hicham El Habti also holds an engineering degree from l'Ecole Normale des Pont et Chaussee, Paris in Economics, Management and Finance and has continued his Higher Educational Path with taking part in Management level and Executive training programs.

In his current role as the President of UM6P, Hicham El Habti continues leading the development aspirations of the institution and providing direction for various programs and initiatives as well as pursuing the goals the university has established for itself of growth, research and innovation infrastructure development, development of talent and capacities, creating meaningful collaborations, and creating lasting impact locally and regionally.

Hicham El Habti believes that people are at the heart of every success story, so various initiatives have been dedicated to support Faculty, Researchers, Students and Staff allowing them to take ownership of their projects and programs and serve their career or research development aspirations. Hicham believes that change emerges from within institutions as a key driver to making a difference locally and internationally while relying on people's strengths and expertise in achieving the sought institutional development goals and building the right type of collaboration to respond to major questions impacting communities, countries, regionals and the world.

Adel El Zaïm, Chief Internationalization Office, University of Ottawa, Canada

Adel El Zaïm is the Chief Internationalization Officer of the University of Ottawa, Canada, in the office of the Vice-President International and Francophonie. He oversees the International office and dedicates his efforts to the acceleration of the University internationalization.

Dr. El Zaïm has worked for several organizations like most recently the University of British Columbia (UBC) when he occupied the position of Executive Director for International. He was Director General, Internationalization, at Université de Sherbrooke, in Quebec, Canada, and Senior Program Specialist, Information and communication Technologies for Development, with Canada's International Development Research Centre, Middle East and North Africa Regional office.

Dr. El Zaïm is president of the Association of International Education Administrators (AIEA). He assumed also the chairmanship of the AIEA Awards Committee and was member of the AIEA Strategic Planing Task Force. Adel was founding member, vice-president and president of the Internet Society in Québec (ISOC-Québec) and he was member of the Civil Society Bureau for the World Summit on the Information Society (WSIS-UN) from 2003 to 2005. He served as member of the board of several organizations including Association ISOC Quebec, Collège de Maisonneuve (Montréal), Association of Arab translators (Beirut) and the Economic Local Development Centre Sherbrooke Innopole (Sherbrooke, Quebec).

He is frequent speaker on Internationalization of higher education strategic issues, strategy development and implementation, evaluation of internationalization, and the contribution of the Internationalization to the different dimensions of HE.

Dr. El Zaïm was born in Tripoli, Lebanon. After graduating from the Lebanese University in French Language and Literature, he prepared a Master in Didactics at University of Paris III, Sorbonne-Nouvelle, and received a PhD in Linguistics (Semantics, 1994) from the University of Paris IV, Sorbonne. Adel El Zaim undertook his post-doctorate research at University of Québec at Montréal in Semiotics and Human Language Technologies.

Eilís Ferran, Pro-Vice-Chancellor for Institutional and International Relations, University of Cambridge, United Kingdom

Professor Eilís Ferran, FBA PhD is Pro-Vice-Chancellor for Institutional and International Relations and Professor of Company & Securities Law at the University of Cambridge, and a Professorial Fellow of St Catharine's College, Cambridge.

Eilís has written extensively on UK, EU and international financial regulation, company law and corporate finance law. She has advised UK Parliamentary committees and served as an academic member of Stakeholder Group of the European Banking Authority. She is a non-executive director of Euroclear SA/NV. Eilís is a Fellow of the British Academy and an Honorary Bencher of Middle Temple.

As Pro-Vice-Chancellor she has strategic responsibility for Cambridge University's staff policies and significant international academic partnerships.

Suzanne Fortier, Principal and Vice-Chancellor, McGill University, Canada

Suzanne Fortier has served as Principal and Vice-Chancellor of McGill University since September 2013 and has held the honourific title of McCall MacBain Professor since 2019. Prior to her appointment as Principal, Professor Fortier was President of the Natural Sciences and Engineering Research Council of Canada (NSERC) from 2006 to 2013, and held the position of Vice-Principal (Academic) from 2000 to 2005 and Vice-Principal (Research) from 1995 to 2000 at Queen's University in Kingston, Ontario, where she was a Professor in the Department of Chemistry and in the School of Computing (1982-2006).

A native of St-Timothée, Québec, Professor Fortier graduated from McGill with a BSc (1972) and a PhD in Crystallography (1976). Her research work has focused in the development of mathematical and artificial intelligence methodologies for protein structure determination. She has also made contributions to the development of novel techniques in crystallographic data mining to gain new insights from the large structural databases.

Professor Fortier was appointed an Officer of the Order of Canada in 2018. She is also an officer of France's National Order of Merit, a fellow of the American Association for the Advancement of Science,

and was named a Specially Elected Fellow of the Royal Society of Canada (2015). She holds honorary doctorates from Thompson Rivers University, Carleton University, and the University of Glasgow.

Professor Fortier currently serves as Chair of the World Economic Forum's Global University Leaders Forum (GULF), as a member of the HEC Paris International Advisory Board, on the Boards of the McCall MacBain Scholarships at McGill and the McGill University Health Centre (MUHC), and is an Academic Member of the Board of Governors of the Technion Israel Institute of Technology. She also serves on the Canadian Business-Higher Education Roundtable, the Catalyst Canada Advisory Board, as well as the Boards of Directors of Montreal International, and the Pierre Elliott Trudeau Foundation.

She has previously served as a member of several boards and councils, including the federal government's Council of Science and Technology Advisors (CSTA), the Board of Directors of the Canada Foundation for Innovation, the Steering Committee of the Networks of Centres of Excellence, the Ontario Task Force on Competitiveness, Productivity and Economic Progress, Universities Canada, the Board of Trade of Metropolitan Montreal, the Canadian Federal Minister of Finance's Advisory Council on Economic Growth, the Conference Board of Canada, and served as a member and Vice-Chair of the Science, Technology and Innovation Council (STIC).

Elio Franzini, Rector, University of Milan, Italy

Elio Franzini, full professor of Aesthetics, is the Rector of the University of Milan, in office from 1 October 2018 to 30 September 2024. He graduated in Theoretical Philosophy with Giovanni Piana and Dino Formaggio at the Faculty of Humanities of the University of Milan in 1979, where he became a researcher in 1984. In keeping with the tradition of the philosophical school known as "Scuola di Milano", he directed his research towards phenomenology, investigating some of its historical and theoretical connections, with a focus on artistic construction, symbol and image.

Since 1994, he has been full professor of Aesthetics and Aesthetics of Objects at the University of Milan. From 2004 to 2010, he was Dean of the Faculty of Humanities, after having been Head of the Degree Programme in Communication Sciences (2000-2004). From 2005 to 2010, he chaired the Conference of Deans of the Faculties of Humanities; from 2011, he was Deputy Rector for Academic Services and Planning for just over a year.

From 2015 to 2018, he was President of the Italian Society of Aesthetics. He is currently a member of the Scientific Committee of Fondazione Collegio San Carlo di Modena, the International Centre for Studies in Aesthetics, the "Corrente" Foundation, the Governing Board of the "Luzzatto" Foundation, "Istituto Lombardo di Scienze, Lettere, Arti", and the panel of the "Bagutta" Literary Prize.

His many publications include: *Fenomenologia. Introduzione tematica al pensiero di Husserl (Milan, Angeli, 1991); Filosofia dei sentimenti (Milan, Bruno Mondadori, 1997); Fenomenologia dell'invisibile. Al di là dell'immagine (Milan, Cortina, 2001); Estetica dell'espressione (with C. Cappelletto – Florence, Le Monnier, 2005); Introduzione all'estetica (Bologna, Il Mulino, 2012); Moderno e Postmoderno. Un bilancio (Milan, Cortina, 2018).*

Jacques Frémont, President and Vice-Chancellor, University of Ottawa, Canada

Jacques Frémont is President and Vice-Chancellor of the University of Ottawa. In 2013, Quebec's legislative assembly appointed him to chair the Quebec Human Rights and Youth Rights Commission. Prior to this appointment, he worked at the Open Society Foundations, in New York, as Director of the International Higher Education Support Program.

Mr. Frémont was formerly at the University of Montreal, where he was Dean of the School of Law, as well as Provost and Vice-Rector (Academic Affairs) until 2010. He has also been a visiting professor at many Quebec, Canadian, European and Asian universities, and is the author of several books, articles and book chapters on constitutional law and public law. In 2012, he was named professor emeritus of the University of Montreal.

Throughout his career, Mr. Frémont has advised various international organizations on issues involving human rights, good governance and democracy, and has directed major international cooperation projects in the fields of human rights and judicial training. He has also been very active in higher education in Canada and abroad.

Mr. Frémont is a graduate of Laval University, in Quebec City, and pursued graduate studies at York University in Toronto. He has been awarded prizes and honours, including being named to the Order of the French Academic Palms in 2009 and receiving an honorary doctorate from Paul Cézanne University in Aix-en-Provence in 2010.

Alain Fuchs, President, Université PSL (Paris Sciences & Lettres), France

Professor Alain Fuchs is the President of "Université PSL" in Paris. He studied chemistry at EPFL, Lausanne and received his PhD in physical chemistry at the "University Paris-Sud, Orsay" in 1983. After a postdoctoral stay at the University of Edinburgh, he was appointed as a research fellow at the French "Centre National de la Recherche Scientifique" (CNRS). He became Professor of chemistry at "Université Paris-Sud" in 1996 and director of the "École de Chimie-Paris", a graduate school of chemistry and chemical engineer, in 2006. He was appointed from 2010 to 2017 as the President and CEO of CNRS. He is a fellow of the UK Royal Society of Chemistry, a member of the Academia Europea, a French knight of the Legion of Honor and a laureate of the Gold and Silver Star of the Japanese Order of the Rising Sun. His research activity is devoted to the modelling and theory of fluids confined in nanoporous materials. He is the co-author of 200+ publications with an h-index of 52.

Alice P. Gast, President, Imperial College London, United Kingdom

Professor Alice P. Gast is President of Imperial College London. Prior to her appointment at Imperial in September 2014, Professor Gast was the President of Lehigh University (2006 – 2014) and the Vice-President for Research and Associate Provost and Robert T. Haslam Professor of Chemical Engineering at the Massachusetts Institute of Technology (2001 – 2006). An expert in surface and interfacial phenomena and the behaviour of complex fluids, Professor Gast was a faculty member at Stanford University (1985 – 2001), being promoted to full professor in 1995. She was affiliated with the Stanford Synchrotron Radiation Laboratory.

Professor Gast is a Fellow of the American Academy of Arts and Sciences, the American Institute of Chemical Engineers, the Royal Academy of Engineering, the City and Guilds of London Institute, the Académie des Technologies, France, and she is a member of the National Academy of Engineering; the League of European Research Universities (LERU); the Academic Research Council for the Singapore Ministry of Education.

Professor Gast was appointed to the board of directors of Chevron Corporation in 2012. She is a member of the World Economic Forum Global University Leaders' Forum (GULF) and is also a Co-Vice Chair of the Advisory Board for the World Economic Forum Centre for the Fourth Industrial Revolution (C4IR).

Hazel Genn, Vice-Provost International & Advancement, University College London, United Kingdom

Professor Dame Hazel Genn is UCL Vice-Provost International & Advancement and Professor of Socio-Legal Studies in the Faculty of Law.

She is responsible for UCL's Global Engagement Strategy, which aims to work with partners to achieve fair solutions to global challenges; leads on all external-facing Advancement activity: fundraising, communications and alumni relations; and oversees the university's communications and recruitment activities and public affairs function.
Dame Hazel was Dean of the Faculty of Laws 2008-2017 and is founder of the UCL Centre for Access to Justice and Co-founder of the UCL Judicial Institute.

Dame Hazel is a leading authority on access to civil and administrative justice. She has conducted numerous empirical studies on public access to the justice system and has published widely in her specialist fields. Her work has had a global influence on policymakers in relation to the provision of legal aid and the social and health impact of unmet social welfare problems.

Dame Hazel has been appointed to numerous public service roles, including Judicial Appointments and Standards in Public Life. In recognition of her contribution to the justice system, she was awarded a CBE in the Queen's Birthday Honours List in 2000 and appointed DBE in the Queen's Birthday Honours List in

2006. In 2006 she was also appointed Queen's Counsel Honoris Causa and in 2008 she was elected Honorary Master of the Bench of Gray's Inn.

Meric Gertler, President, University of Toronto, Canada

Meric S. Gertler began his term as the 16th President of the University of Toronto on November 1, 2013. Prior to that, he served as Dean of the Faculty of Arts & Science—the largest faculty at the University—from 2008 to 2013, where he championed many important innovations in undergraduate teaching and learning. He is a Professor of Geography and Planning, and the Goldring Chair in Canadian Studies at the University of Toronto. He is a co-founder of a large research program at U of T's Munk School of Global Affairs and Public Policy investigating the role of city-regions as sites of innovation and creativity in the global economy. His work engages in comparative analysis of North American and European cities to understand how local social and cultural dynamics create the foundations for economic success and prosperity.

Professor Gertler has served as an advisor to local, regional and national governments in Canada, the United States, Singapore and Europe, as well as to international agencies such as the Organisation for Economic Cooperation and Development (Paris) and the European Union. He has authored or edited nine books, including Manufacturing Culture: The Institutional Geography of Industrial Practice and The New Oxford Handbook of Economic Geography (with Gordon Clark, Maryann Feldman and Dariusz Wójcik). He has held visiting appointments at Oxford, University College London, UCLA, and the University of Oslo.

Professor Gertler is co-chair of the Business-Higher Education Roundtable, a trustee of Toronto's Hospital for Sick Children, a director of MaRS Discovery District and a member of the Board of Universities Canada. He is chair of the U15 Group of Canadian Research Universities and a founding member of the Corporate Leadership Table convened by BMO Financial Group and United Way of Greater Toronto to promote Inclusive Local Economic Opportunity. He also serves as chairperson of the Academic Committee of the China Institute for Urban Governance, and sits on the Singapore Ministry of Education's 11th International Academic Advisory Panel and the International Advisory Board of Uppsala University in Sweden. He previously served on the Expert Panel on Business Innovation in Canada for the Council of Canadian Academies, and the Ontario government's Highly Skilled Workforce Planning and Partnership Table.

A graduate of McMaster University (BA), the University of California, Berkeley (MCP) and Harvard University (PhD), Professor Gertler holds honorary doctorates from Lund University, Sweden, Shanghai Jiao Tong University, China, and Université de Montréal. He is a Fellow of the Royal Society of Canada, the Academy of Social Sciences (UK), the Royal

Canadian Geographical Society and a Corresponding Fellow of the British Academy. He has received the Award for Scholarly Distinction in Geography from the Canadian Association of Geographers, the Distinguished Alumni Award from the College of Environmental Design at the University of California,

Berkeley and the Distinguished Scholarship Honor from the Association of American Geographers. In December 2015, Professor Gertler was appointed to the Order of Canada.

Herbert Grieshop, Director, Division of International Affairs, Freie Universität Berlin, Germany

Dr. Grieshop has been director of the Division of International Affairs at Freie Universität Berlin since 2015. From 2009 to 2015, he was head of the university's Center for International Cooperation.

The Division of International Affairs leads the strategic planning and implementation of all central international activities at Freie Universität – from mobility programs for students, faculty, and staff (Erasmus+ and direct exchange programs) to university partnerships. Its portfolio also covers maintaining and expanding Freie Universität's global network of strategic partners, coordinating the university's participation in the European network Una Europa, and organizing internal funding programs. The division also manages five global liaison offices, the preparatory "Studienkolleg, as well as programs for refugee faculty and students, along with services for international guests and delegations. Further tasks comprise the supervision of the national and international alumni network, the management and delivery of the Deutschlandstipendium scholarship, and the organization of university-wide events showcasing the university's international profile. The division is also home to the university's central translation office.

Before joining Freie Universität Berlin, Dr. Grieshop worked as head of the Education and Science Team of the British Council in Germany and as a cultural affairs specialist at the US Embassy in Berlin. From 1994 to 2000, he was a lecturer in the German department at University College London (UCL) and also worked at the DAAD's London Office.

Dr. Grieshop studied German, history, and philosophy at the University of Göttingen and the University of California, Berkeley. He holds a PhD in German literature.

Dévora Grynspan, Vice President for International Relations, Northwestern University, United States

Dévora Grynspan, Vice President for International Relations, works closely with Northwestern leaders to advance the university's strategic goals in a global context. In her role, Dévora represents the president and the university to international constituencies; provides leadership and coordination in shaping and implementing the university's international agenda; and helps to design and administer partnerships, policies and programs to advance the university's global footprint.

Dévora was the Director of the former Office of International Program Development from 1998 until 2016. In this role, she developed a

number of exchange and specially designed study abroad programs, including in China, Cuba, France, Germany, Israel, Mexico, Serbia and Bosnia-Herzegovina, South Africa, and Tanzania. She established a number of partnerships with universities around the world and continues to promote and strengthen Northwestern's international collaborations. In 2002, Dévora established Northwestern's popular interdisciplinary Program in Global Health Studies, which was the first program at Northwestern to require an international experience. She co-directed the Minor in Global Health Studies until 2016 and continues to fundraise for Global Health Studies and for international programs in general, working closely with Alumni Relations and Development.

Dévora represents Northwestern at the Senior International Officers Committee of the Big Ten Academic Alliance, and is a member of the Université de Paris Strategic Advisory Board.

Dévora earned her bachelor's in Economics, and her master's and doctoral degrees in Political Science at Northwestern. She later received a law degree from the University of Illinois at Urbana-Champaign (UIUC). Dévora came to Northwestern in 1998 after twelve years at UIUC where she had taught Political Science, directed the Center for Latin American Studies, established the Center for European Union Studies, and was Associate Director for International Programs.

Akira Haseyama, President, Keio University, Japan

Professor Haseyama received his bachelor's degrees from Keio University's Faculty of Law in 1975 and Faculty of Letters in 1979. He completed the course requirements for the doctoral program at the Graduate School of Letters in 1984 and obtained a PhD in law from Keio University in 1988.

After serving as a professor in the Faculty of Law at Surugadai University, he became a professor at the Keio University Faculty of Letters in 1997. He was appointed Dean of Students in 2001, became the Dean of the Faculty of Letters in 2007, and also served as the Director of the Keio Institute of Oriental Classics. From 2009 to 2017, he was the university's Vice-President for Academic Affairs, Keio Affiliated Schools, and Mita and Hiyoshi Campuses. He became the 19th President of Keio University in May 2017.

Specializing in Japanese legal history, he has held academic positions at a number of organizations, including as a board member of the Japan Legal History Association and a councillor for the Society for the Study of Diplomatics in Japan.

Additionally, Professor Haseyama is currently the President of the Federation of All Japan Private Schools' Associations (2019–), President of the Federation of Japanese Private Colleges and Universities Associations (2019–), and President of the Japan Association of Private Universities and Colleges (2019–). He is also serving as a member of the Administrative Council of the Promotion and Mutual Aid Corporation for Private Schools of Japan (2020–), councilor of the National Institution for Academic Degrees and Quality Enhancement of Higher Education (2020–), councilor of the Open University of Japan (2019–), advisor of the Tokyo Organising Committee of the Olympic and Paralympic Games (2019–), member of the Council for Science and Technology of the Ministry of Education, Culture,

Sports, Science and Technology (MEXT; 2019–), member of the Administrative Council of the National Institutes for the Humanities (2018–), and trustee of the Kashiyama Scholarship Foundation Scholarship Student Selection Committee (2017–).

Simon Hix, Pro-Director for Research, London School of Economics and Political Science, United Kingdom

Simon was undergraduate and a masters student at the School, and was awarded a BSc(Econ) in Government and History in 1990 and an MSc(Econ) in West European Politics in 1992. He then went on to study for a PhD at the European University Institute in Florence. After periods in Brussels and then Washington, DC, Simon took his first academic position at Brunel University in 1996 and a Lectureship at LSE in 1997. He was promoted to Professor in 2005 and then became the inaugural Harold Laski Professor of Political Science in 2015.

Simon is one of the leading researchers, teachers, and commentators on European and comparative politics in the UK. He has published over 100 books and articles and has won several prestigious prizes and fellowships for his research, including from the US-UK Fulbright Commission, the American Political Science Association, and the UK Economic and Social Research Council. He is also a prize-winning teacher, and continues to teach "Introduction to Political Science" to over 300 first-year undergraduate students.

Simon regularly gives evidence to committees in the UK House of Commons and House of Lords, as well as in the European Parliament. He has held visiting professor positions at Stanford, Berkeley, UC San Diego, Sciences Po in Paris, the Hertie School of Governance in Berlin, and the Korean Institute for International Economic Policy in Seoul. In 2013, on the 40th anniversary of the UK's membership of the EU, EurActiv.com named Simon in their list of "the 40 most influential Brits on EU policy". Simon is a Fellow of the British Academy, a Fellow of the Royal Society of Arts, Chairman of www.VoteWatch.eu (an NGO in Brussels that tracks voting in the European Parliament and EU Council), and Associate Editor of the journal European Union Politics.

Susan D. Hyde, Professor, University of California Berkeley, United States

Susan D. Hyde is a Professor of Political Science, the Avice M. Saint Chair in Public Policy, and the Interim Co-Director of the Institute of International Studies at the University of California, Berkeley. She studies international influences on domestic politics, teaches courses on international relations and comparative politics, and is active in promoting policy-relevant research. She is an expert on international election observation, election fraud, election violence, democracy promotion, international norms, and field experimental methods. She earned her Ph.D. from the University of California, San Diego in 2006, was on the faculty at Yale University from 2006-2016, and held residential fellowships at the Brookings Institution in Washington, D.C. and Princeton University's Niehaus Center for Globalization and Governance. From 2016-2018 she served a three year elected term as the Executive

Director of the Evidence in Governance and Politics (EGAP) network. She has published numerous journal articles, most recently in International Organization and Science, and several books.

Mayumi Ishikawa, Director, Planning Unit, Center for Global Initiatives, Osaka University, Japan

Prof. Mayumi Ishikawa is Director of the Planning Unit of the Center for Global Initiatives (CGI), Osaka University. Specialized in sociocultural anthropology, her research interests include the globalization of higher education, ethnographic studies of universities and of Malaysian Borneo, the internationalization of higher education, transnational mobility of students and scholars, science and education policy, world university rankings and the emergence of hegemony in academia, and power in the construction of knowledge. At CGI, she is primarily responsible for planning and informing the university's international strategic decision-making, as well as enhancing its global engagement. She supports the President in matters and activities concerning international affairs.

Her recent works include Between Local Distinction and Global Reputation: University Rankings and Changing Employment in Japan, in M. Stack ed. Global University Rankings and Politics of Knowledge, from Toronto U.P. (forthcoming), Destined for Asia: Hospitality and Emotions in International Student Mobilities, Compare: A Journal of Comparative and International Education, 2020 (coauthored with R. Sidhu), and Commodified Frontier: Jungle Produce Trade and Kemena Basin Society, Sarawak, in History, in N. Ishikawa and R. Soda eds. Anthropogenic Tropical Forests: Human–Nature Interfaces on the Plantation Frontier, from Springer, 2020 (coauthored with N. Ishikawa).

Daniel Jutras, Recteur, Université de Montréal, Canada

Daniel Jutras holds law degrees from Université de Montréal and Harvard University and has been the Rector of Université de Montréal since June 1, 2020. Previously, he taught at McGill University's Faculty of Law from 1985 to 2020, where he held the Wainwright Chair in Civil Law for 10 years and was Dean of the Faculty from 2009 to 2016.

His contributions to Canadian academic and political life and to educational innovation were highlighted by his appointment as an Officer of the Order of Canada in 2019. He also received the Mérite du Barreau du Québec in 2016, the Avocat émérite du Barreau du Québec distinction in 2014 and the Queen Elizabeth II Diamond Jubilee Medal in 2013.

Genta Kawahara, Executive Vice President of Global Engagement, Osaka University, Japan

Dr. Genta Kawahara received his Ph.D. in Engineering from Osaka University in 1994. He became an Assistant Professor in 1989 and later an Associate Professor in 1996 at the Faculty of Engineering, Ehime University. After staying at the Center for Turbulence Research, NASA-Ames/ Stanford University for one year as a visiting scholar, he worked as an Associate Professor at Ehime University and Kyoto University. He was appointed as professor at Osaka University's Graduate School of Engineering Science in 2005 and became Dean in 2013.

Dr. Kawahara was appointed as Executive Vice President of Osaka University in 2017. He has received many awards including the Japan Society of Mechanical Engineers Frontier Award.

Eric Labaye, President, École Polytechnique, France

Eric Labaye is President of École Polytechnique since September 2018 and President of Institut Polytechnique de Paris, created in May 2019 by École Polytechnique, ENSTA Paris, ENSAE Paris, Télécom Paris and Télécom SudParis. He is a member of the board of Telecom Paris, the International Advisory Board of ESSEC, and the Board of Advisors of the School of Public Affairs at Sciences Po.

In his previous role, Eric Labaye was Senior Partner at McKinsey & Company and Chairman of the McKinsey Global Institute (MGI), its business & economic research arm. Prior to this, he was Managing Director of the France office and led the firm's Global Knowledge and Communication as a member of the Global Executive Committee. He was also a member of the Shareholders Council of the firm (Global Board) for ten years, of which he chaired the Client Committee.

At McKinsey, Eric Labaye worked extensively for clients globally in the Telecom, High-tech and industrial sectors, and also for governments and public institutions on a variety of strategic and operational issues including major transformation programs, growth and R&D topics, development of agile organizations, acquisitions, post-merger management, and digitization.

He conducted many research projects with MGI and in France on key economic topics, including growth in Europe, productivity, digitalization, future of work and inequality. Eric Labaye also initiated and co-led McKinsey's "Women Matter" research program, which, since 2007, aims to promote gender diversity in large companies' senior management. He was a member of the Commission "Release Growth in France", from 2007 to 2010, and a member of the French National Economic Commission from 2005 to 2014.

Eric Labaye is a graduate from École Polytechnique and Telecom Paris and holds an MBA with distinction (Henry Ford II award) from INSEAD.

Sandrine Lacombe, Vice President, International Relations, Paris-Saclay University, France

After a PhD in Sciences (specialization in chemical physics) at Paris-Sud University in 1994, Prof. Lacombe joined the Fritz Haber Institut der Max Planck Gessellshaft for 2 years under the supervision of Prof G. Ertl (2007 Nobel prize in chemistry). She became Professor at Paris-Sud University in 1996 and obtained her Habilitation in 2005. She was invited as visiting professor at Sherbrooke CHU hospital, Canada, in 2003, and awarded an International Research Collaboration Award at Sydney University for a visit in 2016. Prof. Lacombe's research interest focuses on the improvement of particle therapy (hadrontherapy) treatments using nanoparticles and theranostics strategies. She is the coordinator of a European research Marie Curie ITN project named ARGENT (www.itn-argent.eu). Since 2008, she has dedicated her work to international education and developed, at Paris-Sud University, the SERP-Chem and SERP+ Master's course twice labelled Erasmus Mundus by the European Commission. Nominated vice-president for international relations in 2016 at Paris-Sud University, she pursues her work today after joining the president's team of Paris-Saclay University in March 2020. Her priorities are to boost university human resources and to foster the interactions between higher education, research and innovation with targeted international partners. In line with this strategy, Prof. Lacombe is the coordinator of the EUGLOH European university, which brings together 4 other European universities with UPSaclay around issues of global health.

Javier Laguna, Director, National Autonomous University of México Chicago Campus, United States

Javier Laguna is a medical doctor who graduated from the School of Medicine at the National Autonomous University of México (UNAM). He obtained a master's degree in Public Health from the University of North Carolina at Chapel Hill and his doctoral studies were in Health Services Administration at the University of Texas.

As a professor at the UNAM School of Medicine, he held the positions of, among others, Head of the Clinical Instruction and Evaluation Department, Head of the Professional Counseling Unit, Secretary of the Biological and Health Sciences Council and Assistant Director of Academic Collaboration for the Graduate School.

Outside of the university, Dr. Laguna has served as Assistant Director of research for The Department of Health Services for Mexico City, also as Planning Coordinator for the Inter-American Center for Studies on Social Security. He is a member of various associations, former Executive Director of the Mexican Counsel for Postgraduate Studies. He has been published in various journals, newspapers and magazines, addressing issues of quality of education, health care services, public health and social security.

As of September 9, 2009, Dr. Laguna continues to serve as Director of the UNAM Chicago Campus.

Yassine Lakhnech, President, Université Grenoble Alpes, France

Diplômé de l'Université de Kiel en Allemagne, spécialiste de la vérification des programmes et de la sécurité prouvable, des liens entre logiques et modèles de calcul, Yassine Lakhnech est Professeur de l'Université Grenoble Alpes. Il a été impliqué dans la construction de plusieurs projets structurants sur le site dont le Labex Persyval-lab, l'opération campus PILSI (IMAG) et l'initiative d'excellence Université Grenoble Alpes. Il a assuré de nombreuses responsabilités en formation, les fonctions de vice-président recherche adjoint de l'Université Joseph Fourier (UJF), de vice-président recherche de l'UJF et de directeur exécutif du volet recherche etvalorisation de l'initiative d'excellence.

Gaëlle Le Goff, Director for International Affairs, Ecole Polytechnique, France

Gaëlle Le Goff graduated from the University of Paris 2 Paris with a Master in 'Political Sciences – International Relations'

From 2002 to 2009, she mostly worked for the ministry of Foreign Affairs, in diplomatic institutions: the French Embassy in Bulgaria, the French Embassy in Bangladesh, and "Alliance Française" in China.
In 2009, she joined the group ParisTech as manager of the ParisTech office in China. After 5 years working for the Sino-French collaboration as the representative of ParisTech institutions, Gaëlle joined Ecole polytechnique in 2014.

Matteo Lorito, Rector, University of Naples Federico II, Italy

Matteo Lorito is Rector of the University of Naples Federico II. He was Director of the Department of Arboriculture, Botany and Plant Pathology, Erasmus Delegate Faculty of Agriculture, Director of the Research Doctorate in Agrobiology and Agrochemistry, President of the Research Doctorate School in Agricultural and Agri-food Sciences, President of the Degree Courses in Science Agriculture, Forestry and Environmental.

Protection of Agricultural and Forestry Systems of the Department of Agriculture, President-designate of the School of Agriculture and Veterinary, elected member of the Academic Senate (representative of the Full Professors and then Representative of the Department Directors), member of the Scientific Committee of the Quality Presidium, coordinator vicar of the Statute and Regulations Commission, elected member of the Board and vice-president of the Italian Society of Plant Pathology, President of the Italian Society of Plant Pathology (2020-present).

Jean-Francois Marchi, Vice-President for the Mobility and the Development of International Partnerships, Aix Marseille University, France

Position & activities:
Vice-President for the Mobility and the Development of International Partnerships (AMU)
Vice-Dean in Charge of the International Relations of the Faculty of Law (AMU)
Ass. Prof. in International Law (Faculty of Law – AMU)
Research Unit CNRS (7318): Comparative Public Law, International & European Law
Director of the Master in Law « International Law, European Law and Foreign Rights »
Former Special Advisor for Latin America (AMU)
Member (elected) of the Council of the Faculty of Law
Member (elected) of the National Council of Universities (Section 02)
Attorney at Law – Marseille Bar (International & European Law)

Academic Background:
Ph.d. in Law – *Cum laudae* (2001, AMU) ; Advanced Master Degree in Public International Law, *Cum laudae* (1995) ; Master in Public International Law, *Cum laudae* (1994) ; Yale Law School (Connecticut – USA) Tocqueville Fellowship of the French-American Foundation ; Hague Academy of International Law – The Netherlands (1996), Certificate, Fellowship of the French Section of the Academy; Charles Rousseau MC in International Law – Univ. Paris I Sorbonne, 1st Prize

Courses, seminars & conferences:
University of Geneva (CH) ; University La Sapienza, Roma (IT) ; United Nations University in Tokyo (JP) ; The Graduate Institute of International Studies in Geneva (CH) ; Chuo University, Tokyo (CH) ; Tübingen University (GER) ; UCC Bogota (COL); University of La Habana (CUB) ; Kent Law School, Canterbury (UK) ; Federal University of Rio de Janeiro (BRA); International University of Rabat (MOR); Shanghai Jiao Tong University (CHN) ; Zhejiang University Hangzhou (CHN)
Research & Teaching Fields:
International Law ; European Law; International Organizations Law ; International Litigation
+50 publications in the field of international law

Stéphane Martinot, Interim President, Université de Lyon, France

Stéphane Martinot holds a degree in veterinary medicine from the Lyon veterinary school (France) and a PhD from Université Claude Bernard, Lyon.

After a carrier as teacher-researcher in veterinary surgery and reproduction , he was nominated dean of the Lyon Vterinary School in 2016. He was then director general of the Université de Lyon foundation before being nominated interim president of University de Lyon. Martinot is also deeply involved in quality assessment in veterinary education and was elected president of the European association of veterinary establishment in 2018. He is part of advisory groups at national and international level about veterinary education.

Ciaran Moynihan, Head of Global Partnerships, Global Engagement Office, University College London, United Kingdom

Ciaran Moynihan is Head of Global Partnerships in UCL's Global Engagement Office – providing strategic and operational leadership to support UCL in developing global 'partnerships of equivalence' and to enhance global and regional knowledge and impact for UCL. In fulfilling his role, Ciaran works with a wide range of internal and external stakeholders to ensure UCL's global partnerships policy, planning, delivery, monitoring and evaluation effectively underpins the aims and ambitions of UCL's Global Engagement Strategy.

Prior to his role as Head of Global Partnerships, Ciaran has held senior international relations positions at UCL and Imperial College London – with a particular focus on the Americas.

Before joining UCL, Ciaran supported the work of the National Director for Child Protective Services in the Health Service Executive, Ireland. Ciaran holds a BA in English and History from the National University of Ireland, Galway and an MA in Human Rights from UCL.

Peter Mathieson, Principal and Vice-Chancellor, University of Edinburgh, United Kingdom

Professor Peter Mathieson MBBS(Hons)(London), PhD(Cambridge), FRCP(London), FMedSci assumed the office of Principal and Vice-Chancellor of the University of Edinburgh in February 2018.

Peter Mathieson was born and educated in the United Kingdom. He went to a state grammar school in Penzance, Cornwall and was the first member of his family to go to university. He read Medicine at the London Hospital Medical College and qualified with First Class Honours from the University of London in 1983. After junior medical posts in London, he obtained a research training fellowship from the Medical Research Council (MRC) to study at the University of Cambridge. He was awarded a PhD by the

University of Cambridge in 1992. He became Director of Studies for Clinical Medicine at Christ's College, Cambridge following his PhD. After a further MRC fellowship he moved to Bristol in 1995 as the foundation Professor of Renal Medicine at the University of Bristol and Honorary Consultant Nephrologist, North Bristol NHS Trust. In 1999, he was elected to Fellowship of the Academy of Medical Sciences.

In 2007, Peter became Head of the University Department of Clinical Science at North Bristol, was appointed as Director of Research & Development for the North Bristol NHS Trust, and was elected President of the Renal Association (the UK's national speciality association for nephrologists and renal scientists) in a competitive ballot of the membership, being the youngest President in its history. He served the full three year term as President and remained a Trustee for a further two years as Immediate Past-President.

In 2008 Peter was appointed Dean of the Faculty of Medicine and Dentistry at the University of Bristol, serving most of a sixth year after his initial five year term. He played a major role in the formation of Bristol Health Partners from 2008 onwards and was appointed as its founding Director in May 2012, a role he undertook alongside that of Dean.

In April 2014, Peter assumed office as the 15th President and Vice-Chancellor of the University of Hong Kong, a post he held until January 2018.

In 2011 he was awarded honorary life membership of the Australian & New Zealand Society of Nephrology. In March 2015 he was awarded Honorary Fellowship of Hughes Hall, Cambridge and in October 2016 Honorary Fellowship of Hong Kong College of Physicians. Of the various prizes and academic awards that he has received, he is most proud of being voted "Teacher of the Year" by Cambridge medicalstudents in 1992; the Milne-Muehrcke award from the Renal Association and the National Kidney Foundation of USA for "most promising young researcher" from UK in 1997; the UK Renal Association Lockwood Award (for contribution to academic renal medicine) in 2004; and being voted "top teacher 2011-12" by Foundation doctors at University Hospitals Bristol.

Frédéric Mion, President, Sciences Po, France

Frédéric Mion, 51, became President of Sciences Po and administrator of the Fondation Nationale des Sciences Politiques in April 2013. Mr Mion is a Conseiller d'Etat in the French Council of State. He was educated at Sciences Po, Princeton University, the Ecole Nationale d'Administration and the Ecole Normale Supérieure.

Frédéric Mion taught public law at Sciences Po and headed the university's Department of Public Administration from 1996 to 1999. He served as technical advisor to Minister of Education Jack Lang in 2000 and 2001 and as deputy director of the General Directorate of Administration and Public Service from 2001 to 2003. He joined the law firm Allen & Overy in 2003 and became a partner in 2005. In 2007, he was appointed General Counsel at Canal +, a position he held until 2013. In February 2018, Frédéric Mion was elected for a second term as President of Sciences Po.

Mario Monti, President, Bocconi University, Italy

Mario Monti is President of Bocconi University (since 1994, on leave when in public office) and Italian Senator for life (since 2011). In August 2020 he has been appointed Chairman of the "Pan-European Commission on Health and Sustainable Development: Rethinking Policy Priorities in the light of Pandemics", convened by WHO/Europe.

In November 2011, with Italy close to default, President Napolitano called on Monti to form a government of national unity, taking the positions of Prime Minister (2011-2013) and Minister of Economy and Finance (2011-2012). The confidence vote by Parliament saw the highest majority in post-War Italy. Eliciting cross-party support, the government overcame the financial crisis, initiated structural reforms and obtained vital improvements in Euro-area governance.

After months of negotiations under Italy's pressure, Germany, the Netherlands and Finland - which had strongly opposed the idea of interventions in order to stabilize sovereign bond markets – changed position and joined a unanimous statement by the Euro Summit (June 2012) calling for such interventions. This provided the ECB with the highest political coverage for a shift in monetary policy, which was in fact announced shortly afterwards by the ECB President.

Monti had previously served for ten years as Member of the European Commission (1995-2004). As Commissioner for the Single Market (1995-1999) and Competition (1999-2004), he fostered market integration whilst promoting tax coordination; and sanctioned high-profile cases of abuses of dominance (e.g. Microsoft), anticompetitive mergers (e.g. GE/Honeywell) and illegal state-aids (e.g. German government's guarantees to public banks).

Born in Varese, Italy, in 1943, he graduated from Bocconi University and pursued graduate studies at Yale University. He was professor of Economics at the University of Trento, at the University of Torino, and then at Bocconi, where he was Rector between 1989 and 1994.

Satoshi Nakano, President, Hitotsubashi University, Japan

Satoshi Nakano serves as President of Hitotsubashi University (HU), a leading research university in Japan specializing in the social sciences and humanities. An expert on international history of the Asia-Pacific region, focusing on Philippines-U.S.-Japan relations, he has published numerous books, book chapters, and articles in Japanese and English, including Japan's Colonial Moment in Southeast Asia 1942-1945: The Occupiers' Experience (Routledge, 2018). Before becoming the President of HU, he served at the University as Professor of History, Executive Vice President of International Affairs (2016-18), and Dean of the Graduate School of Social Sciences (2014-16). He received his LL.B (1983), MA (1985), and Ph.D. (1996) from HU. He taught at Kobe University (1990-99) before returning to HU to teach in 1999. He has

been a Visiting Research Fellow at the University of the Philippines Department of History (1994-95) and Columbia University Weatherhead East Asian Institute (2005-06), and a Fulbright Visiting Scholar at George Washington University Sigur Center for Asian Studies (2013-14).

Carolyn Newton, Director, Global Engagement, University of Cape Town, South Africa

Carolyn Newton's role as director of global engagement is focused on raising the international profile of the University of Cape Town, advising and supporting the UCT Vice-Chancellor and the Executive on a range of issues related to global strategy and visibility, and leading a team dedicated to increasing the university's global profile through the selection and brokering of strategic international partnerships, communication and marketing of the university's research and internationalisation efforts, and the use of research data to inform executive decisions.

Ms Newton graduated from the University of Cambridge with an MPhil in Criminology, from the University of Stellenbosch with a BA (Hons) in Journalism, and from the University of Cape Town with a BA in English. She has worked as a journalist, writer and editor in a range of media and academic publishing houses in South Africa and the UK, and in sixth-form education in Oxford before returning to Cape Town and her alma mater, UCT, in 2013. In her time at UCT she has held a series of new roles, starting with bringing a strategic research focus to the way in which UCT communicates its research, particularly to international audiences, a portfolio that expanded to include working in internationalisation, including overseeing international partnerships across the Research Office and the International Academic Programmes Office.

Koffi N'Guessan, Director General, Institut national polytechnique Félix Houphouët-Boigny, Côte d'Ivoire

Koffi N'Guessan is Director General of the Institut national polytechnique Félix Houphouët-Boigny since 2011. He spent 20 years as Director of the Institute of Statistics and Applied Economics (ENSEA) in Abidjan. In 2018, he was elected President of the Network of Excellence in Engineering Sciences of the French-speaking Community (RESCIF). He has received numerous awards, including Officier de l'Ordre National de Côte d'Ivoire, Docteur Honoris Causa du Conservatoire national des arts et métiers de Paris and Commandeur de l'Ordre de l'Education Nationale.

Shinnosuke Obi, Vice-President for International Collaboration, Keio University, Japan

Professor Obi is the Vice-President for International Collaboration at Keio University, Japan. He concurrently serves as the Dean of the International Center at the university. Prior to his current appointments, he served for more than a decade as the Chair of the Committee for International Affairs at the Keio University Faculty and Graduate School of Science and Technology. In this capacity, he was heavily involved in developing various international programs, including double-degrees offered to both students at Keio and its partner institutions around the world. He is also the current Vice President of the Asia-Pacific Association for International Education (APAIE).

He has previously served as a member of various committees at the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) related to scholarship programs for international students, joint- and double-degree programs at Japanese higher education institutions, and human resource development.

He has a Bachelor (BSc) and Master of Science (MSc) in mechanical engineering from Keio University, and a Doctor of Engineering (Dr.-Ing.) from the University of Erlangen-Nuremberg in Germany. In addition to his role as vice-president, he remains a professor at the Department of Mechanical Engineering, Faculty of Science and Technology. He is also a Fellow of the Japan Society of Mechanical Engineers and the Japan Society of Fluid Mechanics as well as a member of various academic societies including the Heat Transfer Society of Japan, the Gas Turbine Society of Japan, and the Japan Society of Civil Engineers.

Professor Obi's research focuses on fluid mechanics, turbulence modeling, computational mechanics, heat transfer, and flow measurement techniques. He has published numerous articles and reviews in academic journals, edited books, refereed proceedings in Japanese and English, and has delivered over 200 presentations at Japanese conferences and meetings.

Se-Jung Oh, President, Seoul National University, South Korea

Dr. Se-Jung Oh is the 27th President of Seoul National University, effective February 1, 2019. Under his leadership SNU tries to become one of the world's leading universities both in research and teaching.

He earned his Ph.D. degree in physics from Stanford University in 1982, and worked at Xerox Palo Alto Research Center as a visiting scientist. In 1984, he came back to Korea to start his career as an assistant professor in Department of Physics and Astronomy of SNU. He had dedicated himself to researching and teaching over more than 20 years, and became an emeritus professor in 2018. During his tenure at SNU, he served numerous leadership positions including Dean of College of Natural Sciences in 2004-2008, Vice President of the Korean Physical Society, executive board member of the Korean Vacuum Society, and member of the Korean Academy of Science

and Technology (KAST). In 2011-2014 he took a leave of absence from SNU to serve as the 2nd President of the National Research Foundation (NRF) of Korea and also the founding President of the Institute for Basic Sciences (IBS). In 2016, he was elected as a member of the National Assembly of Korea, and served at the standing committees for Education, as well as for Science and Technology.

His research field is the experimental condensed matter physics using synchrotron radiation, and has (co)-authored more than 170 research papers in international journals. For his scientific achievements, he was awarded the Korean Science Award in Physics in 1998 and the Outstanding Research Paper Award in 1994 from the Korean government. He has been quite active in advising the Korean government on science and technology policies as a member of the Presidential Advisory Council on Science and Technology (PACST) from 1999-2014. He also served as a board member of various non-profit or government-affiliated institutions: Korean Federation of Science and Technology Societies (KOFST), Defense Agency for Technology and Quality (DTaQ), Korea Institute of S&T Evaluation and Planning (KISTEP), Samsung Scholarship Foundation and Samsung Foundation of Culture. He is also well-known for his endeavors for the public understanding of science and technology and the promotion of math, science and engineering education. He has contributed more than 150 articles on scientific R&D policy and science-engineering education issues to major Korean daily newspapers as a guest columnist.

Santa J. Ono, President and Vice-Chancellor, University of British Columbia, Canada

Santa J. Ono PhD FRSC FCAHS is the 15th President and Vice-Chancellor of the University of British Columbia. He also serves as Chair of the U15 Group of Universities, on the Board of Directors of Universities Canada, and as Past Chair of Research Universities of British Columbia. In 2018, he served as co-chair of the Tri-council advisory committee on equity, diversity and inclusion policy.

Prior to his appointment as President and Vice-Chancellor of UBC, Dr. Ono served as the 28th President of the University of Cincinnati and Senior Vice-Provost and Deputy to the Provost at Emory University.

A molecular immunologist educated at the University of Chicago and McGill, Dr. Ono has taught at Johns Hopkins, Harvard University and University College London.

He holds Honorary Doctorates from Chiba University and the Vancouver School of Theology and is a recipient of the Reginald Wilson Diversity Leadership Award from the American Council on Education, the Professional Achievement Award from University of Chicago, a Grand Challenges Hero Award from UCLA and the NAAAP 100 Award from the National Association of Asian American Professionals.

Angela Owusu-Ansah, Provost, Ashesi University, Ghana

Angela Owusu-Ansah is a full professor educated in Ghana (BA in psychology with sociology), Spain (MS in International Educational Administration, and a certificate in TESOL), the United States (Ph.D. in Higher Education Administration, Quantitative Research Methods and Social Science Statistics, Instructional Technology), and United Kingdom (a residency at Oxford University). She is currently the Provost (Chief Academic Officer) at Ashesi University. She also serves as a national commissioner for the Council for Accreditation of Educator Preparation (CAEP), Washington DC. She was formerly a Professor of Doctoral Studies where she taught Research (quantitative and qualitative), statistics and assessment; leadership; and creativity, inquiry, and innovation. She was Faculty Chair of Dissertation Research and Innovation Fellow at Concordia University, Portland OR. She was also the Associate Dean at The Center for Access & Success at Elon University, the Associate Dean of the School of Education, the Director of Master of Education Program, and Coordinator of Unit Assessment and Accreditation at Elon University. Prior, she served as Assistant Dean and Associate Professor at Samford University, Orlean Bullard Beeson School of Education. She was the originator and editor of *The Educational Collaborative* journal and her research interests are in Higher Education Impact Assessment and Change regarding Digitized instruction, African Students' intercultural understanding, Science of Learning, Scholarship of Teaching & Learning, and African women in leadership. Her hobbies include painting with acrylic on stretched canvas & learning how to play basketball.

Swati Patankar, Dean for International Relations, Indian Institute of Technology Bombay, India

Swati Patankar is a Professor in the Department of Biosciences & Bioengineering and Dean for International Relations (IR), Indian Institute of Technology Bombay. Her lab research revolves around infectious diseases, particularly malaria and toxoplasmosis, caused by protozoan parasites. She has been the recipient of national and international grants to study malaria and toxoplasmosis and published the lab research in numerous journals. Her activities in the IR office are to oversee and coordinate the international activities on campus. She works to facilitate opportunities for student, faculty and staff exchange, setting up joint degree programs with our academic partners and running international events on the campus.

Justin Pearlman, Vice Provost for Communications and Engagement, Columbia University, United States

Justin Pearlman was appointed Vice Provost for Communications and Engagement at Columbia University on January 1, 2019. He previously served for eight years as Chief of Staff to the Provost.

Prior to coming to Columbia in 2011 he was Assistant Provost for Research at the University of Southern California. Earlier, he held positions at the United States Institute for Peace, a federally-funded nonpartisan agency, and the Carnegie Council for Ethics in International Affairs.

Pearlman holds a Ph.D. in Political Science from Duke University and a B.S. from the School of Foreign Service at Georgetown University.

Elisabeth Pécou, Professor, Université Côte d'Azur, France

Elisabeth Pécou is a university professor in mathematics. After a start in research in the theory of dynamical systems, she was challenged in the 2000s by the opening up of mathematics to biology, entering its post-genomic era. Working in a multidisciplinary team, she trained in the dynamics of cellular regulations and specialized in the modeling of cellular and tissue systems.

Always eager for new experiences, Elisabeth spent eight years in the private sector, first in a start-up, then in a large company, where she served as director of research in modeling and simulation for the Life industries. This experience has enabled her in particular to understand the scientific challenges of tomorrow's pharmaceutical research and personalized medicine and their economic and societal impacts.

Back at the University, she resumed her teaching and research activities and invested herself in the success of Université Côte d'Azur. She set up an international master's degree in computational biology and a double "math-life sciences" bachelor's degree. As director of the UCA structuring transversal research program for the modeling of living organisms, she promoted interdisciplinary research and combined modeling approaches in life sciences. Recently she was appointed as member of the direction committee of the Université Côte d'Azur "Initiative d'Excellence" Program. Among her mission is the coordination of the European University Ulysseus.

Mamokgethi Phakeng, Vice-Chancellor, University of Cape Town, South Africa

Mamokgethi Phakeng began her term of office as Vice-Chancellor of the University of Cape Town on 1 July 2018, where she had been serving as Deputy Vice-Chancellor for Research and Internationalisation since January 2017. Previous to this appointment she served as Vice Principal for Research and Innovation at the University of South Africa (Unisa) for five years, after serving three years as Executive Dean of the College of Science, Engineering and Technology at the same university. She holds a PhD in Mathematics Education from the University of the Witwatersrand and is a highly regarded B1 NRF-rated scientist with over 60 research papers and five edited volumes published. In July 2019 the University of Bristol conferred on her an Honorary Doctorate in Science in recognition of her leadership role in mathematics education in South Africa. She has won numerous awards for her research and community work, including the Order of the Baobab (Silver) conferred on her by the President of South Africa in April 2016. In August 2014 CEO magazine named her the most influential woman academic in Africa and in August 2016 she was awarded the prestigious Businesswoman of the Year Award in the education category. In 2016 she was appointed by the then Deputy President of South Africa, Cyril Ramaphosa, to chair the Human Resource Development Council standing committee on Mathematics and Science Education. Kgethi is founder of the Adopt-a-learner Foundation (www.adopt-a-learner.com), a non-profit organisation that started in 2004 and provides financial and educational support to students from township and rural areas to acquire higher education qualifications.

Thomas Puhl, President, University of Mannheim, Germany

Thomas Puhl was born in Bonn in 1955. He studied law at the Universities of Bonn and Geneva and received his doctorate in Bonn in 1985 with a thesis on "The minority government under the Basic Law". In 1995 he completed his habilitation at the University of Heidelberg. He has worked at the University of Mannheim since 1995, and has held the chair for public, financial and tax law, public business law and media law since 1999. From 2012 to September 2018 he was Vice President for Student Affairs and Teaching in the President's Office of the University of Mannheim. In October 2018, Prof. Dr. Thomas Puhl took over the office of President of the University of Mannheim from his predecessor Prof. Dr. Ernst-Ludwig von Thadden. Thomas Puhl is married and has four grown children.

Catherine Régis, Associate Vice-President, Université de Montréal, Canada

Catherine Regis is a full professor at the University of Montreal Law Faculty, holder of a Canada Research Chair in health law and policy (chairesante.ca), co-founder of the Health Hub – Policy, Organizations and Law (h-pod.ca) and founding member of the JusticIA (justice-ia.com) research group. She is an Academic Associate Member at Mila (mila.quebec/en), a researcher at the Centre de recherche en droit public (CRDP), the University of Montreal Hospital Research Center (CRCHUM), the Observatory of the Social Impacts of AI and Digital Technology (OBVIA), and Special advisor and Associate vice-rector with planning and strategic communication at the University of Montreal. Catherine also participated in the creation of the Montreal Declaration for a responsible development of artificial intelligence as a member of its scientific committee.

Sylvie Retailleau, President, Université Paris-Saclay, France

Sylvie Retailleau is a graduate of the Ecole Normale Supérieure de Cachan where she obtained an Agrégation de physique in 1988. She received her PHD degree in 1992 in Physics from Paris-Sud University. She joins this university the same year at the Institut d'Electronique Fondamentale at Orsay, as an associate (1992) and a senior professor (2001).

From 2002 to 2011, she was the head of the research team "Quantum components for nanoelectronic" and she developed themes about new concept or new architectures of components with the aim of the future generations of integrated circuits.

Sylvie Retailleau is co-authored more than 134 articles and 14 invited conferences. She supervised 11 doctoral theses and sit on 28 thesis committees.

She contributed to the training policy in micro-nanoelectronics at the national level being, during 12 years, director of the Paris-Sud pole of the national center of training of micro-nanoelectronics.

From 2001 to 2008, she was responsible of Information, Systems and Technology Master's program at Paris-Sud University, co-accredited by Ecole Normale Supérieure de Cachan.

She pays real attention to transfer search-education and training innovation, concretized by publications and educational softwares. Her passion for training was also reflected by a strong commitment for a widespread dissemination of scientific culture. She participated in the creation of the "Diagonale Paris-Saclay" which facilitates dialogue between science and society.

She was Vice-Dean of Education in the Science Faculty (2008-2011) then Dean of the Science Faculty of the Paris-Sud University (2011-2016), before to become President of Paris-Sud University from 2016 to

2018, and President of Paris-Saclay University from 2019. Sylvie Retailleau is Chevalier de la Légion d'Honneur.

Annelise Riles, Executive Director, Northwestern Roberta Buffett Institute for Global Affairs, Associate Provost for Global Affairs, Northwestern University, United States

Annelise Riles is the Executive Director of the Northwestern Roberta Buffett Institute for Global Affairs, enhancing Northwestern's reputation for cutting-edge, interdisciplinary programs and research on globally relevant topics. Riles is also the Associate Provost for Global Affairs and a professor of law and anthropology.

Professor Riles' scholarship spans a wide range of substantive areas including human rights, managing and accommodating cultural differences, and the regulation of the global financial markets. Key areas in legal studies include comparative law, the conflict of laws, financial regulation, socio-legal studies, and international law. In anthropology, her work is known for its methodological contributions as well as for its contributions to the study of international institutions and expertise.

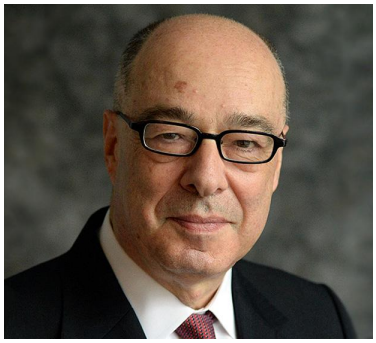
She has conducted legal and anthropological research in China, Japan, and the Pacific and speaks Chinese, Japanese, French, and Fijian. She has published on a wide variety of topics, including comparative law, conflict of laws, financial regulation, and central banking. Her first book, The Network Inside Out, won the American Society of International Law's Certificate of Merit for 2000-2002.

Riles is also the founder and director of Meridian 180, a multilingual forum for transformative leadership. Its global membership of 800+ thought leaders in academia, government, and business work together to generate ideas and guidance on the most important problems of our time, including global financial governance, environmental governance, and data governance.

She has taught at the London School of Economics, University of Tokyo, Yale University among others. Riles is a former professor of anthropology and far east legal studies at Cornell University. During her time at Cornell, she received the Annelise Maier Award for lifetime achievement across the social sciences and humanities from the German government and Humboldt Foundation.

Professor Riles received an AB from Princeton University's Woodrow Wilson School of Public and International Affairs, a MSc in Social Anthropology from the London School of Economics, a JD from Harvard Law School, and a PhD in Social Anthropology from the University of Cambridge.

Gerald Rosberg, Senior Vice President, Columbia University, United States



Gerald Rosberg joined Columbia as its senior vice president in July 2016. In that role he acts as senior advisor to the president across all areas of the university, working directly with the provost and other members the president's executive team and the university's academic leadership, particularly focused on strategic planning and long-term goals.

Before coming to Columbia, Rosberg was the senior vice president–planning and development of Graham Holdings Company (formerly The Washington Post Company). Prior to joining Graham Holdings in 1996, Rosberg was with Computer Associates International, Inc., where he was senior vice president and general counsel and then senior vice president of business development. Before joining Computer Associates, Rosberg was a partner in the Washington office of Dewey Ballantine, where he specialized in litigation and federal regulatory matters.

From 1974 to 1982, Rosberg was on the faculty of the University of Michigan Law School. In 1980-1981, he served as counselor on international law in the Office of the Legal Adviser of the U.S. Department of State. Rosberg graduated from Harvard College and Harvard Law School. Following law school, he served as a law clerk to Chief Judge David L. Bazelon of the United States Court of Appeals for the District of Columbia Circuit and then Justice William J. Brennan, Jr. of the Supreme Court.

Daniel J. Sargent, Associate Professor, University of California Berkeley, United States

Daniel J. Sargent is associate professor at the University of California, where he is jointly appointed in the Department of History and the Goldman School of Public Policy. He is a historian who specializes in U.S. foreign policy and the history of international relations. His research has explored how states and decision makers adapt to long-term changes in their international environments, including the historical advance of globalization. He is presently interested in how the United States has strived, over the long arc of its history, to constitute and sustain international order, and he remains intrigued with how policymakers use historical and grand strategic concepts to inform the work of policymaking.

Daniel Sargent earned his PhD in History from Harvard University in 2008. He is also a graduate of Cambridge University, where he earned his B.A. with double-first class honors in 2001. He has held pre-doctoral fellowships at the Olin Institute for Strategic Studies and the Weatherhead Center for International Affairs, both at Harvard. In 2007-8, he was the inaugural Henry Chauncey Jr. '57 Postdoctoral Fellow at International Security Studies at Yale University. In 2018-19, he was the William C. Bark National Fellow at the Hoover Institution at Stanford University. He has taught at the History Department at Berkeley since 2008 and in the Goldman School of Public Policy since 2019.

Luciano Saso, Deputy Rector for European University Networks, Sapienza University of Rome, Italy

Prof. Luciano Saso (Faculty of Pharmacy and Medicine, Sapienza University of Rome, Italy) received his PhD in Pharmaceutical Sciences from Sapienza University in 1992. He is author of more than 250 scientific articles published in peer reviewed international journals with impact factor (SASO-L in www.pubmed.com, total impact factor > 500, H-index Google Scholar 47, Scopus 39). He coordinated several research projects in the field of pharmacology and has been referee for many national and international funding agencies and international scientific journals in the last 30 years. Prof. Saso has extensive experience in international relations and he is currently Deputy Rector for European University Networks at Sapienza University of Rome. In the last 15 years, he participated in several projects including IMS2020, EGRACONS, IMOTION, BUCUM, UZDOC, TRAIN and has been speaker and chair at many international conferences organised by UNICA and other university networks. He coordinates the Sapienza team in the European University CIVIS (www.civis.eu)
Prof. Saso has been Member of the Steering Committee of the UNICA network of the Univesities from the Capitals of Europe (www.unica-network.eu/) for two mandates (2011-2015) and in November 2019 he has been re-elected President of UNICA for the second mandate (2019-2023).

Marcelo Scaglione, U7+ Special Unit leader, University of Buenos Aires, Argentina

Specialist in international affairs and politics, worldwide strategies and networks. Founder and CEO of NuevasIdeas, international platform advising companies and governments on OECD standards and good practices. He participates of professional and academic networks at the global level. In the United States, he is a member of the Center for Strategic and International Studies (CSIS) "Argentina & USA Forum" and the OECD & Inter-American Development Bank (IDB) "Latin America and the Caribbean Network of Regulatory Improvement". In Europe, he chairs the French National School of Administration (ENA) Argentinean chapter and is fellow of the ENA international confederation represented by +9.000 affiliates with a very active presence in governments, diplomacy and business in more than 130 countries. In Latin America, he is associate of the Institute for Business Development of Argentina (IDEA), the Corporate Directors Forum, the Argentine Council for International Relations (CARI) and the University of Buenos Aires (UBA), where he leads the U7+ special unit. In the Middle East, he is a member of the World Free Zones Organization (WFZO). Between 2016 and 2019 he served as undersecretary of State leading the Argentina OECD accession process. Furthermore, he has more than 25 years of worldwide experience in government, multilateral Organizations, academia, startups, SMEs and corporations. Master's in public administration from the French National School of Administration (ENA) and Certified Public Accountant and Marketing specialist from the University of Buenos Aires (UBA) he collaborates with media and lectures in Latin America and Europe. Marcelo is quadrilingual in English, French, Portuguese and Spanish and recently began studying Chinese.

Morton Schapiro, President, Northwestern University, United States

Morton Schapiro began his term as the 16th president of Northwestern University on September 1, 2009. He is a professor of economics in Northwestern's Judd A. and Marjorie Weinberg College of Arts and Sciences and also holds appointments in the J. L. Kellogg School of Management and the School of Education and Social Policy.

President Schapiro is among the nation's leading authorities on the economics of higher education, with particular expertise in the area of college financing and affordability and on trends in educational costs and student aid.

Previously he was president of Williams College from 2000 to 2009. He had served earlier as a member of the Williams College faculty from 1980 to 1991 as professor of economics and assistant provost. In 1991 he went to the University of Southern California, where he served as chair of the Department of Economics until 1994 and then as dean of the College of Letters, Arts and Sciences until 2000. During his last two years as dean, he also served as the university's vice president for planning.

President Schapiro has written more than 100 articles and written or edited ten books, including the upcoming *Minds Wide Shut: How the New Fundamentalisms Divide Us* (with Gary Saul Morson, Princeton University Press, 2021): *Cents and Sensibility: What Economics Can Learn from the Humanities* (with Gary Saul Morson, Princeton University Press 2017); *The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education* (with Michael McPherson, Princeton University Press 1998); and *Keeping College Affordable: Government and Educational Opportunity* (with Michael McPherson, Brookings Institution 1991). He has also authored dozens of essays and commentaries for the New York Times, Wall Street Journal, Washington Post, Los Angeles Times, Chronicle of Higher Education and numerous other publications.

He has received research grants and contracts from the National Science Foundation, the US Department of Education, the World Bank, the Andrew W. Mellon Foundation, the Spencer Foundation, the College Board, the Organization for Economic Cooperation and Development, and other groups to study the economics of higher education and related topics. In 2010 he was elected a fellow of the American Academy of Arts and Sciences, and in 2017 he was elected to the National Academy of Education.

Vanessa Scherrer, Vice President for International Affairs, Sciences Po, France

Dr Vanessa Scherrer is the Vice President for International Affairs of Sciences Po. As such, she heads the international strategy of Sciences Po, including the 470 academic partnerships of the institution, its dual degree programs and strategic alliances across continents, and the international outreach and attractiveness of Sciences Po for students, faculty and talents worldwide.

Before this, Dr Scherrer had been the Executive Director and founding Vice Dean of the Paris School of International Affairs of Sciences Po (2010-2017).

Before joining Sciences Po, Dr Scherrer spent a decade at Columbia University (2001-2010), New York, where was the Director of the Alliance Program at Columbia University and a visiting professor at the Columbia School of International and Public Affairs (SIPA). The Alliance Program is a partnership between Columbia University, the Ecole Polytechnique, Sciences Po and the Université Paris I Panthéon Sorbonne.

Dr Scherrer is a member of the faculty of Sciences Po. She holds a Ph.D. in Political Science from Sciences Po.

Among other board commitments, Vanessa Scherrer serves as the Vice President of the Paris Peace Forum (France) and was a member of the founding executive committee. She lives in Paris with her husband and their three children.

Ursula Schlichter, Officer International Research Affairs, University of Mannheim, Germany

Ursula Schlichter joined the University of Mannheim in 2012 as European Union liaison officer in the department for research support. In addition to her consultancy work for researchers, throughout the years she become engaged in internationalisation and networking activities at the University of Mannheim. Since November 2020 she is head of the management office of the recently funded European University Alliance ENGAGE.EU at Mannheim.

She is a member of the National Working Group of European Union Funding Advisors at German Universities and Colleges and founding member of the initiative “Research on Society in Europe – ROSE”. ROSE contributes to the debate on the creation of the new European Union Framework Programme FP9 and aims to strengthen the role of Research on Societies in national research landscapes and the European Research Area.

Ursula Schlichter studied biology at the University of Cologne. She spent most of the experimental phase of her PhD thesis at Rothamsted Research, Harpenden, UK, and received her doctorate in natural

sciences at the University of Cologne in cooperation with the Max Planck Institute for Plant Breeding Research, Cologne.

Minouche Shafik, Director, The London School of Economics and Political Science, United Kingdom

Nemat (Minouche) Shafik is a leading economist, whose career has straddled public policy and academia. She was appointed Director of the London School of Economics and Political Science in September 2017.

She did her BA at the University of Massachusetts-Amherst, her MSc at the LSE and her DPhil at the University of Oxford and, by the age of 36, had become the youngest ever Vice President of the World Bank. She taught at Georgetown University and the Wharton Business School. She later served as the Permanent Secretary of the Department for International Development from 2008 to 2011, Deputy Managing Director of the International Monetary Fund from 2011-2014 and as Deputy Governor of the Bank of England from 2014-2017, where she sat on all the monetary, financial and prudential policy committees and was responsible for a balance sheet of over £500 billion.

Minouche has served on and chaired numerous boards and currently serves as a Trustee of the British Museum, the Supervisory Board of Siemens, the Council of the Institute for Fiscal Studies, and the Economy Honours Committee. She was made a Dame Commander of the British Empire in the Queen's Birthday Honours list in 2015. In July 2020 Minouche was made a cross-bench peer in the House of Lords.

Victor Shim, Associate Vice President for Global Relations, National University of Singapore, Singapore

Victor Shim is Associate Vice-President for Global Relations, and a Professor of Mechanical Engineering at the National University of Singapore (NUS). He works with the President on the University's aspiration to be recognised globally as characterised by internationalisation in its perspectives and programmes, through strategic interactions and collaborations with partner institutions overseas.

He pursued his Bachelor's degree at Auckland University, New Zealand, via a Colombo Plan Scholarship, then returned to Singapore for three years of military service as an artillery officer. Thereafter, he took on a Senior Tutor appointment at NUS, and concurrently obtained his Master's degree. Subsequently, he proceeded to Cambridge University for his PhD, supported by an NUS Scholarship.

His research is primarily in Dynamic Material Behaviour and Impact Mechanics, and he is an Associate Editor of the *International Journal of Impact Engineering* and an Editorial Board Member of *Defence Technology*. Prof Shim has been a Visiting Scientist at the Tokyo Institute of Technology and a Visiting Scholar at the University of California, San Diego. He has received awards for Teaching Excellence and

Innovative Teaching, Outstanding Service, and has also been conferred a National Day Public Administration Medal (Silver). He has served in University, Faculty and Department management roles, such as the founding Director of the University's Office of Corporate Relations (now University Communications Office), a Vice-Dean (External Relations & Outreach) at the Faculty of Engineering, and a Deputy Head of the Mechanical Engineering Department. He is also an Independent, Non-executive Director of a publicly-listed company that provides technical inspection and testing services.

Sawako Shirahase, Executive Vice President, International Affairs, University of Tokyo, Japan

Sawako Shirahase is a professor of sociology in the Graduate School of Humanities and Sociology, the University of Tokyo. She received her D.Phil in sociology from University of Oxford. Her main research interests include social stratification and aging, gender and generational inequality, and wealth in advanced capitalist societies. She joined the University of Tokyo in 2006, and became professor in 2010. She was Associate Dean of Graduate School of humanities and Sociology from 2014 to 2016, and became Vice President of the University of Tokyo in 2018. She is currently Executive Vice President of the University of Tokyo in charge of International Affairs.

Dirk Simons, Vice President for Strategic Planning, Scientific Infrastructure and Internationalization, University of Mannheim, Germany

Dirk Simons joined the University of Mannheim as chair of business administration and accounting in 2004. He became vice-president for strategic planning, scientific infrastructure and internationalization in 2015. Before, he has been academic director representing the business school in the Graduate School of Economic and Social Sciences (GESS). GESS was founded in 2007 and financed by the German excellence-initiative.

Dirk Simons' research focus is on the theory of accounting, financial disclosure and auditing. He analyzes problems resulting from information-asymmetry by game-theoretic or agency-theoretic models. He is principal investigator in the collaborative research center TRR266 „Accounting for Transparency", which has been established by the German Research Foundation (DFG) in 2019. Moreover, he is board member of the Schmalenbachgesellschaft (SG), serves as head of the SG-working group "transfer pricing" and is a member of the SG-working group "financial accounting".

James Smith, Vice-Principal International, University of Edinburgh, United Kingdom

James Smith was appointed Vice-Principal International in 2014, having held the Chair of African and Development Studies since 2010. He holds visiting professorships in Development Policy and Practice at the Open University and in the Department of Geography, Environmental Management and Energy Studies at the University of Johannesburg.

He is a member of the Council of the UK's Economic and Social Research Council.

His research focuses on the role of science, innovation and infrastructure on Africa's development and is currently writing a book on African health research and innovation networks and neglected tropical diseases.

He has experience working with donors, development agencies and NGOs including DfID, IDRC, CIDA, the Consultative Group on International Agricultural Research, the World Bank, the Food and Agriculture Organization, the Bill and Melinda Gates Foundation, Oxfam and the New Partnership for Africa's Development.

Jon Sudholt, Strategic Partnerships Coordinator, University of Cambridge, United Kingdom

Jon Sudholt is a Strategic Partnerships Coordinator at the University of Cambridge. He holds the portfolios for institutional relationships with partners in Africa and Europe.

Jon has degrees from Yale University and Brandeis University, with a PhD studying the intersection of sentimental literature and political participation in the antebellum USA.

Tan Eng Chye, President, National University of Singapore, Singapore

Professor Tan Eng Chye was appointed President of the National University of Singapore (NUS) on 1 January 2018. He is the University's 5th president, and the 23rd leader to head Singapore's oldest higher education institution.

Prof Tan is a passionate and award-winning educator. He was a pioneer architect of the current academic system in NUS, and has seeded many initiatives such as the Special Programme in Science, University Scholars Programme, University Town Residential College Programme, Grade-free Year, and Technology-enhanced Education.

Prof Tan is a member of the Singapore's Future Economy Council, which is tasked with driving the growth and transformation of the country's future economy. He is on the boards of the Agency for Science, Technology and Research (A*STAR); National Research Foundation (NRF); and NUS High School of Mathematics and Sciences. He is also on the International Advisory Council of the Southern University of Science and Technology in China, and an advisor with the think tank The Conference Board.

Prof Tan received the Public Administration Medal (Gold) at Singapore's National Day Awards in 2014 for his outstanding contributions to education. He was awarded the Wilbur Lucius Cross Medal, which honours exceptional alumni in the areas of scholarship, teaching, academic administration and public service, by Yale University in 2018. Prof Tan was also conferred an Honorary Doctor of Science from the University of Southampton in 2018 in recognition of his achievements as "an innovative and exceptional teacher, and then as a distinguished and respected leader in academia".

Irini Tsamadou-Jacoberger, Vice President for International Affairs, University of Strasbourg, France

Irini Tsamadou-Jacoberger is a professor of Greek Linguistics and Sociolinguistics at the Department of Modern Greek Studies, Faculty of Languages at the University of Strasbourg since 1999. She is also the Head of the Research Center for Oriental, Slavic and Modern Greek Studies UR 1340-GEO since 2011 (https://geo.unistra.fr/index.php?id=8384). She holds a BA in Classics and Linguistics from the University of Athens, a PhD in Linguistics and Sociolinguistics from the University Paris 7 and a Doctorat d'Etat ès Lettres et Sciences du Langage from the University Paris 7. Her research focuses on Linguistics, Discourse Analysis, Sociolinguistics, Language contacts and Multilingualism. She has participated as a research team member in many national and international research projects, notably in project DYLAN Language Dynamics and Management of Diversity (http://www.dylan-project.org). In 2017, she was appointed Vice President for International Affairs at the University of Strasbourg.

Manuel Tunon de Lara, President, University of Bordeaux, France

Manuel Tunon de Lara studied medicine, immunology, physiology and life sciences. He then carried out research into the cellular mechanisms of asthma. He was a clinician in the respiratory diseases department of Bordeaux University Hospital, of which he then became director. Manuel Tunon de Lara became involved in the institutional aspects of Bordeaux Segalen University and from 1998 he ran the "Aquitaine Euskadi Navarre" cross-border network. In 2001 he set up the Department of European Affairs and International Relations before becoming Vice-President of the university responsible for international relations in 2003. He was elected president of Bordeaux Segalen University in 2008, then reelected in 2012. During his terms of office, he

contributed actively to the Campus Operation project, led the project to set up the Bordeaux University Foundation and coordinated "Investment for the Future" projects, including the excellence initiative

(IdEx) that was among the first three such projects to be accredited in France. Championing the values of a large, multidisciplinary, internationally-recognized university, Manuel Tunon de Lara led his establishment towards a merger with two other universities in the city thus creating the University of Bordeaux with his counterparts. In January 2014, he was elected the first president of the new establishment and, together with his team, set up what has become one of France's top universities. Under his leadership, the University of Bordeaux was definitively "excellence initiative" accredited by an international jury in June 2016, and continues to energetically pursue the objective of becoming a great European university, while remaining anchored in the Aquitaine region. Manuel Tunon de Lara was reelected president of the University of Bordeaux on 18 January 2018.

A man of commitment and conviction, he is an Officer of the Ordre des Palmes Académiques, Chevalier of the National Order of Merit and Chevalier of the Order of the Legion of Honor.

Sally Wheeler, Pro Vice-Chancellor for International Strategy, Australian National University, Australia

As Pro Vice-Chancellor for International Strategy (PVCIS), Professor Wheeler is responsible for the development and implementation of the academically-led international strategy for the Australian National University (ANU). Sally chairs the ANU International Group and is a member of the University's Executive. The PVCIS represents the University on international committees and formal engagements.

Working closely with the International Strategy & Partnerships office, the ANU International Liaison Offices, the University's Marketing and Student Recruitment Division and colleagues across the University, the PVCIS provides leadership to the University's strategic engagement with global partners and on international student recruitment.

Professor Wheeler joined the University as the Dean of the ANU College of Law in early 2018, a role she continues to hold. Sally divides her time between the ANU College of Law and her role as Pro Vice-Chancellor (International Strategy).

Prior to taking up these positions at ANU, Sally was a Professor and Pro-Vice Chancellor for Research and Enterprise at Queen's University Belfast. She was elected to the Academy of Social Sciences and the Royal Irish Academy in 2011 and 2013, respectively. She became a Fellow of the Australian Academy of Law in 2018 and in the 2017 New Years' Honours list, Sally was awarded an OBE for services to higher education in Northern Ireland.

Atsushi Yamada, Vice President for International Affairs, Hitotsubashi University, Japan

Atsushi Yamada received his BA in Sociology, MA and Ph.D. in International Relations from Hitotsubashi University. He was a Fulbright Graduate Student at Columbia University (1991-93) and a Fulbright Research Fellow at University of California, Berkeley (2009-2011). His recent works include *Power Shift and Global Governance* (co-edited), Yuhikaku Publishing, 2018, and *Science, Technology, and Contemporary International Relations* (editor-in-chief, *International Relations*, vol.179, 2015). Since 2018, Yamada has worked for expanding the global partnerships of Hitotsubashi University as Vice President for International Affairs.

Sanni Yaya, Vice-President, International and Francophonie, University of Ottawa, Canada

Professor Yaya is career academic and accomplished researcher. He is Full Professor in the School of International Development and Global Studies at the University of Ottawa and holds the Senghor Research Chair in Health and Development. Prior to assuming the position of Vice-President International and Francophonie, he was Visiting Professor at the University of Oxford. He has also held visiting appointments at Harvard T.H. Chan School of Public Health, the Johns Hopkins Bloomberg School of Public Health, and New York University. He is currently Honorary Professorial Fellow at the Imperial College London in UK.

Professor Yaya has a rich and varied experience that spans many aspects of university life. He first arrived at the University of Ottawa as an Assistant Professor, after holding a Postdoctoral Fellowship at Yale University. Gradually rising through the ranks, Professor Yaya has assumed leadership roles that have helped strengthen the institution.

His leadership has been shaped by important priorities: fostering global citizenship and training future leaders so they can develop an awareness of the world as a whole, supporting cutting-edge research and innovation so to address the most pressing and complex societal challenges. He is a distinguished health economist and global health expert known for his influential studies of maternal and child health around the world. His research is widely cited and has been disseminated in leading academic journals such as Nature Medicine and The Lancet. He has authored, co-authored and edited 22 books, 50 book chapters and over 200 peer-reviewed papers.

Professor Yaya has been involved with several journals over the last decade. His awards and recognitions include the University of Ottawa Award for Excellence in Research, the Socrate Excellence in Teaching Award from the Université Laval and he was recently appointed as a Fellow of the Royal Society of Canada (RSC).

Günter M. Ziegler, President, Freie Universität Berlin, Germany

Günter M. Ziegler started his studies at Ludwig-Maximilians-Universität München. He received his PhD in Mathematics at Massachusetts Institute of Technology (MIT) in Cambridge (USA) in 1987. Following a postdoc in Augsburg and a research stay in Stockholm, he moved to what is now the Zuse Institute Berlin. Since 1995 he has been Professor of Mathematics at Technische Universität Berlin, since 2011 at Freie Universität Berlin, where since July 2018 he serves as the President. From November 2018 until November 2020 he was the spokesperson for the Berlin University Allliance.

In 2001 Ziegler was awarded the Gottfried Wilhelm Leibniz Prize of the German Research Foundation (DFG) for his research. In 2008 he received the Communicator Award of the DFG and the Stifterverband für die deutsche Wissenschaft (Donors' Association for the Promotion of Sciences and Humanities in Germany). In 2010 he was awarded an Advanced Grant from the European Research Council, and in November 2017 he was awarded the Berlin Science Prize of the Governing Mayor of Berlin.

He is a member of the Berlin-Brandenburg Academy of Sciences and Humanities, of the German National Academy Leopoldina, and of the German Academy of Engineering Sciences acatech.

U7+ Collective Statement on the Importance of Intergenerational Justice

We, the Presidents of the U7+ Alliance of World Universities, acknowledge the current challenges facing youth around the world and the historic role of young people in calling for change and advancing equality and inclusiveness. We recognize that many of our greatest policy challenges are urgent matters of intergenerational justice. We also recognize the unique role of universities as global actors operating at the crossroads of global and local forces and at the crossroads of generations: universities serve as a space where knowledge is transmitted among generations and new, bolder visions for the future are imagined. As students participating in the inaugural U7+ Worldwide Student Forum noted, universities stand as champions of truth and scientific inquiry and are uniquely positioned to shape dialogue and decision-making at all levels of society.

Therefore, we commit to advancing intergenerational justice by responding to issues of global relevance that take the interests and rights of youth and future generations into account. We commit to serving as platforms for open intergenerational dialogue, and to supporting students' development as global citizens and leaders. We also call on multilateral organizations including the G7 and leaders across public and private sectors to join us in working to create new opportunities for mutual understanding and equitable resource sharing across generations. We also advocate for the open exchange of accurate, scientific knowledge, and for the application of that knowledge to addressing local and global challenges within all sectors of society.

Our commitment to promoting intergenerational justice builds on the overall commitments, principles, and actions of the U7+ Alliance, representing our collective efforts in areas that need our attention in order to promote intergenerational justice, including:

- training and nurturing responsible and active citizens;
- addressing the world's environmental issues through research and in leading by example;
- combatting polarization in society and working toward equality and inclusiveness; and
- promoting interdisciplinary research and education and engaging with stakeholders to solve complex global issues.

G7 Engagement and Influence

The U7+ / G7 Engagement Group submits the following proposal for consideration by the presidents at the U7+ Summit in November. It is intended as a tool to be used in preparation for the 2021 G7 meeting and U7+ meeting, both to be held in the UK.

U7+ / G7 Engagement Group:

- Stefano Caselli, Universitá Bocconi
- François Collin, HEC
- Adel El Zaïm, University of Ottawa
- Susan Hyde, Berkeley
- Ambassador Ian Kelly, Northwestern
- Julia Kulik, University of Toronto
- Annelise Riles, Northwestern
- Vanessa Scherrer, Sciences Po
- Sawako Shirahase, University of Tokyo
- James Smith, University of Edinburgh
- Cassady Walters, Northwestern
- Charles Puybasset and Meghan Ozaroski (support)

The ambition of the U7+ Alliance: contribution to multilateral discussion

The U7+ Alliance of World Universities was initiated in 2019, out of a call from French President Emmanuel Macron and as host to the G7 Summit that year. At the inaugural U7+ Summit in France there was unanimous agreement that universities are global actors in their own right, and that the U7+ network could serve as a powerful global actor by bringing together universities from around the world.

As concerns our engagement with the G7, the following points were largely agreed upon:

- Our connection to the G7 is a major differentiator for many members of the U7+.
- There is strength and opportunity in both our connection to and independence from the G7.
- While our primary purpose is not advocacy, we have much expertise to offer the G7 and other multilateral organizations. First, universities are both locally rooted and also deeply globally networked. Hence, we offer a unique multilateral perspective on global issues that take into account local conditions. Second, unlike other sectors of society, we are positioned to take the "long view" on policy issues—whether to invest in, imagine and engineer scientific solutions to local and global problems, or to prepare future generations for leadership.
- Engagement with the G7 is by no means all that we do; our own actions on our campuses, and in consort with one another, are the primary way in which we influence global events. However, G7 engagement is one area of activity among others for the U7+ Alliance.
- In the future, our U7+ engagement strategy need not be limited to the G7 and can also target other international fora and organizations, such as the G20, UNESCO and other UN programs. We may also engage international and regional organizations or associations, such as the African Union or the Association of African Universities. These connections can be made bilaterally or through the G7.

Proposal: a two-pronged strategy for G7 engagement

Direct Advocacy: Engagement with G7 leaders and influencers
We propose that one focus, among others of the U7+, is to serve as a formal engagement group of the G7. Direct engagement with the G7 offers us a unique opportunity to propose ideas and define solutions to global problems, and to elevate the role of universities overall, as global actors.

Engagement groups take many forms. We propose the U7+ should work to advocate for universities, for students, and for evidence-based policymaking in nations of the G7, while also maintaining our independence. As always, we will base our positions on evidence and research, not on ideology.

As such, we plan to notify next year's G7 host, the UK, that we exist as a G7 engagement group. We will arrange for consultations with the G7 organizing team (Sherpa team), as is the practice with other consultation groups, such as the B7, S7, Y7 and so forth.

Beyond this, we will ask U7+ universities in G7 member countries to hold direct conversations with their G7 delegations to elevate the role of the U7+ as a G7 engagement group and to consider advocating for key interventions related to the theme and agenda for the current year's meeting.

Influencing Ideas: Media engagement and communication strategies
The second prong of our proposed strategy is to define one or two key messages ahead of the G7 annual meetings and to mount a global information campaign through each of our universities to raise awareness among the public and influence policy makers through the public sphere. We propose to collectively develop messages that will draw attention to issues requiring greater focus from the public and policymakers.

One important aspect of this strategy, we believe, is to prepare a simple but strong statement aimed at a public audience that can be adopted at our annual Summit. For 2020, this is the U7+ Commitment to Intergenerational Justice. We propose to then offer this statement to other universities outside of the U7+ Alliance to join on as signatories after its adoption at the U7+ Summit. This provides an opportunity to increase our impact and profile and raise our global collective voice as universities in action as an even stronger and more representative group.

We would then prepare a communications package, including briefing materials and talking points, and work together in key media markets to place thought leadership pieces from university presidents on behalf of themselves and the U7+ Alliance in media outlets around the world.

Focus for 2020-21: Intergenerational Justice

Our students increasingly feel a sense of generational imbalance in terms of who will pay the price for decisions made, or not made, by policy makers today. As their elders postpone effective action to address issues like the climate crisis, mounting debt, economic inequity, and racial injustice, the younger generation senses keen injustice: it is they who will have to face the consequences of action deferred. We all must understand this will negatively impact the democratic system that unites the G7 nations. At best, political apathy, and worst, support for other political ideologies, follow when a generation feels the present system does not allow them more participation in determining their own future.

As such, we will promote the importance of intergenerational justice as a critical social issue across our countries, and as a useful frame for understanding that policy challenges, from climate change to economic policy, have an intergenerational dimension. For democracy to grow and thrive, the successor generation must feel it has a stake in decision making. The U7+ offers a connection to between generations. Universities have a responsibility to prepare the next generation for global leadership, and we propose to elevate their interests to the attention of G7 and other global leaders.

A focus on intergenerational justice will enable G7 leaders to look beyond short-term election cycles, and towards the long-term interests of all their citizens and of the global community. By taking a long view of these long-term global challenges and opportunities we face—including climate and energy, emerging technologies like artificial intelligence and digital innovations, the COVID-19 global pandemic, and more—we will take the interests and rights of youth and future generations into account when addressing these issues, and thus make our democratic systems of governance stronger.

In future years, other themes will be adopted by the U7+ and promoted to the G7 or even across other organizations and global governing bodies. We also expect that our approach to the G7 will change and grow as the U7+ Alliance matures and gains experience with this engagement.

Initial steps

- Adopting the U7+ Commitment to Intergenerational Justice
  Our adoption of a unifying statement on the importance of intergenerational justice, which reflects our shared U7+ Alliance commitments, principles and actions, will form the basis of our engagement strategy.

- Offering the statement to universities beyond the U7+.
  Once the statement has been adopted by members of the U7+, we will work within our own national networks to encourage more universities to join as signatories in support of the statement.

- Developing a communications strategy
  A concrete communications strategy will be necessary for both prongs of this recommended strategy. Internal communications, media engagement, and direct pathways to the G7 will all be important to develop and execute. As a first step, the U7+ host will develop a communications strategy as part of the U7+ Presidential Summit, and then build on those successes moving forward.

- Direct engagement with G7 leadership
  The U7+ is already building relationships with G7 leaders, including with the organizers of the 2021 G7 meeting in the UK. U7+ member institutions should map their direct connections to G7 leadership through faculty and alumni networks. The U7+ should prepare briefing materials for member universities to use in activating these networks. Working through those connections we will engage national G7 delegations directly around the agenda of the U7+.

- Building a leadership team for the U7+ / G7 Engagement Group
  Ongoing work will be necessary in order to coordinate the U7+ / G7 engagement efforts. Moving forward, the U7+ UK hosting universities will convene regular meetings of a steering committee to make continual inroads with the G7. Members of the U7+ with an interest in joining this work are warmly welcomed. Please reach out to Annelise Riles (annelise.riles@northwestern.edu) to express willingness to join the steering committee.

THE INNOVATIVE UNIVERSITY

Renewing the Role of Universities in the Digital Innovation and Artificial Intelligence Ecosystem

A PROJECT LED BY

Université de Montréal

WITH 12 OTHER U7+ UNIVERSITIES

A U7+ PROJECT LED BY UNIVERSITÉ DE MONTRÉAL

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FOREWORD

The U7+ brings together universities from G7 countries and beyond that are committed to academic freedom, scholarly values and fulfilling their key role as global actors. Through the U7+, universities engage in discussions leading to concrete actions to address pressing global challenges. The Covid-19 crisis is a patent reminder of the pressing need to engage globally through key institutions such as universities. Our students, faculty, researchers and staff are instrumental in defining and implementing U7+ actions.

The first U7+ summit, held in Paris alongside the July 2019 G7, was a unique opportunity for nearly 50 university leaders from 18 countries on all continents to develop a common agenda and framework for university action on global challenges.

At that summit, the Université de Montréal agreed to participate in a number of activities, and take the lead in working with 12 other universities on the challenge of Digital Innovation and Artificial Intelligence (DI&AI) in higher education. This role involves:

Exercising strong leadership, alongside tech companies and governments, in developing and promoting guidelines about how data sciences and digital innovation should be handled. To that end, our universities may seek to establish a first version of a position paper by 2020, that shall be built on the universities' best practices and whose aim is to shape technological transformations for the broad benefit of society and individual wellbeing.

The Université de Montréal is well positioned to lead this project. We previously led the **Montreal Declaration for Responsible Artificial Intelligence**, which has been **recognized** as one of the world's most complete set of principles for AI development and use.

I am strongly convinced that universities have an essential role in maximizing the positive impacts and minimizing the negative effects DI&AI will have on societies.

But I also believe that universities will need to rethink their processes, strategies and even organizational models to remain key players in a world where the future is radically uncertain.

Georges Clémenceau famously said that: "war is too important to be left to the generals". There is no doubt in my mind that DI&AI are too important to be left to firms, computer scientists and governments alone, and that there is a need for universities to co-lead initiatives with these other actors in a vibrant DI&AI ecosystem.

The creation of the DI&AI Academic+ Network, as proposed by the authors of this report, will promote cooperation between universities, public agencies, firms and civil society organizations to develop and enact collective responses to the major issues and opportunities raised by DI&AI in today's societies. It is, in my opinion, an absolute necessity.

It is also my hope that the fruitful collaborations that have developed through the production of this position paper continue well into the future.

I would like to extend my warmest thanks to the authors and collaborators of this report and look forward to further developments and cooperation among our institutions.

Guy Breton, Rector
Université de Montréal, Canada

EXECUTIVE SUMMARY

In this paper, we discuss how universities can become more essential players in the digital innovation and artificial intelligence (DI&AI) ecosystem and increase their capacity to support the "responsible" development and use of these technologies.

The four sections of Part I explore the different ways in which universities can change the future of DI&AI and how DI&AI might transform the world of universities. Concrete examples of innovative and inspiring academic practices related to various challenges and opportunities explored in the paper are highlighted throughout.

In section 1, we recognize that academics in the social and human sciences (SHS) have started to develop knowledge, tools and methodologies around the concept of responsible DI&AI. However, these have yet to be integrated in organizations and policy, which struggle to anticipate the societal impact of producing and using cutting-edge DI&AI systems. Collaboration between SHS scientists, their Science, Technology, Engineering and Mathematics (STEM) colleagues and non-academic actors in the DI&AI ecosystem is not yet commonplace. We explore some of the impediments to this collaboration, while stressing its increasing importance in the face of growing public mistrust of organizations operating DI&AI and collecting and using personal data. Universities have not yet adopted changes required to capitalize on their status as trust brokers and engage with civil society and other stakeholders on issues of responsible innovation.

RESPONSIBLE DI&AI

The "transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products."

RECOMMENDATION 1: Universities should systematically assess their capacities in SHS and develop strategies to increase their ability to support and promote the use of transdisciplinary SHS knowledge within the DI&AI ecosystem.

RECOMMENDATION 2: To support responsible DI&AI innovation, universities should develop and implement strategies and competency-based training that will foster collaborative partnerships and cross-fertilization between SHS and STEM trainees and researchers, within and outside universities.

RECOMMENDATION 3: Universities should develop a strategy to support their role as third-party trust brokers within the broader ecosystem for responsible DI&AI. Initiatives to support the participation of various publics in the definition of responsible DI&AI are a manifestation of this civic leadership agenda.

Section 2 explores the importance of transforming the processes governing university research. Traditional safeguards and standards are impractical and inadequate for academic DI&AI research. Shortcomings are seen in the difficulties faced by researchers in obtaining informed consent at scale, and by Institutional Review Boards in evaluating the ethical dimensions of DI&AI research projects. New approaches must be designed and implemented if universities are to maintain their value in an increasingly complex DI&AI research environment that includes powerful industrial players. Universities collaborate with these firms, but also compete with them for talent. And collaboration can challenge academic values: most of the data researchers need is now produced outside of universities; however current partnership models do not always protect the right to disseminate and comment research results. These challenges emphasize that DI&AI is as much a social issue as an engineering challenge and stress the need for universities to champion interdisciplinary and international research.

RECOMMENDATION 4: Universities should play a co-leading role in exploring and developing innovative data governance models within the DI&AI ecosystem.

RECOMMENDATION 5: Universities and, more broadly, public research centres should develop an explicit strategy to harness the potential of public and open data for DI&AI research.

RECOMMENDATION 6: Universities and the private sector should explore innovative partnerships that value responsible research practices and guide researchers in their application.

RECOMMENDATION 7: Universities should promote the development and implementation of research standards and guidelines that support independent and responsible research within the DI&AI ecosystem.

RECOMMENDATION 8: Universities should go global in their partnerships with other institutions and partners to promote the development and implementation of inclusive research within the DI&AI ecosystem.

Section 3 discusses the transformation of university education. First, departmental frontiers mean that curricula do not presently offer students enough opportunities to acquire the combination of digital competencies and soft skills they need to navigate the changing requirements of the job market in the DI&AI era. Second, students are seldom equipped with the competencies required to develop DI&AI innovations that consider the needs and expectations of end users. STEM researchers in particular lack opportunities to develop an understanding of the societal context of technology use. Third, the biases built into many DI&AI tools can be attributed to the underrepresentation of groups such as women and visible minorities in the field. This points to factors such as admission parameters and faculty diversity that universities should address vigorously.

RECOMMENDATION 9: Universities should collaborate to develop innovative online and on-campus courses and programs to increase digital literacy, adaptability and resilience in students and workers.

RECOMMENDATION 10: Universities should embed ethics and SHS literacy across the curricula for tech students, notably by using transdisciplinary learning experiences, to support responsible DI&AI research and innovation.

RECOMMENDATION 11: Universities should develop innovative and vigorous strategies to promote equity and diversity in STEM courses and programs, and more specifically in DI&AI domains.

Section 4 delves into how universities use DI&AI themselves. DI&AI represent an opportunity for universities, giving them the capacity to rethink current processes and elaborate new business strategies. MOOCs, for example, enhance the scalability and affordability of university courses, and AI could significantly change the process of evaluating student applications. But the rise of DI&AI also risks disrupting the higher education sector by enabling new organizations in some fields to gain market share at the expense of universities. Powerful algorithms could enable virtual providers of education services to tailor lessons, exercises and support according to the needs of each individual learner.

RECOMMENDATION 12: Universities should study how DI&AI will impact their business models and implement strategies and processes to enhance the positive effects of DI&AI on their organization.

RECOMMENDATION 13: Universities should produce a practical guide on steps universities can take to become responsible and efficient users of DI&AI and better carry out their missions. This guide would emphasize DI&AI practices that have been successfully experimented or adopted by universities across and outside the U7+ network, the challenges they faced and the solutions they implemented. It should also help universities identify the expertise they will need to use DI&AI as a lever for change.

RECOMMENDATION 14: Universities should create knowledge exchange forums and online courses on the topic of DI&AI. These should be tailored for different university players (e.g. forum for researchers, forum for CIOs or Chief DI&AI Officers, forum for employees).

Part II of the paper presents the DI&AI Academic+ Network, a new entity designed to promote cooperation between universities, public agencies, firms and civil society organizations, in order to develop collective responses to the issues and opportunities raised by DI&AI.

We describe the importance of networks as a means to assemble the conditions of collaborative governance across autonomous yet interdependent organizations and groups.

The Academic+ Network goals are to promote dialogue and research on responsible DI&AI; develop, share and promote best practices and tools that contribute to embedding responsible innovation principles and mechanisms; develop innovative solutions through collaborative research on responsible DI&AI; and speak as a single voice on core DI&AI issues.

Finally, we describe how the Network would operate. Universities would adhere to the Network on a voluntary basis, with participation fees staggered according to the resources of a university's country of origin. A steering committee comprising representatives from four universities along with four non-academic members would be created to develop the Network's plan and program of activities, as well as the framework used to evaluate network performance.

RECOMMENDATION 15: The U7+ universities will formally decide at their next meeting whether to host a network of universities dedicated to responsible DI&AI innovation. Universities that collaborated on this position paper have already expressed their interest in participating in such a network.

RECOMMENDATION 16: A steering committee will be formed at the next U7+ meeting with the mandate to develop a business and activity plan for the network within six months. This steering committee will make concrete proposals on financial, governance and operational matters, as well as identify program priorities for the network. Right from the start, the DI&AI Academic+ Network will benefit from administrative and strategic support to ensure its viability and success in the initial phase of development.

INTRODUCTION

In the foreword to *The Age of Digital Interdependence*, Melinda Gates and Jack Ma, who co-chair the UN Secretary-General's High-level Panel on Digital Cooperation, underlined the demanding task of forging a digital ecosystem that is highly inclusive and aligned with broad societal goals:

> ***We urgently need to lay the foundations of an inclusive digital economy and society for all. We need to focus our energies on policies and investments that will enable people to use technology to build better lives and a more peaceful, trusting world. Making this vision a reality will require all stakeholders to find new ways of working together.***

In this position paper, we provide a modest response to the invitation extended by Ms. Gates and Mr. Ma. It represents the work of a group of researchers from 13 universities, who committed within a short time frame to consider how universities—as institutions with their own missions, assets and challenges—should play their part in the digital world.

The paper explores the roles played by universities within the expanding ecosystem of responsible digital innovation and artificial intelligence (hereafter DI&AI, defined in the box below). More specifically, we discuss how universities can become more essential players in this ecosystem and increase their capacity to nurture and promote DI&AI through collaboration with other institutions, such as firms or non-governmental organizations (NGOs), without compromising their unique contribution.

This focus arises from the observation that (1) people and societies are in the midst of a powerful and transformative technological transition accelerated by AI; and (2) the social sciences and humanities have a key role to play in informing and shaping that transition to reduce the risk of discrepancies, time lags and misalignments with broader societal goals.

In the context of massive proliferation of DI&AI innovations, two main institutional functions of universities – strongly associated with assets they have developed in the social sciences and humanities – become prominent. Universities may not have a monopoly over these essential and interdependent functions, but are well positioned to support them within the DI&AI ecosystem.

First, universities serve as engines of trust. In an era of information overload and fake news, universities can actively participate in shaping a well-informed and critical stance at the interface of societies and DI&AI. To be such "critical friends", universities need to govern by example, developing best practices in technology development and use within each of their missions (education, research and community service). Second, universities promote institutional reflexivity, and can participate in the construction of societal capacity to approach change and innovation in a more deliberate and self-conscious manner.

This paper identifies and analyzes the specific roles universities should assume within the DI&AI ecosystem, pursuing several lines of inquiry that each lead to a set of recommendations.

RESPONSIBLE DI&AI: A DEFINITION

For the purposes of this paper, responsible DI&AI is understood as "a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society)."[3] The vision of responsible DI&AI implies inclusiveness in terms of gender, cultural and social groups and countries with different levels of resources. In order to reap maximum benefit, and avoid potential pitfalls, universities must accept to be challenged by other players in order to position themselves as one of many valid actors within the emerging and expanding DI&AI ecosystem.

Part 1 examines the impact of DI&AI on the future of universities, their core missions and aspirations. It starts by exploring the role of universities in the production and circulation of knowledge about DI&AI in society, and the potential for them to participate in networks composed of firms, individuals, public agencies and NGOs to achieve pre-defined outcomes in terms of responsible DI&AI. It then looks at how such technologies transform

research and teaching habits and environments and how universities might develop a responsible approach to DI&AI in these missions. Lastly, it analyses how universities will be impacted as users of these technologies, stressing the need for them to support the design and implementation of novel and effective practices and safeguards.

Part 2 describes how networks would help universities play their role in DI&AI more effectively. It suggests a network model whose implementation could help create the institutional conditions to support both the transformation of universities and the expansion of their role as advocates, stewards and developers of innovative solutions for responsible DI&AI innovation.

Further work will be needed to assess the practicability of some of these recommendations and define conditions required for universities to increase their impact on the evolving digital world. Our ambition in this paper is to lay the groundwork for essential and pressing efforts that will require the adoption of candid approaches by universities and the creation of solid local and international networks of researchers.

PART I:
DI&AI AND THE FUTURE OF UNIVERSITIES

SECTION 1: Universities and knowledge systems in the digital world

DI&AI is currently high on the innovation and research agenda of many countries.[4] For example, machine-learning systems are now used for image analysis, real-time language translation, autonomous driving, fraud detection and disease diagnosis.[5] With the rapid diffusion of digital innovations and intelligent systems, hype, hope and fears emerge around the implications of DI&AI for society and the economy.[6, 7, 8]

DI&AI applications bring benefits, but also have unanticipated and undesirable consequences. Facial recognition tools, for instance, can be used to monitor individuals and surreptitiously gather information about their political preferences.[9] Experts worry that applications developed to fight Covid-19 or other viruses will "enable popular repression and strengthen illiberal regimes[10]." Deep learning can be employed to deceive the public by generating convincing images that support the spread of fake news.[11] These phenomena call for an expansion of the knowledge system associated with the digital world, in which social and human sciences (SHS) scholarship and effective knowledge translation practices play a key role.[12, 13]

ZOOM IN

USING AND VALUING SHS KNOWLEDGE

Researchers at University Paris-Saclay launched the project "Bad Nudge-Bad Robot?" to explore the ethical implications of connected objects (such as conversational agents) and raise awareness among technology developers and users about the potential danger of "nudges" (subtle influences on human cognition and action).

In December 2018, Osaka University supported an international symposium "Image of Human Being in the Age of Artificial Intelligence" that gathered top executives from international organizations (the Assistant Director-General of UNESCO and the Director for Science, Technology and Innovation of the OECD) as well as scholars and practitioners from multiples fields (philosophy, ethics, anthropology, jurisprudence, constitutional law, competition law, information law, communications law, economics, business management, neuroscience, informatics, computer science, digital engineering, and science communications). Key issues regarding DI&AI were discussed among scholars and experts and international agencies.

In 2019, HEC Paris and École Polytechnique launched a joint project with the French Supreme Court and the DATA AI Institute to conduct an interdisciplinary assessment of the potential uses of AI in the Court system. The project emerged as an alternative to privately run projects which, in many cases, seek to profit from the expertise and data available in the Courts. In addition to providing access to state-of-the-art research, this project also enables Courts to reflect and work on long term goals for their digital transformation. The project included a commitment to ethical and explainable AI, including the publication of algorithms that were effectively implemented.

Several governments have launched "AI frameworks" in the past few years to spur economic and technological growth through digital transformation.[14] These frameworks range from the "US executive order on AI leadership" and China's "Next Generation AI Development Plan" to the European Commission's "White Paper on AI" and the "Pan-Canadian AI Strategy." In these strategies, university-industry partnerships in AI R&D are considered central to accelerating knowledge spillover and innovation. This type of collaboration can and should be expanded to the SHS domain.

Partnerships based on knowledge exchange and co-development between and among universities, societies and organizations or industries are common in fields such as engineering, health and computer science. However, they have been much less present, historically, in the SHS sector.[15] Competing or alternate narratives around the role of universities in society (for example the Modes of knowledge production[16] and the Triple Helix[17]) have stimulated growing interest in the idea that universities should play a more active role in systems of research and innovation, and that this role should transcend their current boundaries.

ZOOM IN

COLLABORATIVE RESEARCH AND INNOVATION IN HEALTH SCIENCES

Over the years, several universities around the world have developed centres for collaboration and co-production in health research and innovation that seek to enhance patient and public engagement alongside professional researchers and innovators.

The University College London has a Centre for co-production in health research.

The University of Montreal is one of the initiators of the Centre of Excellence on Partnership with Patients and the Public (CEPPP), a global pioneer in the development of new practices to integrate the knowledge and experience of patients and families into health research and innovation.

Labour market studies show that SHS graduates in Canada work in all sectors.[18] There is an opportunity for industries and developers in the DI&AI ecosystem to employ these graduates to support the development of in-house capacities for responsible DI&AI. Moreover, universities can work with these firms to create partnership positions or chairs for highly qualified doctoral and post-doctoral SHS graduates, or embed these researchers within firms.

While the benefits that SHS researchers bring to firms are widely recognized, institutional factors specific to academic work and processes may limit the circulation of knowledge between universities, on the one hand, and private and public organizations on the other.[19] For example, studies have shown that tackling non-academic challenges often places scholars at a disadvantage in academic career paths that focus almost exclusively on reaching narrow disciplinary goals, raising funds, and publishing.[20]

Entrepreneurs and experts we consulted also mentioned a certain disconnect between the DI&AI research conducted in academic centres and the research that companies and start-ups need or have the capacity to exploit. Making timely use of research findings is considered difficult. A better balance is needed between the curiosity-driven research in universities and problem-driven research aligned with the needs of developers and users.

To address these issues, universities have started to develop tools and methodologies that can accelerate knowledge exchange around the production and use of DI&AI. This knowledge can relate to DI&AI programming techniques, but also to the social, ethical and legal tools and processes that are critical to the responsible development and integration of DI&AI technologies into organizational settings.

The disconnect between AI research conducted in STEM departments and the research on AI issues undertaken by SHS researchers is another obstacle to knowledge exchange.[21] While publications on AI have increased steadily over the past half century, SHS researchers have not kept pace, as seen in the low numbers of references in recent SHS studies on AI. Moreover, an increasing proportion of AI research is conducted within industry, which tends to limit dissemination of research results to academic departments and public agencies.[22]

The increasing gap between STEM and SHS research means that researchers and policy-makers may have trouble anticipating the societal implications of producing and using cutting-edge AI systems. This situation underlines the importance of developing interdisciplinary and joint initiatives for responsible DI&AI between universities, developers, industries and concerned partners.

ZOOM IN

ACCELERATING DI&AI KNOWLEDGE TRANSMISSION

Imperial College London publishes lists of AI and digital experts that can act as consultants for public and private organizations. Moreover, the university creates podcasts to communicate scientific information to the public .

In the UK, organizations that are members of the **What Works** network can access tools that help identify evidence-based practices. See, for example, the Education Endowment Foundation.

Paris-Saclay University launched Scikit-learn to provide simple and efficient tools for predictive data analysis (machine learning with Python). Tools are accessible to all and can be used in various contexts.

ZOOM IN

KNOWLEDGE CO-CREATION AND INNOVATION CO-DEVELOPMENT

The **University of Bordeaux** launched the Spine application that allows the public to annotate MRI brain images as a contribution to research in neuroscience. By mobilizing hundreds and thousands of Internet users, large collections of medical images can be analyzed very quickly to answer pressing questions about Alzheimer's disease, multiple sclerosis and other neurodegenerative disorders. The University of Bordeaux is working with Brigham and Women's Hospital (affiliated with Harvard Medical School, Boston) on this project.

Osaka University established the Institute for Datability Science (IDS) to promote productive collaboration between STEM and SHS scholars (including legal scholars, lawyers, ethicists and economists). One of its objectives is to connect data science researchers with researchers from different backgrounds (medicine, arts, legal studies, history) who want to work on DI&AI projects, and help them obtain external funding for their project. The Institute supports researchers in putting together the responsible research component of their grant proposal in order to ensure that the project respects responsible research practices and meets the Institute's standards.

Côte d'Azur University has developed dedicated structures to spur collaboration between academic research, industry and markets around DI&AI developments. Reference Centres set up public-private partnerships for the development of innovation through experimentation, testing of products and services, and co-financing. The Center of Modeling, Simulation, and Interactions offers specific training, advanced expertise and cutting-edge technology to entrepreneurs and project leaders.

Growing public distrust of systems and companies that collect and use personal data[23] suggests the need for a more vibrant civic leadership within the DI&AI knowledge system. This idea rests on the fact that citizens can contribute significantly to shaping policies around complex issues. Given that universities and scholars are still considered credible sources of information by citizens and political representatives[24], they are well positioned to play the role of third-party trust brokers in supporting the development of civic leadership for responsible DI&AI.[25] They can rely on this reputational capital to engage broadly with stakeholders in the ecosystem.

To play this role, universities need to incorporate within their core mission an agenda of public participation and deliberative democracy, incentivize faculty members to take part in civic activities, and recognize researchers who participate in these transformative practices. The principles and methodologies needed to support universities and other institutions in this regard are well developed.[26] The Montreal Declaration for Responsible AI is a good example of the integrative leadership universities can provide, as its architects used co-construction methods involving researchers and civil society participants to develop guidelines and policy recommendations for AI production and use (see Zoom In on next page).

ZOOM IN

THE MONTREAL DECLARATION FOR RESPONSIBLE AI

The Montreal Declaration is the culmination of more than a year of work, research and discussion with close to 500 citizens, experts, public policymakers, industry stakeholders, civil society organizations, and professional associations. This democratic co-construction process, organized by the **University of Montreal** and the Fonds de Recherche du Québec, aimed to produce guidelines for the development and deployment of AI in society. In December 2018, the final version of the Declaration was made public, presenting 10 ethical principles and a set of recommendations.

DEMOCRATIC SPACES FOR DI&AI DISCUSSION

The Bordeaux Artificial Intelligence Alliance (BAIA), a project carried out by **University of Bordeaux**, comprises more than 2,000 individuals from industries, public agencies, non-profit and academic institutions. Information regarding DI&AI developments is shared through newsletters and social media with all members of the network.

ZOOM IN

Côte d'Azur University is setting up a "Maison de l'intelligence artificielle" (AI House) in partnership with local and national authorities. It will invite citizens to participate with developers and innovators in discussions about DI&AI, as well as the co-creation of knowledge and innovation.

Aix-Marseille University is participating in the creation of the "City of Innovation and Knowledge", with support from the French government. Designed as a crossroads between research, innovation, training and culture, it will host research laboratories and offer training by academic and industrial actors. The City's ambition is to create an economic and cultural hub that is oriented towards France's Mediterranean partners.

Imperial College London is a main participant in the GovTech Lab that aims to facilitate the discussion, adoption and exploration of new digital technologies – AI, Internet of Things, Big Data, Blockchain – with a view to supporting the adoption of these technologies in the public sector. The GovTech Lab platforms has three functions. The first the Knowledge Transfer Consortium, a discussion forum that brings together stakeholders from government, academia, business and industry. The second is Education and Training, where the GovTech Lab provides a central hub for educating and enhancing knowledge for people interacting with emerging technologies. The third is the Research and Development platform, which showcases activities of the GovTech network. Network participants include leading UK academic research groups and professional experts from government and industry.

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RECOMMENDATION 3: Universities should develop a strategy to support their role as third-party trust brokers within the broader ecosystem for responsible DI&AI. Initiatives to support the participation of various publics in the definition of responsible DI&AI are a manifestation of this civic leadership agenda.

SECTION 2: Transforming the Research Agenda

The recent evolution of technology has resulted in an exponential increase in the production of digital data and the capacity to harvest and process data. The rise of "Big Data" presents great opportunities, but also poses challenges for the responsible conduct of research in academia.[27] Historically, universities have been promoters of sound policies and practices around data governance and knowledge production and dissemination that apply to research performed within and outside their traditional boundaries.[28] In the research space of the digital era, the relevance and legitimacy of universities as drafters of standards and good practices for responsible research is increasingly questioned.[29]

Higher education institutions around the world need to take urgent action to be a key player for leadership in the promotion of practices for the responsible conduct of research in the age of DI&AI. The question is not whether universities need to adapt, but how they can actively contribute to advancing the science of responsible DI&AI development and governance. That means, among other things, striving in situations of shared leadership to define requirements for ensuring the robustness of AI algorithms, regulating the commercial use of DI&AI and minimizing its environmental impact.

This next section focuses on three key research challenges DI&AI presents for universities.

1) Designing and implementing high ethical standards for the governance and stewardship of academic research in DI&AI

SHS researchers are making increasing use of Internet data as these offer new opportunities to observe and analyze human behaviours.[30] The sources of information are multiplying and becoming increasingly varied (e.g. user-generated videos, social media posts, e-health data) as the Internet becomes the backbone of communications and a main tool for conducting direct observation of activities and behaviours in society.[31] Research use of this data entails various risks and opportunities.

First, it is often difficult or impossible for researchers to collect informed consent at scale to analyze and manage the data they collect.[32] Moreover, for some research purposes, requiring individual authorization for data reuse becomes counterproductive given the societal benefits to be had from the study of large-scale and pooled individual information.[33] For example, current consent-based models used in biomedical research tend to limit research access to data collected through clinical trials, since individual approval is required for each specific research endeavor.[34]

We are currently seeing innovative attempts to ensure that, when necessary, researchers can access, analyze and manage these data without individual consent, while maintaining high standards for transparency, privacy and accountability. For instance, "data trusts" and "data commons" are new collective data governance mechanisms that represent a promising way to achieve the large-scale collection of individual data *and* their responsible use in research.[35]

ZOOM IN

RESPONSIBLE DATA MANAGEMENT

HEC Paris is part of the Centre d'accès sécurisé aux données (CASD Consortium). Research data collected by HEC Paris and partner institutions in France are aggregated into a common platform that researchers from these institutions can access securely. This initiative facilitates inter-university research cooperation and decreases costs related to data storage, management and security.

Osaka University has contributed to the Initiative for Life Design Innovation (iLDi) funded by the Japanese Ministry of Education, Culture, Sports, Science and Technology. The iLDi aims to set up a personal Life record platform that will store and manage individual data to ensure responsible reuse by researchers and companies. Secondary use purposes and practices are revised and assessed by a data ethics board. In this project, efforts are made to obtain explicit consent whenever data subjects receive a request for secondary use with specified purposes, with each request assessed by a data ethics board.

Second, despite their best efforts, researchers cannot always prevent privacy breaches when Big Data is collected, managed and analyzed (e.g. there is always a risk that de-identified data could be re-identified by matching the dataset with other identified sources of information).[36, 37] To minimize risks, precautionary measures need to be taken by researchers and universities throughout the research process. This is especially important when data leakages could cause harm to individuals.

Third, addressing the rising challenge of security will be central to the future of Big Data use and management. The 2017 WannaCry cyber-attack is a vivid example of the risks we face: hundreds of organizations were affected across the world, including many hospitals, public agencies, companies and non-profit organizations.[38] Researchers and universities need to better understand and estimate the impact of cyber-attacks and IT failures, and better anticipate and mitigate risks.

ZOOM IN

ENHANCING DATA SECURITY

Paris-Saclay University developed a project around personal cloud management to enhance the local storage and treatment of data, and improve security. This project is part of the Center for Data Science (CDS), a multidisciplinary initiative that unites more than 300 researchers and 50 laboratories around developments in data science applied to specific fields: physics, biology, medicine, chemistry, human and social sciences.

The Government of Canada is structuring a Digital Research Infrastructure to better equip researchers and academic institutions with the tools and services needed to conduct Big Data research that adheres to strict standards of data management and cyber security.

SERENE-RISC is a network of security experts created by researchers from the University of Montreal and others to break down silos and put people from academia, industry and government in contact with one another. Network leaders describe themselves as brokers who make sure information circulates in all directions. SERENE-RISC organizes two small annual conferences (about 150 people attend). They also disseminate research results. The strategy involves, "translating" scientific articles into a one-page, one-paragraph, and one-sentence summaries. To date, 200 articles have been treated in this way to publicize evidence-based results. Partners publicize the summaries in their own networks.

Fourth, traditional research oversight systems will need to be revised or upgraded to enable universities to face the challenges raised by DI&AI research. These systems include the Ethics Committees and Institutional Review Boards (IRB) that universities have put in place to monitor research involving human subjects. The relevance and usefulness of IRBs are increasingly questioned in the Big Data era.[39] Critics mention that IRB members are rarely experts in Big Data and struggle to evaluate the safety, validity and ethical dimensions of DI&AI research projects, which may involve uncommon questions and research methods.[40, 41] Moreover, IRBs do not always have the resources required for post-approval assessment of research projects.[42] There is therefore a need to adjust, and perhaps extend human research protection systems beyond current IRB practices to enable researchers and universities to better safeguard the rights of human subjects involved in DI&AI research.[43]

Last, but not least, academic researchers and universities must remain both critical and innovative in the DI&AI age. Universities should play a pedagogical role and entice other players to tackle issues related to the responsible production and use of DI&AI. The academic research community should emphasize critical thinking to push back against techno-solution promises of DI&AI when that appears necessary, and remind politicians and policymakers that while DI&AI holds significant promise, it cannot solve all the problems societies are facing.[44, 45] More specifically, universities could, and arguably should, come together to develop specific guidelines regarding the production and use of DI&AI by universities, researchers and developers. They could rely on existing guidelines (e.g. tools included in the Montreal Declaration for Responsible AI) or work together (see Part 2) to develop shared guidelines to orient digital transformations.

ZOOM IN

CREATING A DI&AI IMPACT OBSERVATORY

In 2018, the University of Montreal collaborated with eight other universities to create the International Observatory on the Societal Impacts of AI and Digital Technology (OBVIA). OBVIA brings together researchers, businesses, non-profit organizations and public institutions to conduct cross-sectoral and interdisciplinary work aimed at enhancing society's ability to maximize the positive impacts and mitigate the negative effects of AI and digital technology on people, organizations and communities.

In 2019, Côte d'Azur University, along with public partners, launched the first Observatory on AI in France and in Europe called OTESIA. It will partner with companies, local governments and non-profit organizations in the analysis of AI's impact on society, the economy and the elaboration of public policies.

2) Articulating responsible academic-industry partnerships for Big Data and AI use

Universities are evolving within a research environment that is increasingly complex and dense. First, they collaborate with private laboratories, large firms, think tanks and public agencies, while also developing knowledge in parallel with these multiple stakeholders.[46] Second, the resources of commercial research centres funded by tech giants (with large salaries, advanced technological infrastructure and computing power, and especially access to Big Data) have made them increasingly attractive to top DI&AI graduates and academics. Constrained by current academic rules and structures (such as limits on the data they can collect and how they can commercialize innovation),[47] some academics are completely or partially leaving universities.[48, 49] Third, academic researchers' increasing ability to use privately owned data and commercial computing resources creates fresh opportunities for academic research, but challenges their academic independence and capacity to disseminate knowledge (e.g. traditional industry-academic partnerships include limitations in key areas like data security, data control, privacy protection, avoidance of conflicts of interest, and accountability).[50]

ZOOM IN

AI RESEARCHERS WITH PUBLIC AND PRIVATE AFFILIATIONS

Joelle Pineau, AI Professor and researcher at McGill University, is also heading the Facebook Artificial Intelligence Research Lab in Montreal (FAIR Lab). The agreement was concluded between the tech giant and McGill University as a way to retain leading AI academics such as Professor Pineau.

At Mila, several university professors are conducting academic research and supervising and teaching students, while leading research projects in DI&AI companies and start-ups. Conversely, experts from the industry are welcome at MILA to supervise doctoral and postdoctoral student research.

HEC Paris hosts multiple chairs sponsored by private firms such as AXA, Joly Family, L'Oréal, Natixis and GS1 related to data analytics and digital transformation. These chairs provide researchers with key data to conduct their projects. The chair system is organized in a way that preserves academic freedom and benefits both researchers and students of the school. For instance, the Joly Family Chair held by Prof. Rodolphe Durand has led to the creation of a compulsory course on purposeful leadership for all bachelor students in the school. Similarly, the SMART Law Team at HEC Paris is working with Atos and students of multiple programmes (MSc Data Science for Business, LL.M. and CEMS) to create AI-driven and Smart contract solutions to ensure compliance in data flows. The ultimate goal of the project is to ensure people's personal data is protected across the supply chain of the global digital economy.

That said, universities are very well positioned to conduct important DI&AI research and exert a significant impact in the field. They have the capacity to harness the human and technological resources needed to pioneer "blue-sky research" exploring high-risk domains. Moreover, universities house a large number of impactful publicly funded research institutes and researchers that have their own networks across universities and within

the broader DI&AI ecosystem. Universities are therefore well positioned to access and analyze the vast amounts of still unexplored public or government-held data (health data, socio-environmental data, security data, transportation etc.) necessary for interdisciplinary and socially driven research activities that are complementary to the business-driven R&D conducted by for-profit companies.[51] Partnerships with governments and public agencies are key to ensuring that universities can play this role.

ZOOM IN

UNIVERSITY PARIS-SACLAY CENTER FOR DATA SCIENCE

Paris-Saclay University has constituted a Center for Data Science (CDS) that aims to develop methods and tools to analyze and extract useful information from large amounts of data for research use in physics, biology, medicine, chemistry, the environment and the human sciences. This project is multidisciplinary and involves research on analytical methodologies (statistics, processes of machine learning, extracting knowledge, viewing data), as well as on software design. More than 300 permanent researchers in 50 laboratories participate in the CDS supporting data science projects and events.

Data production outside the academic world is not new, but the fact that it has become predominant is unprecedented. The significant asymmetry between universities and industries in terms of resources and governance structures[52] explains the lucrative industry-academic partnerships involving researchers from both worlds that have emerged to train and validate DI&AI models.[53] Such partnerships can be challenging for academic researchers who have to adapt to imperatives and rules that may be incongruent with their usual research practices. Researchers may have to revisit how they conduct data analysis and publish results when interacting with partners who have different incentives and priorities (e.g. corporate/industrial secrecy). Researchers may find such relationships arduous and have difficulty anticipating consequences without guidance from their institution and exchanges with other researchers about their experience.

This exchange of information and best practices on industry-academic partnerships could lead to the development and implementation of models to ensure the quality of data used for research purposes, and the protection of researchers' academic freedom when collaborating with DI&AI industries (e.g. researchers should be able to present their research results and comments on research in different forums). Universities will also need to think about governance guidelines to help their researchers navigate efficiently through these new partnerships opportunities.

ZOOM IN

INNOVATIVE UNIVERSITY-INDUSTRY PARTNERSHIP

Harvard University has created an organizational model of university-industry partnership managed by an organization of academics named Social Science One, supported by the Institute for Quantitative Social Science at Harvard and the Social Science Research Council. The model enables researchers to access privately-owned data that would otherwise never be shared with the academic community. It proved effective at forging a productive partnership between Harvard researchers and Facebook.

3) Creating productive interdisciplinary and multi-stakeholder research partnerships to support responsible AI development

DI&AI present society with numerous opportunities, but also major challenges. For example, researchers emphasize that workers and citizens are right to be concerned about use of biased automated decision-making systems by courts, social services, hospitals, etc. that pose important risks of discrimination.[54] Legal scholars, in particular, have underlined that the deployment of AI systems to support, and sometimes replace, professionals in the execution of administrative and analytical tasks raises liability and accountability issues.[55]

These examples illustrate that DI&AI is as much a social issue as it is an engineering challenge. Interdisciplinary approaches are therefore essential to understanding and navigating the socio-technical conundrum of DI&AI development and deployment. Universities will need to transform their current approach to DI&AI research, by expanding the capabilities of STEM researchers beyond big data analytics, machine learning and software engineering. Academic institutions can capitalize on their extensive networks of researchers to develop a better understanding of the ethical, legal, managerial and societal implications of DI&AI. Some universities are already investing in this area through the development of interdisciplinary DI&AI research centres that promote interaction between SHS, STEM and other researchers.

ZOOM IN

INTERDISCIPLINARY DI&AI RESEARCH CENTERS

Founded in 2010, the University College London Centre for Digital Humanities (UCLDH) is a cross-faculty research centre that brings together a vibrant network of people who teach and research a wide range of disciplines. UCLDH cultivates close working relationships between the university and international institutions, culture and heritage sectors and industry partners.

Osaka University has set up an interdisciplinary integrated research centre to explore ethical, legal and social issues (ELSI) arising with emerging technologies, including AI and ICT systems. The centre is focused on the following activities: (1) implementing and facilitating interdisciplinary integrated research on ELSI; (2) providing a hub for formulating research networks on ELSI between scholars in the humanities/social sciences (e.g., philosophy, ethics, law including jurisprudence, STS, science communications), scholars in natural science/engineering fields (e.g., computer science, informatics, robotics), the business sector, and research networks involving universities and other institutions; (3) developing collaborations among stakeholders (e.g., civil society, the academic sector, business sector, national/local government sector) to facilitate consensus-building and policy-making on ELSI; (4) developing human resources, including those familiar with ELSI as well as scholars and expert ELSI practitioners.

Interdisciplinary approaches are also key to defining the conditions under which DI&AI innovations can be efficiently and responsibly integrated into fields of practice. A main challenge today is bridging the gap between the development of DI&AI and its application in sectors such as logistics, agriculture, health care or transportation.[56] The time lapse between scientific breakthrough and widespread implementation creates a "transition period" that can put public trust at risk.[57] "Are the huge investments made in AI research really worth it?" In health care, experts speak of an "AI chasm" between the moment algorithms are developed in research labs and their implementation in real-life clinical settings.[58] This might be the main "inconvenient truth about AI."[59]

Universities can play a role in governing the efficient transition from design to diffusion of AI. They can lead or co-lead the development of research and innovation that integrate disciplines and communities within and beyond their walls. By connecting with policymakers, communities and firms, researchers can foster DI&AI developments that respond to socially relevant questions. The idea is not to stop conducting blue-sky research in DI&AI, but rather to pay greater attention to the issues raised by DI&AI innovation[60], the social context of technology use, and practical contingencies in the design and development of technologies. Such pursuits would facilitate DI&AI implementation in real-life environments and maximize its positive impact on societies and populations.

Finally, to contribute to the equalization of DI&AI research and development across countries, universities will need to invest in effective, inclusive and equitable international collaborations that span the whole research pipeline, from data collection and analysis, to algorithm development and testing, to the diffusion of research results in scientific journals. This is crucial, as the lack of diversity in DI&AI research can have highly negative impacts on AI applications on the ground.[61, 62] For instance, most of the open genomic datasets that can be used to develop and train algorithms in biomedical research overly represent white male populations.[63, 64] This

considerably limits the usefulness of AI applications in most regions and countries. Universities can play their part in addressing the AI inequity conundrum by structuring transcontinental research partnerships that will increase the probability of producing DI&AI solutions that are safe in diverse sociocultural environments.

ZOOM IN

UNIVERSITY OF MONTREAL

At the **University of Montreal**, the Centre for techno-social innovation InvenT encourages researchers and students with different expertise to work with practitioners and decision-makers in organizations on identifying and addressing problems related to AI and Big Data, while adhering to key ethical principles from the Montreal Declaration.

ZOOM IN

AI COMMONS

The AI COMMONS network unites researchers, practitioners, private and public organizations across several countries to accelerate the dissemination of expertise and resources connected to AI. In particular, the network aims to connect experts in AI and related fields with individuals and organizations that are facing a problem that this technology would be helpful in solving.

RECOMMENDATION 4: Universities should play a co-leading role in exploring and developing innovative data governance models within the DI&AI ecosystem.

RECOMMENDATION 5: Universities and, more broadly, public research centres should develop an explicit strategy to harness the potential of public and open data for DI&AI research.

RECOMMENDATION 6: Universities and the private sector should explore innovative partnerships that value responsible research practices and guide researchers in their application.

RECOMMENDATION 7: Universities should promote the development and implementation of research standards and guidelines that support independent and responsible research within the DI&AI ecosystem.

RECOMMENDATION 8: Universities should go global in their partnerships with other institutions and partners to promote the development and implementation of inclusive research within the DI&AI ecosystem.

SECTION 3: DI&AI and New Responsibilities in Education

It has become apparent during the Covid-19 pandemic that creating highly advanced digital tools is only one part of the DI&AI equation societies will have to solve. For example, mobile applications to track contacts of known cases will not be useful unless they respect a country's legislation, meet citizens' expectations with regard to privacy, and accommodate vulnerable groups, such as people without smart phones. For new products to be adopted, their integration and use in the real world needs to be planned before they launch. For example, algorithms will become useful to detect eye disease or fast-growing tumors in real-life settings only once new workflows are designed to integrate the innovation, training is provided for health professionals (e.g. to judge borderline cases) and models are adjusted (e.g. to handle often imperfect images).[65] Finally, tough questions will have to be considered regarding the transformative potential of DI&AI on societies and the economy. As seen in recent months, "we're great at devising shiny, mainly software-driven bling that makes our lives more convenient in many ways. But we're less accomplished at reinventing health care, rethinking education, making food production and distribution more efficient, and, in general, turning our technical know-how loose on the largest sectors of the economy."[66]

In this section, we argue that universities can catalyze the production of an ecosystem of responsible and socially mindful DI&AI students and workers. Universities are at the crossroads of multiple sectors and types of expertise, and can provide students, practitioners and decision makers with comprehensive interdisciplinary training that will help them navigate the fast-changing market of the digital era and contribute to the development and deployment of safer, more useful and more effective technologies. We focus here on three main educational roles universities can play in the DI&AI ecosystem.

1) Helping students and workers gain resilience, agility and autonomy to face digital transformations

While DI&AI is not exactly new, researchers and experts concur that recent advances in the field are intensifying the transformation of workplaces and the nature of work.[67] Recent studies show that AI will accelerate the shift in work skills that has been underway over the past 15 years[68] and has increased demand for advanced technological skills (e.g. in programming, data analysis, data protection). Today, a broader range of social, emotional and cognitive skills, such as creativity, critical thinking and complex information processing, are becoming essential for students seeking to integrate the labour market.[69]

As producers and disseminators of interdisciplinary knowledge, universities can play a role in helping students and workers acquire digital competencies, and develop the soft skills they need to navigate the changing requirements of the job market. With their STEM and SHS expertise, universities can produce cutting-edge knowledge on the multiple types of change induced by DI&AI to work and social relations. Universities' pluralistic approach to knowledge is highly valuable in developing comprehensive curricula that will enable students and established workers to gain resilience, agility and autonomy in the face of digital transformations.

ZOOM IN

DEVELOPING DIGITAL COMPETENCE

Côte d'Azur University has developed training programmes and modules to enhance digital and AI literacy among students from multiple backgrounds. It offers a program for bachelor's and master's students, a program for students already specialized in mathematics and computational science (including doctoral students), a program for high school students, a professional training program for non-specialists in AI (schoolteachers, managers, engineers, medical teams, doctoral students, etc.), and a program for medical professionals.

HEC Paris recently created the Centres of Expertise in Entrepreneurship & Digital (IDEA Center) and SNO (social business). The Centres focus on three axes: research and applied research, training, and implementation and outreach. Several programs in digital innovation, data science, as well as commercial and social entrepreneurship studies are proposed to students on and off campus.

Over the past few decades, universities have reshaped programs and courses to respond to evolving labour market demands and anticipate changes produced through automation and the digitization of work. Training in library science and information management is a good example of this transformation. Current and future librarians have been offered formal and continuing education courses in database searching and information classification to adapt to the rapid digitization of content and material. They have also acquired the skills needed to manage digital information according to international standards.[70]

Several institutions have started to change university curricula to match the skills required in many of the areas that DI&AI will impact.[71] In academic medicine, for instance, universities in the US and Canada have begun to offer machine-learning courses to medical students to equip them to apply AI techniques to the analysis of medical images.[72] While these adaptations cannot anticipate all the changes that will affect work and professions, they are essential to developing more adaptive individuals with a broader range of competences.

ZOOM IN

TRAINING A NEW GENERATION OF DI&AI LEADERS

University College London launched two new Centres in 2019 for Doctoral Training focused on "Foundational AI" and "AI-enabled Healthcare Systems". The centres are collaborating with public health organizations, research institutes and companies to train a new generation of researchers, business leaders and entrepreneurs with knowledge and competence in management, data science and innovation ethics.

The **University of Montreal** recently launched a new master's programme in Digital Health to enable healthcare professionals to acquire complementary skills in data science and information management, while gaining an appreciation for issues related to digital health developments.

The **University of Bordeaux** has launched a new graduate programme (master's and doctoral training) in Digital Public Health, combining lectures in epidemiology, biostatistics, computing and social sciences to explore the impact of digital public health on society.

Universities need to multiply these efforts, as organizations are increasingly looking for professionals who can combine various competencies to bridge the communication gap between DI&AI developers (e.g. programmers and data scientists) and specialists in a given field (e.g. medicine, law, management).[73] To meet these demands, universities must work harder to open up the frontiers between departments and develop programs and courses that increase the resilience, agility and empowerment of workers.

2) Cultivating social responsibility and ethical mindfulness in tech students to spur safer, more useful and effective digital innovations

The Cambridge Analytica scandal provided striking evidence of how Big Data from social media could jeopardize the very foundations of democracy and make it difficult to ensure fair election campaigns.[74] The rapid diffusion of AI-based innovations has raised serious issues (e.g. safety, discrimination, inequality) that are intrinsically related to the way technologies are designed and developed.[75] Despite these risks, the ethical and social aspects of technologies are often assessed only *after* negative impacts become apparent.

To evaluate the potential harms and benefits of DI&AI during the first phases of technology development and testing, the data scientists who develop algorithms and the multiple experts in charge of their validation would ideally operate in a transdisciplinary setting and possess appropriate skills.[76] Admittedly, universities already offer a wide range of courses on topics such as computer ethics, privacy and security, the social impact of technology, etc. However, very few universities go beyond such stand-alone courses to comprehensively embed SHS and ethics training across the curricula for data scientists and algorithm developers.[77] Academic institutions face the challenge of adapting teaching methods and curricula to available resources and learning environments, in order to engage large numbers of tech students within and beyond their walls. Massive Open Online Courses

Training in responsible DI&AI should target user populations, but also the companies with business models based on the development and spread of these innovations.

(MOOCs) and other distance-learning methods (see next subsection) could be employed to disseminate SHS training and help students and faculty members explore the critical issues raised by DI&AI.

ZOOM IN

EMBEDDING SHS IN TECH DEVELOPMENT TRAINING

At Harvard University, the computer science curriculum has been revised to embed ethics training provided by professors from the philosophy department. Computer scientists are trained to reflect on the societal impacts of technologies and develop solutions to minimize their potential risks and adverse effects.

At the Canadian Robotics and Artificial Intelligence Ethical Design Lab (CRAiEDL) at Ottawa University, Professor Jason Millar organizes workshops to train engineers in ethics capacity building using innovative methodologies. Building a "value-map", for instance, engineers are led to reflect on potential conflicts of interest and values between stakeholders during the design of a technology.

ZOOM IN

SCALING SHS TRAINING AROUND DI&AI ISSUES AND SOLUTIONS

The University of Bordeaux has developed a MOOC on research integrity in scientific professions (French and English) and will soon launch a course on Software Law (under development).

The French National Institute for Research in Digital Science and Technology (INRIA) has developed an online course on privacy protection in the digital age (French).

The Institute for Data Valorization (IVADO) has just launched a MOOC on bias and discrimination in AI, in partnership with the University of Montreal.

Only a small percentage of DI&AI is currently integrated into real-life settings, and an even smaller portion has been proven to generate positive outcomes for individuals and organizations.[78] To improve adaptation, uptake and evaluation, universities will need to equip students with the skills to develop responsible DI&AI that considers the needs and expectations of end users, and is suited to the environments in which it will be implemented. For example, pedagogical models exist to develop communities of practice where students engage with actors from government organizations, business and civil society to experiment collaborative methods of responsible innovation development and testing (e.g. Design Thinking and co-design methodologies).[79] Changing the training of tech students, and leading them to envision innovation development and diffusion differently, will have a considerable impact on the tech industry as a whole.

3) Leading the movement towards diversity and inclusion in DI&AI industries

In the 1940s, 50s and 60s, the vast majority of computer programmers and systems analysts in the US were women; today women comprise a minority of the labour force in these sectors.[80] For workers from visible minority groups, the picture is even more worrying. In major digital tech industries (GAFAM) less than 5% of all workers are nonwhite.

Recently, New York University's AI Now Institute evoked the "diversity disaster" that now affects the entire AI sector.[81] And there is increasing evidence of the impact of this lack of diversity: facial recognition applications failing to identify darker skinned users, chatbots adopting hate speeches, etc. According to AI Now, the biases built into the AI industry are attributable to the lack of diversity in perspectives, values and concerns in AI design and development.

There is no question that industry must play its part to increase the participation of underrepresented populations in the AI field (e.g. by hiring a more diverse group of candidates, by being more transparent about pay and more attentive to reports of discrimination and harassment, by creating a more welcoming atmosphere). But universities must also make changes to increase diversity.[82] At Carnegie Mellon University, for instance, the admissions system has favored women in tech by no longer rewarding teenage coders.[83] And the apprenticeship programs in computer science developed by universities in conjunction with companies can encourage intake of a more diverse group of tech developers—including students from lower socio-economic backgrounds who cannot afford to enrol in full-time university programs.

ZOOM IN

APPRENTICESHIP PROGRAMMES IN COMPUTER SCIENCE

HEC Paris became involved some years ago in a partnership with École 42, a computer programming school with a peer-to-peer learning environment. The objective is to bring diversity and skills complementarity in student teams projects involved in HEC Digital & Entrepreneurship programs.

Moreover, at **HEC Paris**, a student association, HEC Data Minds, was created with the goal to empower HEC students to become fluent in coding and analytical problem solving. It organizes coding seminars, conferences and events with professionals from the tech and traditional industry on digital and data issues.

The **University of Bordeaux** is an active member of Robocup, which is the largest international competition in autonomous robotics. Within this context, several junior competitions are organized during the year, addressing high school students under the mentorship of academics. The first Women's Robocup will be organized in Bordeaux in June 2021 during the international Robocup.

Universities should also address the "leaky pipeline" issue: the drop in the proportion of women and under-represented groups at each successive level in academia (e.g. only 18% of authors at leading AI conferences are women, and more than 80% of AI professors are men[84]). Promoting a more diverse and representative faculty could have a major impact on the composition of the AI industry. Indeed, studies show that environmental factors (faculty composition, presence of advisors, institutional support, etc.) are key to the success of women and underrepresented minorities in programs that are dominated by white men.[85]

ZOOM IN

CREATING A MORE INCLUSIVE COMMUNITY OF DI&AI DEVELOPERS AND RESEARCHERS

Spoken Tutorial is a publicly funded project developed by the **Indian Institute of Technology in Bombay** to promote IT literacy in students and workers across India and in neighboring countries. Ten-minute long spoken tutorials (ST) are created for self-directed learning. They are dubbed into all Indian languages and can be used offline. Both ST and the software trained by the tutorials are publicly available at no cost. Anyone can create a ST, learn independently using ST (with no Internet connection), and conduct ST-based training programmes. A total of 4.5 million students have been trained, of whom 1.5 million are studying arts/science/commerce.

Part of the AI for Social Good initiative, the internship programme set up by the **Mila** is currently enrolling students from multiple countries in Africa, Asia and South America. Under the supervision of top AI academics, students are paid to conduct four to six months' work on an AI project of their choice. They are encouraged to tackle a research question or practical concern arising in their own cultural and social environment and field of practice.

The support of professors and advisors who are familiar with the realities of students' lives can help overcome psychological barriers that limit student confidence and undermine academic achievement. To promote inclusion and diversity within and beyond their walls, universities need to encourage diverse faculty members to engage in mentoring, outreach and recruitment activities, and reward these activities. Female and minority professors and researchers can act as powerful role models for students who are hesitant about pursuing their career aspirations.

RECOMMENDATION 9: Universities should collaborate to develop innovative online and on-campus courses and programs to increase digital literacy, adaptability and resilience in students and workers.

RECOMMENDATION 10: Universities should embed ethics and SHS literacy across the curricula for tech students, notably by using transdisciplinary learning experiences, to support responsible DI&AI research and innovation.

RECOMMENDATION 11: Universities should develop innovative and vigorous strategies to promote equity and diversity in STEM courses and programs, and more specifically in DI&AI domains.

SECTION 4: Universities as users of DI&AI

Universities have long used digital technologies to increase the effectiveness and efficiency of *existing* business processes. For example, universities started using Enterprise Resource Planning systems 30 years ago to better connect offices and departments and ensure that financial information, registration data and faculty course loads would be accessible at lower cost and in real time.[86] Universities have also using the Web to provide 24/7 information for more than a quarter-century. But digital technologies can do more than offer universities faster and cheaper ways to basically do more of the same. They increasingly offer the potential to rethink current processes (that is to conduct certain key activities in a different way) and the power to build new business models and adopt groundbreaking long-term strategies.[87]

For example, MOOCs enhance the scalability and affordability of university courses by enabling more diverse populations (e.g. people from lower socio-economic backgrounds or emerging countries, non-traditional students such as single parents and people changing careers) to conveniently access higher education at various stages in their lives. Universities can also rely on a wide range of digital tools (e.g. mobile devices, cloud systems, video games) to tailor educational content to a student's abilities, preferred mode of learning, and experience. In some universities, AI systems are used to augment tutoring with autonomous conversational agents that can answer student questions and provide assistance with learning and assignments.[88]

These transformations are leading universities to reflect on the nature of teaching and learning, as well as to reconsider the interactions between faculty members, lecturers, administrators and students.[89] For example, pedagogy is progressively moving beyond traditional lectures to allow remote collaboration and co-creation in complement to face-to-face interactions between professors and students.[90]

Universities can also use DI&AI to reinvent key processes. For example, AI-driven chatbots can immediately answer tough questions applicants might have about their eligibility or tuition fees (and, in the end, attract more students), or help students navigate their university and determine when their classes will be or who will be teaching them.[91] Some universities have begun adopting machine learning techniques to identify opportunities to save in procurement activities, generate metadata for library content[92] or better determine which donors fundraising specialists should prioritize.[93] Creating an AI that could automatically analyze the applications and social media posting of students could also "make the task of choosing which applicants should receive offers faster, cheaper, and more accurate"[94] and, ultimately, enable universities to "significantly modify the dynamics of competition for top [...] candidates."[95]

The rise of DI&AI could fundamentally disrupt the higher education sector by enabling new organizations to gain market share at the expense of universities in some important segments. For example, the development and adoption of new, powerful algorithms could increase the capacity of online course or program providers to automatically evaluate the quality of written essays or vocal answers to questions, to personalize lessons and exercises according to the needs of individual learners, and to tutor students and increase their engagement.[96] Powerful innovations such as AI-powered MOOCs are what led Clayton Christensen to state that traditional universities should seriously rethink the way they will do things in the future. As Christensen, who developed the theory of "disruptive innovation" in the 1990s, said: technologies enable "new business model[s] to coalesce, and that's what is happening in higher ed now."[97]

We see four actions as especially important for universities in facing the impact of DI&AI.

First, universities should carefully plan their digital offensive and assess the potential of digital technologies and the positive and negative impacts these may have on their business model, business strategies and business processes. Planning may include establishing a formal DI&AI governance structure, hiring a Chief DI&AI Officer or equivalent (as more than 200 universities and colleges have already done, according to a 2018 study[99]),

UNIVERSITIES SEE DI&AI AS AN OPPORTUNITY

Times Higher Education and Microsoft recently conducted a survey of more than 100 AI experts and university leaders and found that 94% of respondents believe that AI will increase the future demand for university graduates. Moreover, 86% of respondents disagree (most often, strongly) with the idea that AI will lead to the closure of universities. In fact, 95% of them see AI as an opportunity rather than as a threat.[98]

adopting a deliberate and coordinated DI&AI strategy to support all aspects of change, conducting ongoing scanning activities (in order, among other things, to identify promising technologies and best practices) and creating R&D departments and 'sandboxes' to design and safely carry out experiments.[100]

ZOOM IN

MOOCS IN DI&AI

HEC Paris began experimenting with MOOCs in 2013. Thanks to the courses and programs it offers through the Coursera platform, the business school estimates it has been able to attract students it would not have reached in the past.

Spoken Tutorial and "Train 10,000 Teachers" (or T10KT) are two very large-scale asynchronous and synchronous teaching methodologies developed by the Indian Institute of Technology Bombay. Using these approaches, the Institute is able to teach tools or languages like Koha, Moodle, Scilab and Python to 5,000 teachers and librarians at the same time. A financial model to make this approach affordable for students, and self-sustaining in the long run, has been successfully tested.

Second, universities should take measures to improve their capacity to maximize the positive impacts of AI. These measures are not exclusively technical, as we saw in the first section of this paper. Indeed, exploiting the full potential of DI&AI will depend, *to a very large extent,* on bringing about social, cultural and organizational changes. For example, universities will need to change rules and accountabilities to empower and motivate employees to redesign processes around DI&AI and use the new tools put at their disposal. They will also have to train staff to productively process the information provided by algorithms. To paraphrase information technology governance expert Ross, recruiters will know what to do when the machine tells them an applicant has a 95% chance of becoming a successful student, "but what's the next step when the machine says there's a 50% likelihood that this happens?"[101]

Third, universities should start to identify the positive and negative impacts DI&AI could have on students, researchers, employees and other stakeholders, and define strategies for reducing or eliminating potential risks. For example, allowing AI tools like chatbots to gather and analyze very large quantities of sensitive data, such as student or staff records, raises major ethical and privacy concerns that should be addressed by universities *before* they start using the tools. Moreover, management should be ready to face some of the questions that introducing AI to automate key processes raises, *even when the algorithms put in place are unbiased and function basically as planned.* Oswald reminds us, for example, that we "cannot always assume that the forecast or classification represents the only or main factor on which the 'rightness' or 'wrongness' of the overall decision is to be judged. Doing so risks changing the question that the [...] decision maker has to answer. 'Young Jones was admitted to dental school despite the algorithmic prediction that he would do poorly, and look he has done poorly; therefore, the human decision was wrong.' But perhaps the university's policy of admitting candidates from deprived backgrounds outweighed the prediction at the time."[102]

Fourth, universities should collaborate more closely with one another on internal use of DI&AI. For example, a lack of preparation could make universities especially vulnerable to cyber attacks. These could impair their legitimacy and, hence, their capacity to conduct research in the future, and even expose them to lawsuits. Cyber security is an ideal area for inter-university collaboration, to share best practices and research on DI&AI security, and increase their common preparedness.

To conclude, "the ongoing coronavirus pandemic has forced a global experiment that could highlight the differences between, and cost-benefit trade off of, the suite of services offered by [universities] and the ultra-low-cost education of [online education providers][103]." Whatever happens in the coming months and years, universities should develop a deep understanding of what DI&AI can and cannot do for their mission, processes and clienteles.

RECOMMENDATION 12: Universities should study how DI&AI will impact their business models and implement strategies and processes to enhance the positive effects of DI&AI on their organization.

RECOMMENDATION 13: Universities should produce a practical guide on steps universities can take to become responsible and efficient users of DI&AI and better carry out their missions. This guide would emphasize DI&AI practices that have been successfully experimented or adopted by universities across and outside the U7+ network, the challenges they faced and the solutions they implemented. It should also help universities identify the expertise they will need to use DI&AI as a lever for change.

RECOMMENDATION 14: Universities should create knowledge exchange forums and online courses on the topic of DI&AI. These should be tailored for different university players (e.g. forum for researchers, for CIOs or Chief DI&AI Officers, forum for employees).

PART II:
A MACHINE FOR STRATEGIZING: PARAMETERS OF A DI&AI INTERNATIONAL ACADEMIC+ NETWORK

SECTION 1: Rationale

Networks provide a promising way to face great societal challenges and technological transitions, and deal with "wicked problems." The intensity and velocity of developments in DI&AI call for an increase in the capacity of universities to respond to and influence such a socio-technological push. In this section, we propose the implementation of a multilateral and multi-stakeholder network to support the development and transformation of universities in response to the multiple challenges raised by DI&AI. The DI&AI Academic+ Network will be involved in an ambitious program of activities based on the exploration, experimentation, execution and evaluation of core DI&AI developments within and beyond universities.

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Network formation is not a goal in itself, but rather a means to assemble the conditions for collaborative governance across autonomous yet interdependent organizations and groups. *Collaborative governance* is defined as " ... processes and structures of **public policy decision-making and management** that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished."[104] An extension of this stream of scholarship is found in the notion of *collaborative platform,* defined as "an organization or program with dedicated competences, institutions and resources for facilitating the creation, adaptation and success of multiple or ongoing collaborative projects or networks."[105] The collaborative platform aims to increase the operational capacities of the network.

Organizing in networks requires defining and implementing specific parameters. A network will develop if time and resources are devoted to the development of shared motivation (a common definition of problems and domains of intervention, mutual trust and understanding, legitimacy and commitment), shared principles and rules for effective joint action (governance, decision-making, allocation of resources and priority setting, evaluative criteria, rules to arbitrate conflicts or differences) and clear and agreed principles of engagement, including the question of resource commitment.[106] It is expected that the network and collaborative governance co-evolve in order to respond to new challenges that are identified through joint thinking and action.

SECTION 2: Operational parameters

Mission of the network

The DI&AI Academic+ Network aims to promote cooperation between universities, public agencies, firms and civil society organizations to develop and propose collective responses to the major issues and opportunities raised by DI&AI in societies.

While the collective voice of universities constitutes the network's core, the "+" highlights its multi-stakeholder nature. The network is based on the idea that universities are part of a vibrant multi-stakeholder DI&AI ecosystem, with which they need to engage in order to remain relevant and innovative. Where appropriate, the network builds on existing regional, national or continental networks.

GOALS OF THE NETWORK:

The network will maximize its value through pursuit of the following four goals:

1 - Promoting high-impact international, interdisciplinary and intersectoral dialogue and research on responsible DI&AI.

2 - Developing, sharing and promoting best practices, tools and solutions that contribute to embedding responsible DI&AI innovation principles and mechanisms within the university's core mandates of research and education and within society.

3 – Developing innovative evidence-informed solutions through collaborative research on responsible DI&AI.

4 - Speaking publicly as a single voice on core issues related to responsible DI&AI.

Functions of the network:

The network will perform four functions related to the roles of universities within the DI&AI ecosystem: 1) **the network as an engine for university diplomacy** to nurture greater collaboration and cooperation among universities and key partners and stakeholders (NGOs, firms, citizen forums, etc.) within the DI&AI ecosystem—this network function relates mostly to challenges and opportunities discussed in this paper on the positioning of universities within the broader DI&AI ecosystem; 2) **the network as a collective to create and share best practices** for the institutional renewal of universities within this ecosystem—this network function is related to challenges and opportunities arising from the digital transformation's impact on the fundamental missions of universities, 3) **the network as a force of advocacy to influence and shape DI&AI developments and impacts according to norms of responsible innovation**—this network function sees universities using their specificities and assets to achieve an impact within the broader global DI&AI ecosystem by promoting evidence-informed practices and solutions, and 4) **a network dedicated to experimentation and the search for evidence-informed innovative solutions,** in the spirit, for example, of the UN GlobalPulse initiative for the development and deployment of responsible DI&AI. Through these different functions, the network aims to support the development of capacities, to influence the approaches used to develop and deploy DI&AI and to act as a set of labs to identify and experiment innovative solutions with key partners across the ecosystem.

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Membership and resources

Universities adhere to the network on a voluntary basis. Membership is for an initial period of three years.

An adaptive fee scale is established according to the income level (high, middle or low) of the university's country of origin.

Adherence to the core values, mission and goals of the network is reflected in a Memorandum of Understanding signed by each university member of the network.

Governance

An *Elected Steering Committee* is composed of eight members, with an initial three-year mandate. The steering committee includes members from the following institutions: one designated representative from each of four universities that are members of the network, one representative of private sector developers, one representative of an NGO, one representative from government and one student representative.

The mandate of the steering committee consists mainly in developing, with network members, a plan and program of activities aligned with the mission and goals defined for the initial three years, and in managing the financial resources provided by membership fees and other sources of funding.

In term of resources, the DI&AI Academic+ Network benefits in its initial phase of development from the support of an administrative coordinator and a person in charge of strategic development, partnership and communication.

Membership fees should cover the cost of these two resources plus additional recurrent operating costs. In addition, member universities provide in-kind resources to support core program activities.

The *steering committee* sets up committees to oversee and develop various components of the network's program of activities. These committees mobilize network members in order to ensure broad participation and a plurality of views and perspectives. They may focus their work on specific themes and/or regions.

An annual assembly of all network members, with external members as observers, and an annual network colloquium are organized to share developments in the network and its main achievements. Revisions and updates of the network's program are accomplished through these two forums.

The Elected Steering Committee, with the support of network members, is responsible for gaining support and formal endorsement from relevant high level regional and government bodies.

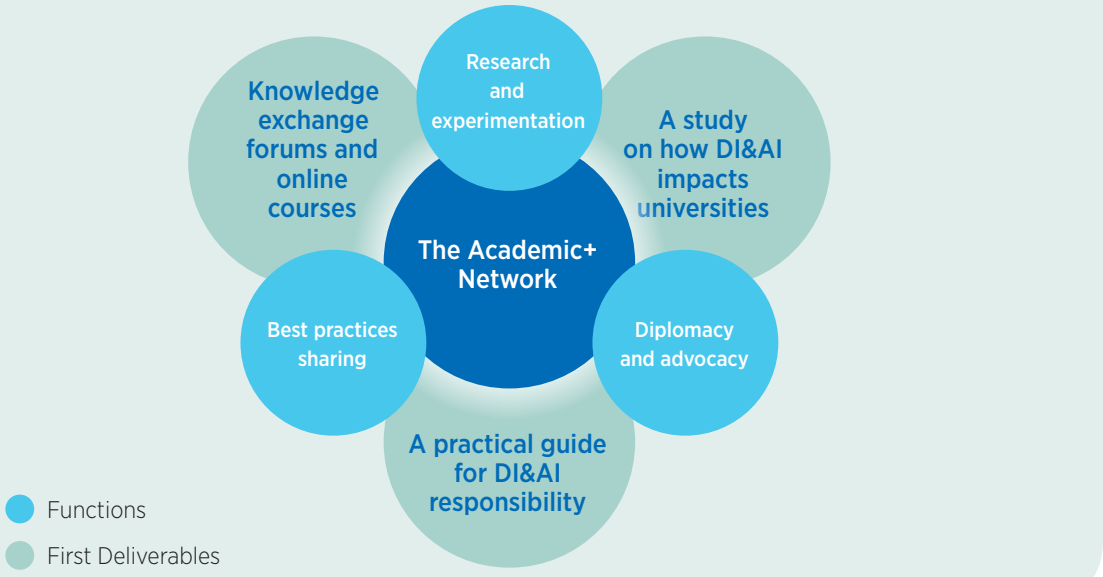
Deliverables

The network's program of activities will address its four main goals. Clearly defined deliverables are a condition for obtaining resources from the DI&AI Academic+ Network. University members are expected to work closely with the DI&AI Academic+ Network office to identify sources of funding and help secure resources required to perform core program activities. Depending on their total value, membership fees may contribute to core program activities.

THREE KEY PROJECTS

Universities that participated in this position paper expressed an interest in undertaking further work through the network on the paper's recommendations, starting with the following three: 1) Universities should conduct a study on how digital technologies will impact the business models, strategies and processes of universities; 2) Universities should produce a practical guide on steps universities could take to become responsible and efficient users of digital technologies and better accomplish their missions; 3) Universities should create knowledge exchange forums and online courses on the topic of DI&AI for different university players (e.g. forum for researchers, for CIOs or Chief DI&AI Officers, forum for employees).

THE NETWORK'S FUNCTIONS & DELIVERABLES



Tools to evaluate effectiveness

An evaluation framework will be developed and implemented by the steering committee, based on the DI&AI Academic+ Network's goals and mission.

Steps in developing the network

Following the meeting to present the position paper to the U7+ universities (https://www.u7alliance.org), a steering committee will be formed within three months to recruit and formalize membership and prepare a proposed program of activities and business plan to launch the network within six months. A broad consultation of university members will take place before formal adoption of a plan for the first three years of activity. Resources and support will be needed for this initial stage of development, as described above.

RECOMMENDATION 15: The U7+ universities will formally decide at their next meeting whether to host a network of universities dedicated to responsible DI&AI. Universities that collaborated on this position paper have already expressed their interest in participating in such a network.

RECOMMENDATION 16: A steering committee will be formed at the next U7+ meeting with the mandate to develop a business and activity plan for the network within six months. This steering committee will make concrete proposals on financial, governance and operational matters, as well as identify program priorities for the network. Right from the start, the DI&AI Academic+ Network will benefit from administrative and strategic support to ensure its viability and success in the initial phase of development.

CONCLUSION

This paper focuses on the specificities of universities and what these imply for the roles they play within the broader DI&AI ecosystem. It is deliberately university-centric, exploring how the digital world impacts universities from within and examining their actual and potential contributions to responsible DI&AI development.

This perspective recognizes the importance of fostering cross-fertilization between universities, researchers from the various disciplines involved in DI&AI research and other organizations that populate the DI&AI ecosystem. Multilateralism is seen as a way to advance the responsible DI&AI agenda. Within this extremely dynamic ecosystem, all players have to think explicitly about their particular contributions, constraints and opportunities, and consider the benefits of collaboration and cooperation.

In the first part, we underlined that universities need to change in order to sustain their legitimacy and relevance within this booming ecosystem. We also pointed to assets that are specific to universities, notably knowledge and reputational capital (based on scientific credibility), in order to identify roles they can play to greatest effect. In all cases, the roles assumed by universities must be defined with consideration for the contributions of other core players in the DI&AI ecosystem. Universities do not have a monopoly on assets; neither are they immune to distortions introduced by narrow individual or organizational interests. We seek in this paper to move beyond a naïve regard for the Ivory Tower to provide a grounded perspective on the legitimate roles of universities in the pursuit of responsible DI&AI.

We are confident—and this confidence is supported by the many innovative practices highlighted throughout the paper—that universities are prepared and equipped to meet expectations as they pursue the responsible DI&AI agenda.

The agenda we propose for universities is based on deliberation about how to renew their orientations and practices to add value to the DI&AI ecosystem. We are confident—and this confidence is supported by the many innovative practices highlighted throughout the paper—that universities are prepared and equipped to meet expectations as they pursue the responsible DI&AI agenda.

Specific recommendations address the teaching and research missions of universities and the way these operate in the evolving higher education market. One key element of our analysis relates to the importance of creating resilient and well-informed agents for the DI&AI ecosystem—of increasing socio-technical literacy to fertilize the ecosystem with a plurality of views and types of knowledge. Another key element is the governance of data and more broadly the governance of research within the digital world. Recommendations regarding the research and teaching missions of universities emphasize the value of transdisciplinary knowledge in spurring innovative thinking and action. By joining forces, SHS and STEM players will contribute to developing cutting-edge knowledge, competencies and practices in responsible DI&AI. A key lesson from the analysis of university business processes is that management and operations will need to be revisited if universities are to maintain capacity to fulfill these ambitions.

Universities are stand-alone institutions that operate in distinct jurisdictions, but face common challenges and opportunities. In the second part of this paper, we propose the creation of a university network to support the joint development of an agenda for responsible DI&AI. This proposition recognizes both the unique value universities bring to the DI&AI ecosystem and the need to accelerate their internal transformation and strengthen their position as credible actors within the ecosystem. In order to launch, organize and develop high-impact initiatives, the university network for responsible DI&AI will need support and resources.

We hope this paper provides fertile ground for further thinking and collaborative partnerships in this period when universities face unprecedented challenges and opportunities. The potential for win-win partnerships with others key players in the ecosystem has never been greater. The proposed network would create a solid frame on which to construct these partnerships.

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THE INNOVATIVE UNIVERSITY

Renewing the Role of Universities in the Digital Innovation and Artificial Intelligence Ecosystem

A PROJECT LED BY

Université de Montréal

WITH 12 OTHER U7+ UNIVERSITIES

MAY 2020

U7+ Intergenerational Roundtables

Proposal for U7+ Intergenerational Roundtables
Submitted by Northwestern University

Building on the 2020 U7+ Presidential Summit theme—Intergenerational Justice in a Post-Pandemic World—we propose that the U7+ carry our deliberations forward into next year in a more informal format that will allow diverse stakeholders from across the generations to engage directly with one another.

Responding to a call from U7+ students
This proposal for the creation of U7+ Intergenerational Roundtables builds on proposals from U7+ student representatives in 2019, again in 2020, and during this year's inaugural U7+ Worldwide Student Forum. Each of these groups in their own way has proposed the following:

- Substantive conversations across our campuses about global issues
- Opportunities for collaboration
- More structured and institutionalized student involvement in the U7+

Our students are inspired by the U7+ Alliance; they understand its significance, and they want to make a contribution. They also want to share their ideas, and listen to and learn from the faculty and administrators of the U7+.

A model for multi-stakeholder engagement
Intergenerational Justice is defined as the challenge of taking the interests of youth and future generations into account as we address global problems. It requires the participation of many stakeholders—most notably, the participation of the youth on our campuses.

In 2020 the U7+ created opportunities for a wide range of university stakeholders to come together with their peers. As an Alliance, we brought together students, faculty, presidential delegates, and presidents. Each of these groups has demonstrated a serious commitment to dialogue, and genuine curiosity about the issues confronting their counterparts around the world. The next step might be to provide an opportunity for members of each of these groups to talk to one another, if they wish to do so.

For 2021, therefore, in the run-up to the next U7+ summit, Northwestern University proposes to bring these stakeholder groups into conversation with one another by hosting a series of informal round tables in which faculty, students, administrators and alumni can meet to share their thoughts and listen to one another. This would in no way replace the more structured work of our working groups or the policy-setting work of the Presidential Summit. Rather, it would be a more casual opportunity for members of our communities to come together.

We at Northwestern University are happy to volunteer to do the organizing. We can support the technology, the logistics, and the communications. At the same time, we aim for shared leadership in the selection of topics and the recruitment of participants across our universities and within the group of U7+ Worldwide Students Forum participants.

Proposed format

The precise format for these round tables will be determined by a steering committee of students, faculty, and U7+ presidential delegates from across our campuses. However, we offer the following proposal as a starting point.

We envision a series of roundtable discussions held monthly on topics of global concern. These roundtables would bring together 4-6 speakers from across our institutions for a recorded conversation. The recordings would be made publicly available on the U7+ website. We would then schedule virtual meetings across different time zones and invite U7+ universities to nominate students, alumni, faculty, and administrators to join the conversation. After viewing the recorded remarks in advance, participants would come together over Zoom for informal live conversation. We would also create an online discussion board where participants could continue the conversation and share resources.

Students have already raised a number of topics for discussion that align with the U7+ Commitments, Principles, and Actions. These include:

- Mental health during the COVID-19 global pandemic
- Building technical and professional skills for the real world
- Learning across disciplines
- Truth and disinformation
- Digital technology and remote learning
- Equality and justice
- Peace and peacemaking
- Personal development in university
- Measuring impact of change initiatives
- Equalizing the experience of international and domestic students on campuses
- Climate change and sustainability
- The role of the arts during a global crisis

Next Steps

It is our hope that this series of events will help to build lasting connections between stakeholders across the U7+, provide our students, and all of us, with opportunities to encounter new perspectives, and help to encourage shared leadership in the U7+ effort between Presidential Summits.

If you would like to be involved, or to propose someone from your university to play a leadership role in this initiative, please send an email to the Summit email address (U7summit@northwestern.edu) or to Annelise Riles (annelise.riles@northwestern.edu).