



## **Eu-SPRI Forum**

# **Annual Report 2019**

## Contents

Eu-SPRI 2019 in a Nutshell: Message from the President .....	3
Organisation.....	5
Communication.....	6
Eu –SPRI Forum Activities .....	7
Annex 1: PhD Circulation .....	10
Annex 2: EU-SPRI Inter-network dialogue: towards a transformative agenda for the STI community.....	12
Annex 3: Eu-SPRI 2019 Annual Conference, STI Policies for Sustainable Development Goals, Actors Instruments and Evaluation.....	18
Annex 4: Final Report: EU-SPRI Summer School Research & Innovation Policy and Governance .....	21
Annex 5: Eu-SPRI Summer School, Tools and methods for analysing complex Science, Technology and Innovation (STI) systems: A gentle introduction to Machine Learning (ML), Network Science (NS) and Text Mining (TM).....	27
Annex 6: Eu-SPRI Early Career Researchers Conference: The changing entrepreneurial finance landscape: challenges for policy .....	30
Annex 7: Transformative Innovation Policy Conference: Towards a Global Research Agenda Final Report.....	37
Annex 8: Report: EU-SPRI Early Career Research Training School 2019 (ECS), Problem-Oriented Innovation Policy: Key Organizational Dynamics and Issues .....	47
Annex 9: Ten Years of Community Building. Revisiting the Mission and Activities of EU-SPRI .....	50
Annex 10: Rules for supporting Eu-SPRI events and activities .....	54
Annex 11: Financial Report by the Treasurer .....	56

## Eu-SPRI 2019 in a Nutshell: Message from the President

Dear Reader,

The **European Forum for Studies of Policies for Research and Innovation** (Eu-SPRI) Forum, aims to strengthen the vibrant but dispersed, interdisciplinary community of researchers who focus on interdisciplinary dimensions related to policy and governance, in the field of knowledge creation and innovation. Studies of Policies for Research and Innovation (SPRI), has been a growing field of research since the late 1960s; evolving at the encounter of economics, political science, sociology, Science and Technology Studies, STS, business administration, geography and history.

The Eu-SPRI Forum was founded in Paris in June 2010 by 11 organisations. As of 31 December 2017 our Forum had seventeen full members and one associate member. In 2018, we were delighted to welcome a new member organisation - Sozialforschungsstelle Dortmund ZWE der TU-Dortmund. This takes the number of full member organisations to 18 and signifies the continuing attractiveness and relevance of the association.

As in previous years, in 2019 the Eu-SPRI Forum carried out a number of activities to accomplish the network's three key missions: to structure the field of PRI Studies, to nurture the next generation of scholars and experts in our field and to explore new horizons.

Our main **community building event** was the Annual Conference in Rome, 5-7 June 2019, which was organised by Emanuele Reale and her team at ICRES CNR, under the theme *Organisation and Governance for Sustainable Research and Innovation*, [Annex 4](#).

In advancing our mission to nurture the **next generation**, we held one **Early Career Researcher Conference**. This was organised by POLIMI and held in Torino in September on the topic of *The changing entrepreneurial finance landscape: challenges for policy*. The conference was a great success with 47 participating doctoral students and early career researchers.

Three **Early Career Research Training Schools** were held in 2019. The first was a Summer School on *Research & Innovation Policy and Governance*, hosted by Manchester Institute of Innovation Research at The University of Manchester in June and delivered in collaboration with University of Twente, Fraunhofer Institute for Systems and Innovation Research and Austrian Institute of Technology, [Annex 4](#). The second training school was a Summer School, *Tools and methods for analysing complex Science, Technology and Innovation (STI) systems: A gentle introduction to Machine Learning (ML), Network Science (NS) and Text Mining (TM)*, organised by IRCrES-CNR, Rome in July, [Annex 5](#). In December, CBS in Denmark hosted and organised the third training school of the year on *Problem-Oriented Innovation Policy: Key Organizational Dynamics and Issues*, [Annex 8](#).

Our **Early Career Researcher mobility scheme** continues to attract participation. In 2019 we had 8 participants from 6 different member associations, visiting 7 member organisations, [Annex 1](#).

We followed up on the networking activities with other networks in the field. In 2017, first steps had been made to explore new **global co-operation with neighbouring networks to influence global policy agendas**. This initiative was led by Johan Schot, Philippe Laredo and Matthias Weber. The implementation of the initiative was formulated in 2018 and an inter-network meeting held in February 2019 in Utrecht, *Eu-SPRI Inter-network dialogue: towards a transformative agenda for the STI community*, [Annex 2](#), followed by a large conference of academics and policy makers in Valencia November 2019, [Annex 7](#).

Following on from the positive experience of the **exploratory initiative** on the future research agenda in 2018 in Twente, Eu-SPRI organised an internal workshop titled ***Ten Years of Community Building. Revisiting the Mission and Activities of EU-SPRI***. This workshop was held at Fraunhofer ISI in Karlsruhe, December 2019. The purpose of this event was to review the achievements of Eu-SPRI in the ten years since it was established, to consider the current missions and to think about the future of Eu-SPRI. Three working parties were created that will report at the online General Assembly in June 2020, [Annex 9](#).

Professor Dr. Jakob Edler continued his term of office as President of Eu-SPRI. The Secretariat was run by the Manchester Institute for Innovation Research (MIOIR) at Manchester University throughout the year. The Secretariat is currently managed by Deborah Cox.

On behalf of all Eu-SPRI members I should like to thank all colleagues who have supported the Forum, through taking initiatives, serving on the Executive Committee, organising and supporting events, sending and receiving PhD students and contributing to the exciting academic debate in our field.

Jakob Edler, President

Deborah Cox, Secretariat

## Organisation

The Eu-SPRI Forum is a not for profit association (French law) founded in Paris in June 2010 and is funded by the annual contributions of its members.

The Eu-SPRI Forum is governed by the Assembly of its full members meeting once a year and is managed by an Executive Committee. The eighth session of the Forum started on 7<sup>th</sup> June 2019.

### Full members (as of June 2020) are:

1. Université Paris-Est, Institut Francilien Recherche Innovation Société (IFRIS), founding member.
2. Copenhagen Business School (CBS), founding member.
3. University of Twente, Institute of Innovation and Governance Studies (IGS), founding member.
4. Instituto de Gestión de la Innovación y el Conocimiento (INGENIO), Instituto de Políticas y Bienes Públicos (IPP) CSIC, founding member.
5. Institute of research on economic sustainable growth, IRCrES-CNR, founding member.
6. Politecnico di Milano, Dipartimento di Ingegneria Gestionale, founding member.
7. AIT, Austrian Institute of Technology, founding member.
8. CIRCLE, Lund University, Sweden, founding member.
9. Manchester Institute of Innovation Research, AMBS; The University of Manchester, founding member.
10. NIFU, Nordic Institute for Studies in Innovation, Research and Education, Norway (accepted on 27 October 2010), founding member.
11. Fraunhofer Institute for Systems and Innovation Research, ISI, Karlsruhe, Germany, since academic year 2011/2012.
12. VTT, Innovation Systems and Innovation Policy (in collaboration with) Helsinki Institute of Science and Technology Studies, HIST, since academic year 2011/2012.
13. Innovation Studies, Copernicus Institute of Sustainable Development, Universiteit Utrecht, since academic year 2011/2012.
14. TIK, Centre for Technology, Innovation and Culture, University of Oslo, since 2013.
15. SPRU - Science Policy Research Unit (University of Sussex), since 2015.
16. TNO Netherlands Organisation of Applied Scientific Research, Expertise Group Strategy and Policy, since 2016.
17. Autonomous University of Madrid (UAM) and Accenture, re-joined 2017
18. Sozialforschungsstelle Dortmund ZWE der TU-Dortmund, joined 2018

### Associate member:

Helsinki Institute of Science and Technology Studies (HIST) in collaboration with VTT, since academic year 2011/2012.

### General Assembly

The eighth General Assembly (GA) was held In Rome, Italy, 4<sup>th</sup> June 2019.

## Executive Committee Members 2019

President From 2016	Jakob Edler	Fraunhofer ISI and Manchester Institute of Innovation Research, AMBS; The University of Manchester, ExCo member from June 2010 President from 2016
Vice President from June 2016	Gaston Heimeriks	Innovation Studies, Copernicus Institute of Sustainable Development, Universiteit Utrecht, ExCo member from June 2014.
Treasurer from June 2010	Philippe Larédo	IFRIS (Paris) and Manchester Institute of Innovation Research, AMBS; The University of Manchester
	Susana Borrás	ExCo member from June 2019
	Emanuela Reale	ExCo member from June 2019
	Matthias Weber	AIT, Austrian Institute of Technology, ExCo member from June 2016, re-elected 2018
	José Guimón	Autonomous University of Madrid (UAM), ExCo member from June 2019

In June 2019, the GA re-elected Gaston Heimeriks to the Executive Committee (ExCo) and elected Susana Borrás, Emanuela Reale and José Guimón.

The Executive Committee held 4 meetings in 2019. These were held at regular intervals in March, June, July, and September and were conducted by Skype/telephone, with the exception of the ExCo in June, which was in person, in Rome. There were fewer ExCo meetings in 2019 than 2018 but there was active, additional ExCo communication around the organisation and content formulation of the December Fraunhofer workshop.

**Eu-SPRI treasurer** is **Philippe Larédo**, IFRIS.

### Eu-SPRI Forum Secretariat

The Eu-SPRI Forum Secretariat is managed by **Deborah Cox**, from The University of Manchester.

## Communication

### Eu-SPRI Forum website

The website was moved in 2019 to a new host. The address is <http://www.euspri-forum.eu>. It is updated by the Secretariat, who are currently based in Manchester. The host is globalCOMUNICA in Valencia, Spain. Additional content is currently being added to this site. Comments about the website and requests to add material are always welcome and should be sent to the Secretariat.

### Eu-SPRI Forum List servers

Eu-SPRI Forum has 2 list servers:

Eu-SPRI-NEWS for news items of general interest and Eu-SPRI-INFO, a discussion list for Eu-SPRI Forum members only.

**Eu-SPRI posters and leaflets** can be obtained by contacting the Secretariat.

## Eu –SPRI Forum Activities

### Eu SPRI Forum Calls for proposals

One call for Proposals for Early Career Researcher Conferences (ECC) was launched 1<sup>st</sup> July 2019 with a deadline of 20th September 2019.

### Eu-SPRI Forum Circulation awards

The selection committee consisted of 2 members: Kate Barker and Catalina Martinez (until June 2019). Since June 2019 Kate has been sole adjudicator.

Three calls were published in 2019 for **PhD circulation awards** with the following submission deadlines: 11 Mar, 11 June and 11 November 2019. See [Annex 1](#) for details of the 8 successful candidates.

### Early Career Research Training Schools (ECS) in 2019

As previously agreed we decided to host a series of complementary schools to offer a coherent and coordinated programme.

Three Early Career Research Training Schools were held in 2019.

- Summer School, The University of Manchester (June) *Research and Innovation Policy and Governance*, [Annex 4](#).
- Winter School, University of Rome (July) *Tools and methods for analyzing complex Science, Technology and Innovation Systems: A gentle introduction to Machine Learning (ML), Network Science (NS) and Text Mining (TM)*, [Annex 5](#).
- Winter School 2019, Copenhagen Business School (December) *Problem-oriented innovation policy: key organisational dynamics and issues*, [Annex 8](#).

### Future Schools scheduled:

The following member organisations will hold Early Career and PhD Researcher Training Schools

- University of Sussex, SPRU (planned for Spring 2020 but being rescheduled)
- Utrecht University (Summer 2021)
- Lund University
- University of Oslo
- University of Twente in partnership with AIT, The University of Manchester and Fraunhofer ISI

### Eu-SPRI Early Career Researcher Conferences (ECC)

One early career conferences was held in 2019.

In September 2019 Politecnico di Milano, (POLIMI) hosted an ECC on the topic of *The changing entrepreneurial finance landscape: challenges for policy*.

It ran from 24-25th September, 2019 in Torino, Italy.

The full report is available to read in [Annex 6](#).

### Eu-SPRI Forum Annual conference

9th Annual Conference, Rome– June 5-7 2019, [Annex 4](#).

ICRES CNR, Organisation and Governance for Sustainable Research and Innovation.

<https://www.euspri2019.it/>

### Future conferences

#### Annual conference 2020-2022

The table below shows an agreement for the allocation of expression of interests for the next three years. These expressions are not binding for either the proposers or for the ExCo, until the proposers have formally submitted a full proposal, following requests by the ExCo nearer to the time. The planned Utrecht 2020 conference, which was cancelled due to the health crisis, is moved to 2022.

Host	Theme	Year
Univ. Oslo/TIK & NIFU	Exploring links and tensions between research and innovation policy	2021
Univ. Utrecht	Institutions and “entrepreneurial state”	2022
SPRU, Brighton	Innovation Policy for Transformative Change	2023

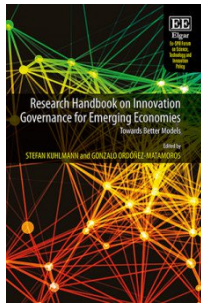
### Exploratory Scheme Activities 2019

The setting of the research agenda in the science and innovation policy field is an essential objective of the Eu-SPRI activities. Exploratory initiatives aimed at developing knowledge supporting the anticipation of new SPRI themes, concepts and methods are very important in order to connect different research spaces.

*Inter-network dialogue: towards a transformative innovation policy agenda* led by Johan Schot, Philippe Laredo and Matthias Weber. The implementation of the initiative was formulated in 2018 and a meeting held February 2019 in Utrecht, *Eu-SPRI Inter-network dialogue: towards a transformative agenda for the STI community*, [Annex 2](#). This was followed up by a one and half day conference to mobilise the community of scholars and practitioners to explore the emerging 'Transformative Innovation Policy' theme, in Valencia in November 2019. The conference accommodated more than hundred participants, affiliated to one or multiple research network and offered multiple highly interactive sessions and two panel discussions between European policymakers as well as research and policy funders, [Annex 7](#).

In early December 2019 Eu-SPRI organised an internal workshop titled ***Ten Years of Community Building. Revisiting the Mission and Activities of EU-SPRI***. The purpose of this event was to review the achievements of Eu-SPRI in the ten years since it was established, to consider the current missions and to think about the future of Eu-SPRI. Three working parties were created that will report at the online General Assembly in June 2020, [Annex 9](#).





### Eu-SPRI Book series with Edward Elgar

The Edward Elgar Eu-SPRI series aims at promoting forefront research in the field of STI policy. An agreement for Eu-SPRI Book series with Edward Elgar was signed in 2013.

## Annex 1: PhD Circulation

### Successful Candidates from Eu-SPRI Forum 25th call for PhD Circulation, March 2019

Paola Bellis, home institute - Politecnico di Milano, Milan, supervisor - Roberto Verganti, went to Copenhagen Business School, Denmark, host supervisor - Silviya Svejenova Velikova. The title of his thesis is: Pairs in Innovation: how two individuals can help an organization to develop shared and innovative directions.

Kyung Han, home institute - Science Policy Research Unit (SPRU), University of Sussex, UK, supervisor - Professor Ben Martin, went to Innovation Systems & Policy Centre, Austrian Institute of Technology (AIT), host supervisor - Dr Doris Schartinger. The title of his thesis is: Characteristics of Collaborative Structures and their Implications for R&D Performance.

Nadia Weidner, home institute - Fraunhofer Institute for Systems and Innovation Research, Germany, supervisor - Professor Knut Koschatzky, went to Copenhagen Business School, Denmark, host supervisor - Professor Mark Lorenzen. The title of her thesis is: Absorptive capacity beyond R&D.

Keija Yang, home institute - Science Policy Research Unit (SPRU), University of Sussex, UK, supervisor Dr Ralitsa Hiteva, went to Centre for Global Challenges, Utrecht University, The Netherlands, host supervisor is Professor Bernhard Truffer. The title of her thesis is Actor interactions and transition: solar and wind power development in China post 2000.

### Successful Candidates from Eu-SPRI Forum 26th call for PhD Circulation, June 2019

There were no applicants in this call.

### Successful Candidates from Eu-SPRI Forum 27th call for PhD Circulation, November 2019

David Howoldt, Copenhagen Business School, Denmark, supervisor - Prof. Susana Borrás, will go to Fraunhofer Institute for Systems and Innovation Research, Karlsruhe, Germany, host supervisor - Dr. Stephanie Daimer & Dr. habil. Henning Kroll. The title of his thesis is: Comparing Innovation Policy Instruments and Mixes with Quantitative Text Analysis.

Ido Alon, Autonomous University of Madrid, Spain, supervisors - José Guimón, Rosa Urbanos-Garrido, Manuel Mira Godinho, will go to UiO, Centre for Technology, Innovation and Culture, University of Oslo, Norway, host supervisors - Prof. Markus M. Bugge, Prof. Taram Thune, Prof. Ana Delgado. The title of his thesis is: Technological forecasting and regulatory assessment: An application to assisted reproductive technologies.

Jose Nicanor Franco-Riquelme, Autonomous University of Madrid (UAM), Technical University of Madrid (UCM), Complutense University of Madrid (UCM), Spain, supervisor - Prof. Joaquin Ordieres-Meré, will go to Research Institute on Sustainable Economic Growth (IRCRES), Rome, host supervisors - Dr. Emanuela Reale & Dr. Antonio Zinilli. The title of his thesis is: Different contexts analysis of opinion mining approaches in innovative organisations.

Sergio Segura-Calero, Institute of Innovation and Knowledge Management, INGENIO (CSIC-UPV). Spanish Council for Scientific Research - Polytechnic University of Valencia, Spain, supervisor - Dr. Jordi Molas-Gallart, will go to Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands, host supervisor - Dr. Marko Hekkert. The title of his thesis is: Transition management and spatial planning. Urban transformative capacities.

## Summary Table: PhD Circulation 2019

<b>24th Eu-SPRI Forum PhD Circulation call March 2019</b>		
<b>Name of Applicant</b>	<b>Home Institution</b>	<b>Host Institution</b>
Paola Bellis	Politecnico di Milano, Milan	Copenhagen Business School, Denmark
Kyung Han	Science Policy Research Unit (SPRU), University of Sussex, UK	Innovation Systems & Policy Centre, Austrian Institute of Technology (AIT)
Nadia Weidner	Fraunhofer Institute for Systems and Innovation Research, Germany	Copenhagen Business School, Denmark
Keija Yang,	Science Policy Research Unit (SPRU), University of Sussex, UK	Utrecht University, The Netherlands
<b>25th Eu-SPRI Forum PhD Circulation call June 2019</b>		
No Applicants.		
<b>26th Eu-SPRI Forum PhD Circulation call November 2019</b>		
David Howoldt	Copenhagen Business School, Denmark	Fraunhofer Institute for Systems and Innovation Research, Germany
Ido Alon	Autonomous University of Madrid, Spain	UiO, Centre for Technology, Innovation and Culture, University of Oslo, Norway
Jose Nicanor Franco-Riquelme	Autonomous University of Madrid (UAM), Technical University of Madrid (UCM), Complutense University of Madrid (UCM), Spain	Research Institute on Sustainable Economic Growth (IRCRES), Rome
Sergio Segura-Calero	Institute of Innovation and Knowledge Management, INGENIO (CSIC-UPV). Spanish Council for Scientific Research - Polytechnic University of Valencia, Spain	Copernicus Institute of Sustainable Development, Utrecht University, The Netherlands

## Annex 2: EU-SPRI Inter-network dialogue: towards a transformative agenda for the STI community

25th & 26th February 2019, Utrecht University, the Netherlands

**Organisers:** Organised by EU-SPRI in association with STRN and TIPC and with a representation of Globelics members

**Key Speakers:** Jakob Edler, Matthias Weber, Erika Kraemer-Mbula, Johan Schot, Lea Funfschilling

**Number of Participants:** 40 participants

Including:

- 12 participants from EU-SPRI, 9 from Globelics, 9 from STRN and 5 from TIPC.
- Policy makers from Business Finland (3), Vinnova Sweden (1), Research Council of Norway (1), Department of Science and Technology (DST), South Africa (1)
- Also represented: European Environment Agency (EEA) (1), European Commission (1), Climate KIC (2), Rathenau (1) & Aalborg University (1)

**Number of Participants from EU-SPRI:** 12

Overall Impression:

The two day workshop brought together members of EU-SPRI, Globelics, STRN and TIPC with the objective to agree upon a shared priority agenda for research on Transformative Innovation Policy (TIP). Following an earlier discussions at the last TIPC conference in 2018, particular areas of discussion that had been agreed upon which included:

- Rationales for TIP
- The conceptual foundations of TIP
- Role of Science, Technology and Innovation (STI) in TIP
- The design and implementation of TIP

Much of the discussion centred on the need to understand the scope and scale of innovation, the feasibility of transformation for different contexts, and the actual coordination of innovation. The TIP research agenda has ambitious goals that represent a radical departure from traditional methods of policymaking and knowledge production, and thus needs truly transformative methods and modes that allow for diversity across different contexts. The importance of collaboration and coordination between different actors was stressed as crucial to the success of TIP, as well as the need to apply local, regional and national lenses.

It was agreed that innovation policies can deliver on transformation when there is emerging coordination across experiments in trans-local levels, when the State plays the role of a convener, facilitator and enabler, and also when we are reflexive on what problems we are addressing through transformation – which could be radically different in global North and

global South contexts. Such agreements were confirmed when hearing from policymakers on the second day of the workshop, who stressed the need to work both transnationally and locally.

The two day inter-network research dialogue paved the way for an agreed research agenda on TIP, and it was clear there was appetite for continuing the discussion. The network agreed that the next priority was the creation of a research initiative group with representatives from all networks that will put together a research proposal for potential funders. Furthermore, TIPC will put out a call for papers in April/May 2019 to further develop understandings of TIP, which will coincide with the next TIPC Conference in November 2019. A tentative research agenda is due to be published in April/May 2019.

Comments from participants:

Elisabeth Gulbrandsen from the Research Council of Norway said, *"The discussions over the last few days were rich and very positive. Progress has been made, and it is clear how special the ethos and agenda of TIP is. I was especially happy to see the focus on interaction between policymakers and academics, and the insistence that learning must come from all sides. It is easier to see where we are going, and where we have come from."*

Heli Karjalainen from Business Finland said, *"I am very happy with the outcome, and look forward to the agenda that will come out at the end of March. We still have some way to go; the language and discourse needs to be settled on but that is why it is so important we have this platform for ongoing discussions."*

Goran Marklund from Vinnova in Sweden said, *"The feeling around the research agenda is very good, and it's exciting to see that different networks are noting the potential of TIP. Converging interests and interaction with policymakers is crucial and it's good to see this happening. I feel comfortable and this platform is catalyst for this and that is important."*

Imran Patel from the South African National Research Foundation commented, *"The conversation is deepening and we are tackling some key research questions. How do we want to unfold the research agenda? How do you give different knowledge equal standing between different groups? We are making good progress."*

Key Emerging Outcomes:

- A shared tentative priority agenda on TIP for STI (to be published in April/May 2019)
- A call for papers to be announced in April/May 2019 to be presented at the next TIPC conference
- Commitment by researchers to meet again to continue building a research community for TIP
- The network agreed that the next priority was the creation of a research initiative group with representatives from all networks that will put together a research proposal for potential funders
- Sessions about TIP to be organised at next Eu-SPRI, Globelics and IST conferences

Agenda:

Day 1: 25 <sup>th</sup> February 2018	
9.30-10.00	<b>Introductions</b>
10.00-11.00	<b>Rationales for transformative innovation policy</b> Discuss and clarify aims and rationales of the workshop: why is this workshop on transformative innovation policy and underlying research agenda building activity relevant/important? Why do we need transformative innovation policy? Structure of session: plenary discussion with brief invited introductions (max 5 minutes each) by 4 spokespersons of organising associations (they do not represent the organisations in any formal sense, so opinions are personal, but they are located in the various fields organized by Eu-SPRI, Globelics, STRN and TIPC); The listener will not intervene but report day 2 on the results of the session. Chair: Jakob Edler Introduction: Jonas Torrens about various steps/history of initiative Eu-SPRI: Matthias Weber STRN: Lea Funfschilling Globelics: Erika Kraemer-Mbula TIPC: Johan Schot Listener: Bipashyee Ghosh
11.00-11.15	<b>Break</b>

11.15-13.00	<p><b>Conceptual Foundations</b></p> <p>Central question: How to conceptualise transformative innovation policy? How to put it in context of emerging approaches of framing new STI policies?</p> <p>What is relationship between these approaches and the Sustainable Development Goals?</p> <p>Structure of session: 4 invited brief provocations (max 5 minutes each). This is the start of group discussions (four smaller groups) (30 minutes) followed by reporting and plenary discussions (45 minutes). The listener will not intervene but report day 2 on the results of the session</p> <p>Chair: Johan Schot</p> <p>Invited provocations by Fred Steward; Bengt-Åke Lundvall;</p> <p>Marina Szapiro; Ed Steinmueller</p> <p>Listener: Jakob Edler</p>
13.00-14.00	<b>Lunch</b>
14.00-15.45	<p><b>What role for STI policy?</b></p> <p>The specific role of Innovation, in relation to other policies and other actors (business, civil society, users/market). Can innovation policy deliver? What about coordination among policy actors and among all actors? What about coordination across scales (local, national and transnational). Is transformation a feasible aim? We will think about this question in the context of both the Global South and Global North (consider variety in contexts)</p> <p>Structure of the session: 3 invited brief provocations (max 5 minutes each). Group discussions (four smaller groups) (30 minutes) followed by reporting and plenary discussion (45 minutes). The listener will not intervene but report day 2 on the results of the session</p> <p>Chair: Matthias Weber</p> <p>Invited provocations by Emanuela Reale/Erika Kraemer-Mbula/Wouter Boon</p> <p>Listener: Jonas Torrens</p>
15.45-16.00	<b>Break</b>

16.00-17.45	<p>How to do transformative innovation policy?  How to design, implement and evaluate transformative innovation policy initiatives in various contexts?  Structure of the session: 3 invited brief provocations (max 5 minutes each). Group discussions (four smaller groups) (30 minutes) followed by reporting and plenary discussion (45 minutes). The listener will not intervene but report day 2 on the results of the session  Chair: Erika Kraemer-Mbula  Invited provocations: Gabriela Dutrenit; Alejandra Boni, Bruno Turnheim  Listener: Ann Kingiri</p>
17.45-18.00	<b>Closing of the Day</b>
<b>Day 2: February 26<sup>th</sup> 2019</b>	
9.30-10.00	<p>The need for transformative innovation policy  Session in which policy makers articulate need for transformative innovation policy from their own perspectives and experiences  Chair: Melanie Peters  Cristian Matti, Göran Marklund, Imraan Patel, Mike Asquith followed by plenary discussions</p>
10.00-11.00	<p>The emerging research portfolio on transformative innovation policy  Session in which the appointed listeners present results and their impressions of the four sessions followed by plenary discussions  Chair: Johan Schot  Jakob Edler, Jonas Torrens, Bipashyee Ghosh, Ann Kingiri</p>
11.00-12.30	<b>Group work: development of research agenda (groups will mix policy-makers and researchers)</b>
12.30-13.30	<b><i>Lunch</i></b>
13.30-15.00	<b>Presentation of results and plenary discussions</b>
15.00-15.15	<b><i>Break</i></b>
15.15-16.00	<b>Closing discussion (including how to proceed)</b>





Photographs of the event:



## Annex 3: Eu-SPRI 2019 Annual Conference, STI Policies for Sustainable Development Goals, Actors Instruments and Evaluation

Roma, June 5-7 2019

Hosted by CNR-IRCRES Research Institute for Sustainable Economic Growth

The Conference built on the directions proposed by the 2017 Vienna and the 2018 Paris Eu - SPRI conferences, and focuses on new actors, instruments, practices, and policies for research and innovation to pursuing sustainable development goals using the problem-solving approach.

The Conference aim was to deepen the concept of 'missions' and how R&I studies can address it, trying to figure out existing or potential linkages between missions and sustainable development goals, and what is the contribution that STI policy studies can provide in this respect. Also, problems of measurements related to missions and existing gaps between missions and social challenges, policy objectives, policy instruments, and research projects were discussed, including the understanding of issues such as regulations, public funding and public procurement toward reaching specific goals.

The Conference was organised around six key themes.

- R&I policies toward mission-oriented sustainable research: rethinking policy design, implementation and evaluation.
- New governance of STI policies: actors, networks and instruments
- RRI and the new social contract for research and innovation
- Social innovation: enabling factors and existing practices for sustainable social needs
- Research infrastructure for STI studies: open data, big data, and new research avenues
- Globalization and the geography of knowledge and innovation

Important dates of the Conference:

- Pre-announcement of the Call: December 2018
- Opening of Submissions: January 10, 2019
- Closing of Submissions: February 15, 2019 extended until March the 10th
- Announcement of the selected papers and posters: April 12, 2019
- Registration opened: April the 1st, 2019

Key figures of the Conference:

Submissions received: 170

Paper accepted: 98

Poster accepted: 16

Number of people attending the Conference: 164

Of which Students: 21

Non-Eu-SPRI participants 64

More than 30 countries are represented with speakers and guests mainly from European countries, but we also had scholars from North America, Africa, South America, and Asia.

OECD representatives attended the Conference, as well as representatives from the European Commission DG RTD.

**Book of abstract and presentations:** available on the Eu-SPRI web page  
<http://www.euspri2019.it>.

#### Venue

CNR Headquarter for the morning of Wednesday the 5<sup>th</sup> and Centro Congressi Frentani, which are very close to Termini Station (the main train station of Roma).

#### EU-SPRI 2019 Conference: Keynote speakers

We invited three keynote speakers that fit the orientation of the Conference, who are listed below.

Name	Affiliation	Topic
Enrico Giovannini	University of Tor Vergata (Italy)	S&TI policies for contributing to sustainable development
Adrian Ely	SPRU (UK)	New governance of STI policies toward sustainable research
Susanna Borràs	CBS (Denmark)	State Capacity in Transformative Science Technology and Innovation Policies

We also covered the costs of 1 invited speaker for the special plenary session on RISIS (Ilaria Fava, University of Gottingen)

#### Organisation

The programme of the Conference is in the annex and still available on the Conference website ([www.eu-spri2019.it](http://www.eu-spri2019.it)). The Conference started Wednesday 5 June 2019 morning and ended on Friday 7 June at 3pm; it was organised with 5 parallel sessions over the whole duration. The programme included:

- 3 plenary sessions for keynote speakers;
- 5 special parallel sessions;
- 1 Poster session;
- 1 session for book presentation;
- 1 plenary session organized by the RISIS infrastructure on new developments and services available for researchers in the field of studies on science technology and innovation.

One plenary session in the last day of the Conference was based on a panel presenting the work done during the 2018 December Exploratory Workshop of Eu-SPRI.

#### Practicalities

The registration fee was the same as in Paris 2018. We agreed on some special rates or no fee at all in very special case of researchers (generally early career researchers) that want to

attend the Conference but do not have enough budget for covering the fee. No fees were paid by the invited speakers and people from EU-DG-JRC and CNR.

The fee included materials (a small welcome pack, including practical information, a map of the conference venues, a printed program, a pen and one note paper), three lunches and the welcome cocktail. The participation to the Conference dinner and the related cost of 50 Euros, were up to the participants.

## Annex 4: Final Report: EU-SPRI Summer School Research & Innovation Policy and Governance

### SHORT FACTS

**Location:** Manchester

**Date:** 24-28<sup>th</sup> June 2019

**Organisers:** Manchester Institute of Innovation Research at The University of Manchester, University of Twente, Fraunhofer Institute for Systems and Innovation Research, Austrian Institute of Technology.

**Speakers:** Kieron Flanagan, Elvira Uyarra, , Kate Barker, Jacob Edler, Philip Shapira (MIOIR) Peter Biegelbauer, Matthias Weber (AIT) Gonzalo Ordonez-Matamoros, Stefan Khulmann (U. Twente)

**Number of participants:** 18 from 6 countries

**Number of participants from EU-SPRI network:** 18

**Overall satisfaction:** Good

### Overall impression

The EU-SPRI summer school 2019 at The University of Manchester's Alliance Manchester Business School gathered a group of European based of younger researchers for lectures, discussions and group work. The school focused on R&I policy and governance, with a strong emphasis on a critical and comparative perspective. This included both comparisons across European countries and consideration of R&I policy and governance in different political and economic contexts. We explored the complementarities and tensions between descriptive and analytical approaches, on the one hand, and prescriptive approaches on the other. We also combined a review of foundational and state-of-the-art thinking on policy analysis and consideration of applied issues from current policy debates.

Topics and themes addressed included:

- Ways of thinking about R&I policy analysis
- Policy design and policy implementation
- Changing rationales for R&I
- Instrument analysis, policy complexity and policy mixes
- Multi-actor, multi-level governance
- Strategic intelligence and policy learning – including foresight, technology assessment, monitoring and evaluation
- RRI and tentative governance of R&I
- Selected case studies of national/European R&I policy mixes and their evolution



## The Objectives of the Summer School

To equip participants with a good understanding of different theoretical perspectives and approaches to the analysis of R&I policy, and provide them with an overview of the variety of instruments, processes and structures of R&I policy in specific case study contexts.

- To understand recent trends and debates in R&I policy
- To work in small groups to deliver a small piece of policy analysis
- To expose participants to leading scholars in the field and to help participants advance their own research projects

## Teaching mode

Short lectures and case presentations from leading scholars in the field, group discussion, student presentations of their own projects, with feedback from a senior discussant and small group work on a specified policy analysis task.

## Organisation of the course

Each day of the summer school was dedicated to a specific topic. The programme is shown below in full but essentially day 1 focused on relevant theories, approaches and instruments. Day 2 was concerned with the shaping of policies and day 3, the implementation of policies. Day 4 was policy learning and the final day concentrated on the results from the group work and student presentations.

Manchester academics selected the course applicants based on their stated research and thesis interests.

## Evaluation

The evaluation questionnaire had 9 respondents. The overall assessment was that participants were satisfied with the course. It was thought to be a coherent programme with good lectures presenting a broad array of topics and perspectives but possibly a bit full. There was a nice combination of students from different countries and backgrounds. The content and choice of teachers was considered excellent and the accommodation was complemented. For those attending who had not previously had exposure to public policy, the summer school was useful to gain insight into the domain.

*"It was an amazing week, I am so grateful for the opportunity to be here. Thank you for all your effort and the top notch team of researchers and managers we had chance to interact with!"*

*"The course was useful in introducing me to the world of policy in STI studies. A positive impression – Overall! The open discussions were quite helpful to deliver into a range of policy issues."*

For the particular sessions, policy learning, policy implementation, policy assessment and the evening lecture, by Gonzalo Ordóñez Matamoros on Innovation policies in emerging economies, were mentioned as enjoyable and useful.

*“Policy Learning, Policy Implementation and the evening lecture was really nice because it was more interactive.”*

We asked for useful ideas to enhance the course in future years and a number of positive suggestions emerged. These included allocating more time for discussions and including more interactive sessions and short assignments. More substantive feedback for the student presentations, which would essentially require more time to allow thought and preparation from the audience and the lecturer, was another proposal. This would require material to be circulated in good time.

*“Reserve time for discussions (more realistic time frames), Add more ‘interactive’ sessions/short assignments.”*

The points for improvement on the organisation of the course included a longer timeline to distribute the programme and materials for the week. Avoiding a clash with the Annual PhD reviews for Manchester students was highlighted.

## Future Plan

The course team hope to repeat the Summer School in 2 years.

June	24	25	26	27	28
	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>Theme</b>	<b>Foundation</b>  lead: Kieron Flanagan/Elvira Uyarra	<b>The shaping of policies</b>  lead: Stefan Kuhlmann/Kate Barker	<b>Policy implementation</b>  lead: Jakob Edler/Peter Biegelbauer/Gonzalo Ordonez-Matamoros	<b>Policy and programme learning</b>  lead: PS (am) and Matthias Weber (pm)	<b>Future directions</b>  lead: Matthias Weber/Kate Barker
<b>9.00-9.45</b>	Introductions and outline of course - <b>Lecture 1:</b> Perspectives on R&I policy and governance Kieron Flanagan	Illustrative Case study I: The United Kingdom Kate Barker	Illustrative Case study II: Germany Jakob Edler	Illustrative Case study III: USA Philippe Shapira	Illustrative Case study IV: The European Union Matthias Weber
<b>9.45-10.45</b>	<b>Lecture 2:</b> Instrument approaches to R&I policy analysis Kieron Flanagan	<b>Lecture 5:</b> Policy design & development Stefan Kuhlmann	<b>Lecture 7:</b> Democratic Governance of R&I Peter Biegelbauer	<b>Lecture 9:</b> Responsible Research and Innovation PS	<i>Group work time</i>
<b>10.45-11.00</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>
<b>11.00-12.00</b>	<b>Lecture 3:</b> Policy complexity Elvira Uyarra, Kieron Flanagan	<b>Lecture 6:</b> policy design & development continued Stefan Kuhlmann	Group discussion “Comparative perspectives on R&I policy governance” lead: Jakob Edler/Gonzalo Ordonez-Matamoros	<b>Lecture 10:</b> Impact assessment and evaluation Kate Barker	Presentation of results of student group work
<b>12.00-12.45</b>	Student presentations I (2 students with senior discussant)	Student presentations III (2 students)	Student presentations V (2 students)	Student presentations VII (2 students)	Discussion/feedback
<b>12.45-14.00</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>



June	24	25	26	27	28
	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>14.00-15.00</b>	<b>Lecture 4:</b> Diversity of approaches to policy analysis Stefan Kuhlmann, Peter Biegelbauer	Group discussion on strengths and weaknesses of R&I policy studies lead: Stefan Kuhlmann	<b>Lecture 8:</b> Policy learning Peter Biegelbauer, Gonzalo Ordóñez-Matamoros	<b>Lecture 11:</b> Implementation Peter Biegelbauer, Jakob Edler	Student roundtable: What are the big questions in R&I policy studies - and how to answer them? lead: Matthias Weber
<b>15.00-15.15</b>	Break with light snack	Break with light snack	Break with light snack	Break with light snack	Break with light snack
<b>15.15-16.00</b>	Student presentations II (5 students with a break)	Student presentations IV (2 students)	Student presentations VI (2 students)	Student presentations VIII (2 students)	Final Roundtable/ Q&A with researchers and practitioners Wrap-up session/feedback lead: Matthias Weber/Kate Barker/all
<b>16.00-17.00</b>		Introduction to group work task <i>and groups begin work</i>	<i>Group work time</i>	<b>Lecture 12:</b> Strategic Intelligence for R&I policy Matthias Weber	
<b>Evening</b>	Free time	Evening lecture Gonzalo Ordóñez-Matamoros	Course Dinner		



## **Annex 5: Eu-SPRI Summer School, Tools and methods for analysing complex Science, Technology and Innovation (STI) systems: A gentle introduction to Machine Learning (ML), Network Science (NS) and Text Mining (TM)**

IRCrES-CNR, Rome – July 1-3, 2019

**Chairs of the conference:** Antonio Zinilli, Giovanni Cerulli

**Teaching Staff:** Dr. Antonio Zinilli (IRCrES-CNR), Dr. Giovanni Cerulli (IRCrES-CNR), Dr. Carlo Drago (Università Cusano)

**Local Organising Committee:** Antonio Zinilli Giovanni Cerulli Marco De Biase Emanuela Reale

### **Participants**

33 researchers participated to the Summer School: Eu-SPRI Members 5, Non-Eu-SPRI members 26, Researchers from the CNR 2.

### **Objectives of the Course**

Machine Learning (ML), Network Science (NS) and Text Mining (TM) are relatively new techniques able to enlarge our understanding of complex socio-technological systems, either by digging deeply into the data informative power (ML and TM), or by increasing the understanding of the system relational dimension (NS). The training provided participants with the essential tools for a correct application of some popular ML, NS, and TM methods in various STI contexts. In particular:

- ML techniques proves useful for factor importance detection, as well as for classification purposes in a model- free stance;
- NS techniques are useful to identify and study structure and dynamics of large and complex STI communities;
- TM is a set of tools able to extract relevant information from articulated documents, both for descriptive and policy analysis purposes.

The course provided three modules (one on ML, one on NS, and one on TM) with the aim of balancing theory and applications. Participants carried out some exercises assigned by the instructors under their supervision.

### **Social dinner**

On September 2<sup>th</sup>, at 7.30<sup>PM</sup>, the social dinner took place at “Efeso il Barrocciaio”. Besides being another opportunity for networking, this dinner offered Summer School participants the opportunity to taste the typical Italian food.

### **Evaluation of the conference**

Overall, the attendees were highly satisfied with the program and activities which is confirmed by the attendee evaluations. Attendees graded the overall conference with a good evaluation judgment. High scores were particularly given for the overall atmosphere, the feedback received and scientific program. Staff members were also really enthusiastic about the group and enjoyed the interactions with the young researchers.

## Summer school programme

<u>Day 1 – July 1, 2019 (Antonio Zinilli)</u>	<u>Day 2 – July 2, 2019 (Giovanni Cerulli)</u>	<u>Day 3 – July 3, 2019 (Carlo Drago)</u>
9:30 Registration		
9:45-10:00 Welcome		
10:00-11:00 Basic concepts of Social network analysis	10:00-11:30 An introduction to Machine Learning and Data Science for analyzing complex STI systems: Identification, prediction, trade-offs, and validation approaches	10:00-11:00 Concepts and tools for Text Mining analysis
11:00-11:30 Coffee break	11:30-12:00 Coffee break	11:00-11:30 Coffee break
1:30-12:30 Main Network models (ERGM)	12:00-13:00 Monte Carlo, Bootstrap, and model Validation: a primer	11:30-12:30 Text Mining applications
12:30-13:30 Lunch	13:00-14:00 Lunch	
13:30-14:30 Application scenarios (some illustrative examples of Network Science on specific datasets of Science Technology and Innovation (STI) systems)	14:00-15:00 Model selection and regularization: Optimal subset selection; Shrinkage Methods: Lasso, Ridge, and Elastic regression	
14:30-15:30 Organisation of the laboratory assignments Creation of groups and provision of data	15:00 – 16:00 Laboratory with Stata and R	
15:30-16:00 Coffee break	16:00 – 16:30 Coffee break	
16.00-17.00 Young participants' presentation of their assignments	16.30 – 17.30 Applications to real STI datasets	
	19.30 Dinner	



Pictures from the Conference



## Annex 6: Eu-SPRI Early Career Researchers Conference: The changing entrepreneurial finance landscape: challenges for policy

### SHORT FACTS

**Location:** Torino (Italy)

**Date:** 24-25th September 2019

**Organisers:** Politecnico di Milano, Politecnico di Torino.

**Keynote Speaker:** Rosemarie Ziedonis

**Number of participants:** 47 from 9 countries

**Number of participants from EU-SPRI network:** 17, 12 participants and 5 organisers

Overall satisfaction: Good

### Aim of the conference

Reflecting the breadth of financial instruments that are potentially available to new ventures (e.g. VC financing, BAs, CF, CL, proof-of-concepts), the conference focused on the changing ecosystem of entrepreneurial finance, currently transformed by the Fintech revolution and by the entrance of new actors in the arena and investigated the challenges (and opportunities) this new financial environment creates for policy makers.

Some broad topics addressed in the papers submitted to the conference include:

- Public policy towards the financing of high-tech entrepreneurship and innovative firms
- The role of the Fintech revolution in the changing eco-system of entrepreneurial finance
- The effects of the financial crisis on SMEs and new ventures
- New forms of entrepreneurial finance (e.g. proof-of-concepts, ICOs)
- The relationship between different forms of finance (crowdlending, crowdfunding, business angels, venture capital)
- The role of location and institutional characteristics in shaping the ecosystem of actors (and their relationships) surrounding start-up financing
- Entrepreneurs and investors' social capital and positioning into a network
- Business models and different sources of financing
- Policy challenges and the integration of European entrepreneurial finance policies
- The impact of the digital transformation on regional equity gap
- Financial markets, regulatory framework and the provision of finance for SMEs
- Crowdfunding: opportunities, challenges and critical factors
- Venture capital, innovation and high-tech start-ups performance
- Macro perspectives on financial markets, innovation, high-tech entrepreneurship and economic growth
- Innovative policy tools to finance innovative and high potential SMEs

## Organising Committee

- Elisa Ughetto (Politecnico di Torino) - Scientific Coordinator
- Annalisa Croce (Politecnico di Milano School of Management) - Scientific Coordinator
- Massimo G. Colombo (Politecnico di Milano School of Management)
- Emilio Paolucci (Politecnico di Torino)
- Vincenzo Butticiè (Politecnico di Milano School of Management) Carlotta Orsenigo (Politecnico di Milano School of Management)
- Francesca Tenca (Politecnico di Milano School of Management)
- Daniele Battaglia (Politecnico di Torino)
- Antonio De Marco (Politecnico di Torino)

## Participants

In total 39 researchers participated to the conference: 9 members of the organizing committee and 30 young researchers. Out of these 30, 12 young researchers are affiliated to Eu-SPRI members while the remaining 18 researchers come from non Eu-SPRI members. 21 researchers, out of these 39 attending the event, presented the submitted paper. In addition to these 39 participants, 1 well known senior academic gave the keynote speech and 7 practitioners were involved in a round-table, **for a total of 47 participants to the conference**. Some (junior and senior) researchers from the Politecnico di Milano attended some paper sessions as well as the keynote speeches and the practitioners' roundtable.

## Format

As it is clear from the conference program (see Annex 1), we organised a two-day event consisting of 8 sessions: six paper sessions, one keynote speech and one practitioners' roundtable. Each session had a chairperson keeping the time and facilitating interactions between the presenters and the audience.

## Paper sessions

In each paper session, 3 or 4 papers were presented. Each speaker had 15-20 minutes for the presentation. Each paper was then discussed by a discussant who was one of the presenters of the remaining papers in the same session, and the session chair who acted as senior discussant for all the papers presented in the session. Discussants received the papers one week in advance and were asked to prepare a 5-minute presentation providing the paper's authors with feedback that would help to improve the presented works. Thanks to the availability of time, interesting and fruitful interactions between presenters, discussants and the audience were possible.

Sufficiently long coffee and lunch breaks increased networking opportunities for participants and allowed more in-depth discussions between paper presenters and discussants, keynote speakers and the rest of the audience.

## Practitioner's roundtable

The conference benefitted from a round table involving seven practitioners:

- Giancarlo Giudici, Politecnico di Milano School of Management and Minibond Observatory Director
- Paolo Anselmo, IBAN Italian Business Angels Network

- Alessandro Balboni Intesa, San Paolo Innovation Center
- Claudio Bedino Starteed, Oval Money
- Marta Ghiglioni Italia Fintech
- Alessandro Lerro Assofintech, Italian Equity Crowdfunding Association  
Ciro Spedaliere Vertis

The insights from the presenters generated an interesting debate/discussion combining academics' view with practitioners' one.

### **Keynote speech**

The keynote speaker, Rosemarie Ziedonis (see Annex 2 for their short bios), gave one inspiring speech about venture lending & the role of IP as collateral assets. This speech provided researchers in the audience with a clear view about a synthesis of the key empirical findings on the topic and suggestions about the broader policy implications of those findings.

### **Social dinner**

On September 24<sup>th</sup>, at 8:30 PM, the social dinner took place at the Restaurant "C'era una volta", Corso Vittorio Emanuele II, 41, 10125 Torino.

### **Program of the Conference**

*Tuesday 24<sup>th</sup> September*

(@ Energy Center, Via Paolo Borsellino, 38 int. 16, 10138 Torino & room 5N, Politecnico di Torino)

**8.45-9.00: Registration of participants (@ Energy Center)**

**9.00-9.15: Welcome address (@ Energy Center)**

**9.15-10.30: Keynote speech (@ Energy Center)**

Prof. Rosemarie Ziedonis (Questrom School of Business, Boston University)

**10.30-11.00: Coffee Break (@ Energy Center)**

**11.00-13.00: Paper development session**

Session 1: Start-up Creation and Financing (@ Energy Center)

Session 2: Innovation and Policy (@ room 5N)

**13.00-14.00: Lunch**

**14.00-16.00: Paper development session**

Session 3: Crowdfunding (@ Energy Center)

Session 4: Social Capital and Social Impact Finance (@ room 5N)

**16.00: Visit to Politecnico di Torino main campus and group photo session**

**20.00: Social dinner, Restaurant "C'era una volta", Corso Vittorio Emanuele II, 41, 10125 Torino**



Wednesday 25<sup>th</sup> September

(@ Energy Center, Via Paolo Borsellino, 38 int. 16, 10138 Torino TO & room 5N, Politecnico di Torino)

### 9.00-10.30: Paper development session

- Session 5: Venture Capital and Business Angel Finance (@ Energy Center)
- Session 6: Fintech Finance (@ room 5N)

### 10.30-11.00: Coffee break

**11.00-13.00: Round table with practitioners (i.e. business angels, venture capitalists, crowdfunders, entrepreneurs). (@ Energy Center)**

### 13.00-14.00: Lunch

## PAPER DEVELOPMENT SESSIONS

Session 1: Start-up Creation and Financing Chair: Maxens Berre	Session 2: Innovation and Policy Chair: Francesca Di Pietro
<i>Sept, 24 – 11.00-13.00 – Energy Center</i>	<i>Sept, 24 – 11.00-13.00 – Room 5N</i>
<b>Maxens Berre</b> A targeted review of literature on start-up valuation driving factors <b>Discussant: Noemi Oggero</b>	<b>Francesca Di Pietro</b> , Vincenzo Buttice The role of institutional characteristics in influencing the development of crowdfunding across countries <b>Discussant: José N. Franco-Riquelme</b>
Lukas Held, Andrea M. Herrmann, <b>Friedemann Polzin</b> Follow the Money: The Funding Acquisition Process of Nascent Ventures <b>Discussant: Maxens Berre</b>	<b>Francesco Gerli</b> , Benedetta De Pieri Supporting hybrid impact oriented organisations through local policies: the value of non-traditional financial schemes - Evidence from the municipality of Milan <b>Discussant: Francesca Di Pietro</b>
<b>Laurence Cohen</b> , Kirsten Burkhardt Entrepreneurs (novices vs. experts) and investors: Interaction and effectual vs. causal rationality dynamics <b>Discussant: Friedemann Polzin</b>	<b>José N. Franco-Riquelme</b> , Isaac Lemus-Aguilar, Antonio Bello-Garcia, Joaquín B. Ordieres-Meré SDGs & Innovation The discourse of entrepreneurial financial KIBS (FinTech) through social media analysis, attached <b>Discussant: Francesco Gerli</b>
<b>Noemi Oggero</b> , Maria C. Rossi, Elisa Ughetto Entrepreneurial Spirits in Women and Men. The Role of Financial Literacy and Digital Skills <b>Discussant: Laurence Cohen</b>	
Session 3: Crowdfunding Chair: Francesca Tenca	Session 4: Social Capital and Social Impact Finance Chair: Veronica Chiodo
<i>Sept, 24 – 14.00-16.00 – Energy Center</i>	<i>Sept, 24 – 14.00-16.00 – Room 5N</i>

Maximilian Goethner, Lars Hornuf, <b>Tobias Regner</b> Protecting Investors in Equity Crowdfunding: An Empirical Analysis of the Small Investor Protection Act <b>Discussant: Liang Zhao</b>	<b>Davide Viglialoro</b> , Giuliano Sansone, Paolo Landoni The peculiarities of incubators focused on startups with social or environmental aims <b>Discussant: Veronica Chiodo</b>
Aurélien Petit, <b>Peter Wirtz</b> Experts in the Crowd and their Influence on Herding in Reward-based Crowdfunding of Cultural Projects <b>Discussant: Tobias Regner</b>	Mario Calderini, Irene Bengo, <b>Alice Borrello</b> , Veronica Chiodo Water in a bottle: setting the boundaries of impact investing <b>Discussant: Davide Viglialoro</b>
Tobias Regner, <b>Paolo Crosetto</b> The long-term effects of self-pledging in rewards-based crowdfunding <b>Discussant: Francesca Tenca</b>	<b>Leonardo Boni</b> , Laura Toschi, Riccardo Fini How strategies for societal impact attract finance? An investment portfolio analysis within an organizational identity framework <b>Discussant: Alice Borrello</b>
<b>Liang Zhao</b> Investigations of Entrepreneurial Financing Success Through Elaboration Likelihood Model: The Case of Reward-based Crowdfunding <b>Discussant: Paolo Crosetto</b>	<b>Veronica Chiodo</b> Size vs Scale: the Growth Dilemma of Hybrid Ventures <b>Discussant: Leonardo Boni</b>
<b>Session 5: Venture Capital and Business Angel Finance</b> <b>Chair: Vincenzo Buttice</b>	<b>Session 6: Fintech Finance Chair: Francesco Fontana</b>
<b>Sept, 25 – 9.00-10.30 – Energy Center</b>	<b>Sept, 25 – 9.00-10.30 – Room 5N</b>
Angelo Cavallo, Antonio Ghezzi, Giancarlo Giudici, <b>Benedetta Montanaro</b> Determinants of the exit value in European VC-backed technology companies <b>Discussant: Laurence Cohen</b>	<b>Francesco Fontana</b> , Daniel Levis, Elisa Ughetto, Francesca Tenca A look into the future of blockchain technology: opportunities and challenges for corporate financing <b>Discussant: Alessia Pedrazzoli</b>
<b>Vincenzo Buttice</b> , Massimiliano Guerini, Roberto Bianchini, Annalisa Croce On The characteristics of Innovative Start-Ups Accessing External Equity Finance: Evidence from Italy <b>Discussant: Benedetta Montanaro</b>	<b>Davide Lanfranchi</b> Insurtech and new technology driven innovation in P&L insurance <b>Discussant: Francesco Fontana</b>
Peter Wirtz, Christophe Bonnet, <b>Laurence Cohen</b> , Vincenzo Capizzi Angel Cognition and Active Involvement in BA Groups: A Cross-Country Empirical Analysis <b>Discussant: Vincenzo Buttice</b>	Riccardo Ferretti, <b>Alessia Pedrazzoli</b> , Valeria Venturelli Investment decision and heuristics of equity crowdfunding investors: evidence from an Italian platform <b>Discussant: Davide Lanfranchi</b>



## Annex 2: Keynote speaker biography

Rosemarie Ziedonis is an Associate Professor of Strategy and Innovation at Questrom. She has a Ph.D. in Business and Public Policy from UC Berkeley's Haas School of Business and an undergraduate degree in economics from the University of North Carolina, Chapel Hill. Prior to joining Questrom, she served on the faculty at the University of Oregon, the Wharton School, and the University of Michigan's Ross School of Business, where she co-directed the Program for Law, Economics, and Technology. Her research examines the value and strategic use of intellectual property, and broader aspects of innovation policy and management. Findings from her studies have been published in a wide range of journals including the Journal of Financial Economics, Organization Science, Management Science, the Rand Journal of Economics.



## Annex 7: Transformative Innovation Policy Conference: Towards a Global Research Agenda Final Report

### **Date and location: Valencia**

**4<sup>th</sup> November 2019**- Mirador de Comedias, Carrer de les Comèdies, 7, 46003

**5<sup>th</sup> November 2019** – Ingenio, UNIVERSITAT POLITÈCNICA DE VALÈNCIA, Ciudad Politécnica de la Innovación, Edif 8E 3º Flor [Red Cube], Camino de Vera s/n, 46022

(Followed by funders dinner in central Valencia)

**Organisers:** Organised by TIPC in association with Eu-SPRI & with a representation of STRN & Globelics members

**Key Speakers:** Kirsten Dunlop (ClimateKIC), Jordi Molas Gallart (Ingenio), Johan Schot (University of Utrecht)

**Panellists:** Fred Steward (Policy Studies Institute), Mike Asquith (EEA), Anastasios Kentarchos & Sander Happaerts (European Commission), Matthias Koller (German Environment Agency), Astrid Martens (Netherlands Environment Agency), Karin Fink (Environment Office, Switzerland), Matthew Wallace (IDRC), Imraan Patel (DST, South Africa), Diana Velasco (Universidad de Ibagué), Ellie Gilvin (EPSRC), Nina Strandberg (SIDA)

### **Number of Participants: 110**

Including (approximately): Eu-SPRI: 30, TIPC: 45, STRN: 35, Globelics: 15

Many of the participants who attended the conference are members of multiple networks and some were not part of any network.

**Number of Participants from EU-SPRI:** Approx. 30

### **Overall Impression:**

The one and half day conference was an effort to mobilise the community of scholars and practitioners to explore the emerging 'Transformative Innovation Policy' theme. It followed ongoing dialogue between members of four research networks – the Transformative Innovation Policy Consortium (TIPC), European Forum for Studies of Policies for Research and Innovation (Eu-SPRI Forum), Sustainability Transitions Research Network (STRN) and Globelics (in particular Africalics) in order to understand how different actors around the globe are interpreting and enacting transformative innovation policies through research and policy actions. To this end, the conference accommodated more than hundred participants, affiliated to one or multiple research network and offered multiple highly interactive sessions and two panel discussions between European policymakers as well as research and policy funders.

One key impression from the conference is that the participants valued the range of projects they were exposed to in the conference by replacing presentation session with

dedicated poster session. This one hour dedicated poster session provided the opportunity to participants to expose themselves to a wide of research topics, and also offered the flexibility to widen and/or deepen knowledge on specific topics. An example feedback on the conference is “I thought the session content and organisation was excellent - very refreshing to not just come and talk about our individual projects, but rather use these projects in dialogue around the wider issues of transformations. Much more rich discussions.”

Another important session was the “engagement activity” where groups of conference participants discussed one of ten themes/topics, which constitute the proto-research agenda on TIP. These themes were:

1. Conceptual Foundations of Transformative Innovation Policy
2. STI Policies for Transformative Change
3. Experimentation for Transformative Change
4. Politics and Governance of Transformative Change
5. Role of Research and Innovation Agencies for Transformative Change
6. Role of Governments and Ministries for Transformative Change
7. Role of Businesses and Entrepreneurs for Transformative Change
8. Transformative Innovation Policy in Developmental Context
9. Transformative Innovation Policy in Regional Context
10. Tools for Transformative Innovation Policy

Through an in depth facilitated discussion on each of these themes, the groups contributed to the research challenges and opportunities on each topic. The inputs from all groups were recorded online and is available for access by the community [here](#) in the Padlet platform. The feedback from the participants about this session were mostly “very positive”, with a few suggestions to allocate more time for such discussion sessions in future.

Key insights from the interactive engagement sessions were shared more widely among all conference participants in the “Agora of topics” in the penultimate session of the conference. Topics like “assessing transformation”, “Configuration of actors in the hidden world of business”, “transformation innovation administration” attracted many audiences.

In the closing session of the conference, it was agreed that a research agenda needs to emerge on the broad topic of transformative innovation policy. The proto-research agenda which has emerged from this conference will be a useful input to that process. Many practitioners remarked that besides generating new knowledge, there should also be efforts in translating and sharing scholarly knowledge for capacity building among practitioners for broadening innovation policy. To this end, a new “Transformative Innovation Policy Research Network (TIPRN)” was officially launched at the conference. Interested individuals from the STI research and practice community and affiliates of all four research networks were invited to [join this new network](#), and support development of the network and the research. A core committee will continue to seek funding and members for each of the four research networks have shown interest in continuing these discussions in further dedicated meetings and in dedicated sessions in different conferences, while also seeking out funding for further activities and for publishing the TIP research agenda.



## Key Emerging Outcomes:

- A proto-research agenda has emerged based on further inputs on the various topics and research themes that constitute TIP research, following from the February 2019 workshop in Utrecht. There is an agreement on the need to finalise on a research agenda on TIP based on these inputs.
- A new platform of “Transformative Innovation Policy Research Network (TIPRN)” was launched for interested individuals to commit to building a research community around TIP. A core committee consisting of members of Eu-SPRI, STRN, TIPC and Globelics is in place and set to meet in coming months in order to coordinate attempts to support development of the network and the research.
- Members and governing board of TIPC have agreed to organise a low-emission virtual conference in 2021. This conference could be focussed on the TIP research agenda, if the TIP research network is effectively mobilised.
- A next step in this initiative to understand whether Eu-SPRI will be willing to continue to support the implementation of the TIP agenda, supporting various aspects of this initiative like publishing the research agenda and co-organising the conference in 2021.

## Agenda:

Day 1: 25 <sup>th</sup> February 2018	
9.30-10.00	<b>Introductions</b> Welcome to the conference from Professor Jordi Molas Gallart, Director of CSIC- UPV Ingenio.
16.30-16.45	<b>Welcome Address</b> Johan Schot welcomed all participants to the event on behalf of TIPC members.
16.45-17.30	<b>Engagement Activity I</b> The sessions opened with a semi-structured speed networking game, intended to introduce group members, explore expectations for working together and check in to the conference – leaving behind other duties and concerns. Each group was provided with a pack of cards, addressing a series of questions, such as motivations for attending the event, work responsibilities, collaborative styles, likes and dislikes and roles played within a team. Players were given a few minutes to take a card and discuss the question with other group members, before moving on to another group member – and question – when the bell rang.  We observed how different groups interpreted this game and the social and cultural dynamics on display – some groups adopted an informal approach, circulating independently and mixing randomly with members; others were more formally facilitated, with players taking turns to circulate under the direction of the facilitator, or sharing responses one by one with the whole group. Participants finished the exercise by scribbling down anonymously their initial thoughts, reflections, hopes and fears for the event. These notes highlighted themes that ranged

	<p>across hopes ‘to learn more about state-of-the-art innovation studies’ to have ‘challenging discussions that give new ideas’ to fears around ‘getting bogged down in theory’ and ‘networking with new people’ and ‘how to translate theory to practice’.</p> <p>Overall, the post conference survey indicated that 73% of respondents found this opening session a ‘very positive’ experience, 18% ‘somewhat positive’ and 9% neither positive nor negative.</p>
17.30-18.15	<p><b>Keynote by Dr Kirsten Dunlop, CEO EIT Climate KIC</b></p> <p>An inspiring talk focused on the EIT Climate KIC mission to catalyse systemic change through innovation; which looked at the drivers of their strategy, ‘Transformation, In Time’ and how this is being achieved through experimentation and collaboration.</p> <p>Chair: Johan Schot Speaker: Dr Kirsten Dunlop</p>
18.15-20.00	<b>Cocktail reception and networking</b>
<b>Day 2: February 26<sup>th</sup> 2019</b>	
9.00 – 10.00	<p><b>Welcome and Introductions</b></p> <p>Professor Jordi Molas Gallart, Director of CSIC- UPV Ingenio and Dr Bipashyee Ghosh shared an update on how the TIP global research agenda work is shaping up thus far with the inter-network dialogue participants – Eu-SPRI, Globelics, STRN and TIPC. Each shared their vision for transformative change from their network’s perspectives and how this links to aspects of the emerging research agenda.</p> <p>Different STI communities are mobilising innovation policy for addressing persistent socio-economic-environmental challenges. The main aim of the conference was to provide a platform for advancing the ongoing debates of different scholarly networks like Eu-SPRI, STRN, TIPC and Globelics/AfricaLics on transformative innovation. The conference brought together people and transdisciplinary research projects from different Global South and Global North contexts. The sessions in the conference were designed to facilitate maximum interaction, debate and mutual learning among participants towards co-creating new narratives around TIP.</p> <p>In this session, as well as the overview given from Professor Molas Gallart and Dr Ghosh, participants affiliated to each of these four key networks briefly introduced their perspective on TIP – how they approach this concept and how relevant is understanding and enacting TIP in their own contexts.</p> <p>Chair: Jordi Mollas Gallart Bipashyee Ghosh</p>
10.00-11.00	<p><b>Engaging with the projects through a poster exhibition</b></p> <p>This was a formal session, designed to facilitate informal interactions between participants. Each participant was requested to bring a poster</p>



	<p>describing their projects and results. More than 60 project posters were displayed in the hallways – which triggered rich discussions and engagement between the poster ‘hosts’ and ‘visitors’. The projects ranged from biodiversity approaches to development, using AI to understand the impact of R&amp;D, open data against government inertia to new narratives of green growth, Transformation for achieving SDGs in Mexico, Policy Labs for mobility services – to name a few. The session resulted in either deep understanding of a few projects in depth by some participants or a quick overview of many projects by others, given an hour time limit. Owing to the virtual exhibition of the posters on the TIPC website, participants could start the conversation with “Oh, I was looking at this poster online, and I have a question...”, instead of seeing the poster for the first time in this session.</p>
11.00-11.30	<b><i>Tea and Coffee</i></b>
11.30-13.00	<p><b>Engagement Activity II</b></p> <p>A key session of the conference were these facilitated group discussions on specific themes that emerged out of the project proposals submitted for the conference. Participants in each group brought forward insights from their projects or policy work to contribute to the theme of the group. Following these inputs, the groups chose a topic or a range of issues to discuss in-depth following the lead of the facilitator. The dynamics in each group and the resulting discussions were different. The note-taker recorded these discussions in an online platform called Padlet. This platform is open for knowledge sharing across all groups. The key aim of this activity was to generate knowledge from different individual as well as STI community perspectives on multiple facets of transformative innovation policy. These insights will feed into the effort of creating a shared research agenda on TIP through finding synergies and contrasts between different perspectives on each theme related to TIP. A key outcome of this activity was that a vibrant community of learning and practice emerged, made up of members who are enthusiastic about carrying forward the discussion and contribute to the research and action for transformative change.</p>
13.00 – 13.45	<b><i>Lunch and Networking</i></b>
14.00 – 15.00	<p><b>Plenary session on “Policy for Global Transformations ”</b></p> <p>The plenary was led by Mike Asquith from the European Environmental Agency (EEA). The core of the session was statements from the panel of representatives from various European agencies setting out how they are operationalizing transitions thinking and the challenges that this creates for assessing various initiatives.</p> <p>Chair: Mike Asquith Matthias Koller, Anastasios Kentarchos, Sander Happaerts, Mike Asquith European Environmental Agency, Fred Steward</p>

15.00 – 16.00	<p><b>Panel: ‘Supporting Global Transformations research’</b></p> <p>This panel focused on a discussion around what can be considered as ‘cutting-edge research’ for transformative change from funders’ perspective. In this session, a panel of funders shared their experiences of funding proposals that offered to contribute to transformative innovation. They shared the kind of projects they anticipate to be emerging in the field of science, technology and innovation that can be considered transformative. The panelists in this session had extensive experience in funding projects, particularly in the Global South, therefore a greater insight into research support in specific contexts became clear.</p> <p>Chair: Matthew Wallace Diana Velasco, Ellie Gilvin, Imran Patel</p>
16.00- 16.30	<b>Networking Break</b>
16.30- 18.30	<p><b>Bringing it together and forming the inter-network research network – Venue: Red Cube Lecture Theatre</b></p> <p>This session brought together the supply (the research community) and demand (the funders), although supply and demand is also cross cutting since researchers are looking for funding and funders are demanding fit with strategic priorities, aligned with ambitions to address the Sustainable Development Goals. The first half of this session brought it all together and defined next steps for the research agenda work and the related research network.</p> <p>In the beginning of this session, facilitators of each group presented short reflections and the key arguments put forward in their respective tables. These inputs were then matched with the funders’ experiences and anticipations in an open floor discussion. The goal was to find implications for a global research agenda on Transformative Innovation that bridges the supply and demand.</p> <p>The last part of the session launched a network around transformative innovation research and funding to continue collaboration and experimentation by designing a global programme of research on TIP.</p> <p>Chair: Johan Schot and Bipashyee Ghosh</p>
18.30 – 19.30	<b>Closing drinks reception</b>
20.00 – 22.30	<p><b>Funders Dinner in central Valencia</b></p> <p>A dinner hosted by TIPC, and co-funded by EU-SPRI, brought together research networks leads, policy makers and national agencies to consider opportunities for collaboration around a Transformative Innovation Policy (TIP) agenda aligned to societal and environmental goals. It built on earlier discussions with members of research networks, including STRN, EU-SPRI, Globelics and Africalics. TIPC</p>

	<p>founder, Johan Schot, hosted the meeting, calling for global research networks for sustainability transitions and innovation studies to mobilise in pursuit of a new shared research agenda, and for policy makers and funders to play a role in influencing this. He said: To address the SDGs, the Academy must transform, and as academics we need to rethink the way we do our business. How can we nurture more interdisciplinary and transdisciplinary work? The current model of working, underpinned by working individually, in smaller projects and in silos with cross-fertilisation at conferences, is a model of the 20th century. We need to establish new research infrastructure and work together in a bigger way. The EU, and other agencies globally want to prepare for sustainability transitions and as academics, it is no longer enough to do our own thing.</p> <p>TIPC is a step towards this, bringing together researchers and policy makers to work on shared learning and co-creation of TIP. However, there is further scope to strengthen ties with other networks to capitalise on the shared impact. The dinner meeting highlighted opportunities that this would present, along with obstacles to be overcome, and opened a dialogue for a way forward. Harnessing plurality Discussions highlighted the difficulties in establishing a new shared research agenda. While there is value in mobilising communities around common goals and themes, this approach is potentially at odds with scholars taking mutually informed individual approaches. Representatives emphasised, however, that networks can act as platforms to assimilate and mobilise knowledge, particularly for interaction with policy communities. One strategy, for example, might involve deliberate engagement with policy practitioners at annual conferences, such as demonstrated at the TIPC conferences. The challenge laid for building a shared research agenda is how to harness the plurality of perspectives within the networks. Network leads drew attention to the capacity for strengthening partnerships and connections, for aligning TIP enquiry with network research themes, and for using existing forums to promote a TIP research agenda that individuals may wish to subscribe to. Experimentation with evaluation, for example, was a common interest amongst network members. The time is right for alliances on transformation The policy makers, multilateral organisations and national agencies present, drew attention to the relevance and timeliness of this dialogue, and the scale of opportunity to work together. Implementation of the European 'Green Deal', for example, will throw up the need for new mind-sets and practitioners. National, regional and city administrations will also need to work with researchers on systems mapping and the design of transformative policy actions. There is an opportunity for research networks to step up to the task of co-creation for policy experimentation and evaluation, along with the training of civil servants, with scope for initiatives such as EIT Climate-KIC to engage with TIPC and other networks to build capacity. Policy makers and researchers are speaking different languages participants also touched on obstacles to closer collaboration. The current interface between scholarly networks and policy practitioners is not working effectively, with academic thinking sometimes lost in translation to the policy world. Policy makers called for more systemic links with researchers, arguing that networks need to demonstrate solutions through action that is working on the ground and leading to impact, rather than relying on practitioners to engage with more abstract thinking. The TIPC approach of experimentation and openness to policy makers is very attractive, and</p>
--	---

	<p>resonating globally, but the language being used should enable effective collaboration. Researchers were asked to make a shift to enter the terrains of policy makers, reaching out to officials who would not ordinarily attend academic forums. Finally, researchers need to develop expertise in engaging not only with agencies acting as investors or funders, but also with those politicians who are answerable to societal needs. Finding and sharing new ways of working together funders and national agencies suggested their interests lie in partnerships with TIPC and the other networks, particularly with a view to identifying new ways of working together. An explicit research agenda is secondary to this and would not necessarily align to funding frameworks at any given time. There is complementarity in thinking, emerging from the Global South and North, and opportunities to learn from each others' approaches. But some contributors expressed frustration at the way funders facilitate policy interaction – particularly in the South – with investment dependent on satisfying the funders' agenda, rather than delivering the impact sought by those on the ground. New models for engagement and practice, such as bilateral initiatives between a single agency and research team, can help us to challenge one another on how we work on transformative change. Participants voiced the appetite for a community of practice, linking together policy actors from across the world – and viewing not just innovation, but also education, wealth, industrial, environmental and other policies through a transformative lens. The opening of a dialogue TIPC founder Johan Schot thanked representatives at the meeting for their contributions and commented on the broad scope for collaboration and scale of opportunity. TIPC will continue consultation on the development of a shared agenda and has launched a Transformative Innovation Policy Research Network (TIPRN) space (sign up on the website homepage) to facilitate continued dialogues between interested parties. A month on at the beginning of December, around 90 researchers and practitioners had subscribed to this network. Rather than concluding collaboration at the conference, this meeting has started a new, transformative dialogue.</p> <p><b>Attendees at the meeting were affiliated to the following networks and organisations:</b></p> <p>African Network for the Economics of Learning, Innovation, and Competence Building Systems (Africalics)</p> <p>European Commission, Directorate-General for Regional and Urban Policy (REGIO)</p> <p>European Commission Directorate-General for Research and Innovation (DG RTD)</p> <p>European Environment Agency (EEA)</p> <p>European Forum for Studies of Policies for Research and Innovation (EU-SPRI)</p> <p>European Institute of Innovation and Technology Climate Knowledge and Innovation Community (EIT Climate-KIC)</p> <p>German Environment Agency</p> <p>Global Network for Economics of Learning, Innovation, and Competence Building Systems (Globelics)</p> <p>INGENIO [CSIC-UPV]</p> <p>International Development Research Centre (IDRC)</p> <p>Kenyan National Commission for Science, Technology and Innovation (NACOSTI)</p>
--	---

	<p>Netherlands Environmental Assessment Agency (PBL)</p> <p>Research Council of Norway</p> <p>Science and Technology Policy Research Institute (CSIR), Ghana</p> <p>Science Policy Research Unit (SPRU)</p> <p>South African Department of Science and Technology (DST)</p> <p>Sustainability Transitions Research Network (STRN)</p> <p>Swiss Federal Office for the Environment (FOEN)</p> <p>Transformative Innovation Policy Consortium (TIPC)</p> <p>UK Research and Innovation (UKRI)</p> <p>Université Cheikh Anta Diop de Dakar (UCAD)</p> <p>Utrecht University Centre for Global Challenges (UGlobe)</p> <p>Vinnova, Sweden</p>
--	---

Photographs of the event:







## Annex 8: Report: Eu-SPRI Early Career Research Training School 2019 (ECS), Problem-Oriented Innovation Policy: Key Organisational Dynamics and Issues

### SHORT FACTS

**Location:** Copenhagen

**Date:** 9<sup>th</sup>-13<sup>th</sup> December 2019

**Organisers:** Copenhagen Business School

**Speakers:** Susana Borrás, Charles Edquist, Christoph Grimpe, Alan Irwin, Signe Vikkelsø

**Number of participants:** 16 from 10 countries (DK,DE,UK,F,FI,A,IT,ES,NO,NL)

**Number of participants from EU-SPRI network:** 10 (6 participants from non Eu-SPRI organizations)

**Overall satisfaction:** Very Good

### Overall impression

The Eu-SPRI Early Career Training School at Copenhagen Business School was co-organised and co-funded by the CBS doctoral school Organization & Management School (OMS) and Eu-SPRI. It gathered a group of European young scholars (PhD candidates and post-docs) for lectures, discussions and group work. The school focused on a series of key topics related to problem-oriented research and innovation policy, with a strong emphasis on questions related to different organisational dynamics and aspects.

The course achieved its aim to provide the students with a theoretical and conceptual framework for the analysis of most crucial organisational dynamics and issues associated to problem-oriented science, technology and innovation policy. The students were working on their own research projects involving aspects of science, technology and/or innovation policy design and policy-making. Hence, the interactive nature of the course has served to make the students reflect upon their own research projects from the theoretical and analytical perspective of problem-oriented innovation policy.

Topics and themes addressed included:

- What is problem-oriented and transformative innovation policy
- Responsible Research and Innovation
- Inter-organisational and intra-organisational coordination dilemmas
- Stakeholder integration in innovation consortia
- Problems in science-industry interactions
- Demand-driven innovation policy
- Policy instruments design and mixes
- Policy learning and isomorphic reforms of national innovation policies

## The Learning Objectives of the ECS

Upon completion of the course, the students:

- Have acquired a good understanding of the different theories that are the basis for the rationales and design of science, technology and innovation policies.
- Have acquired a good insight into the key concepts and analytical frameworks for conducting organisational studies of innovation policy.
- Have acquired a good overview and deep knowledge of the key themes and specific topics related to problem-oriented innovation policy.
- Have improved their skills in terms of oral presentation and discussion at academic level.

## Teaching mode

The course was organised in a series of lectures in the morning and afternoon sessions from leading scholars in the field. The lectures were highly interactive, and students were requested to actively engage with questions and discussions in small groups during the lectures. In the afternoons, the students did presentations of their own projects in turns, and received feedback from a senior discussant and from the fellow participants. The students were divided into two groups for these presentation sessions, in order to give more time for each presentation and to make the collective feedback engagement more active and participatory.

## Organisation of the course

The course followed a structure similar to previous ECS in EU-SPRI, with lectures in the morning and workshops in the afternoon. See the program below.

## Evaluation

The evaluation questionnaire had 100% response from all participants in the course. The participants' evaluation was overall very positive. The academic content was considered "excellent" by most of the students. The students were particularly positive about the novelty and diversity of the topics, the interdisciplinary approach, good, recent and complementary readings, the engaging discussions, and the excellent and communicative teachers.

The weak aspects of the course were considered to be: at times over theoretical and conceptual with insufficient empirical cases, too few group-building activities, too much lectures at times, more time for students' individual presentations.

Elements for improvement in the future:

Reduce the quantity of covered topics and provide more policy empirical examples; organise site visits; more student participation for example as scenario-building or role-play interactions; more clarity on what the student assignment entails; more time to prepare the readings.

## Future Plan

We hope to run the course again in 2022 or 2023 (2 or 3 years after this first course).



## Lecture plan:

Day/ Time	9 <sup>th</sup> DEC	10 <sup>th</sup> DEC	11 <sup>th</sup> DEC	12 <sup>th</sup> DEC	13 <sup>th</sup> DEC
9.00- 10.30	Introduction  Susana Borrás	Intra-organisational and managerial dilemmas in innovation models/policies - Signe Vikkelsø	Isomorphic differences in science and technology policies – Alan Irwin	Problems and dynamics in science-industry interaction  Christoph Grimpe	Innovation policy instruments: Design, choice & implementation issues – Susana Borrás
Coffee break					
11-00- 12.30	Problem-oriented innovation policy. A holistic approach – Charles Edquist	What inter-organisational coordination challenges are there in purpose-driven innovation policy? – Signe Vikkelsø	Responsible Research and Innovation: old themes in a new framework? - Alan Irwin	Stakeholder integration in innovation -  Christoph Grimpe	Policy mixes for transformative innovation policy: Concepts & measurement – Susana Borrás
Lunch 12.30-13.30					
13.30- 15.00	Demand-driven innovation policy: new issues – Charles Edquist	Organisational capacity & innovation policy learning - Susana Borrás	The transformative roles of the state in the governance of socio-technical change – Susana Borrás	Innovation policy in the era of digital transformation – Susana Borrás	Students' presentation– Susana Borrás
Coffee break					
15.30- 17.00	Students' presentations – Susana Borrás	Students' presentations - Alan Irwin	Students' presentations– Alan Irwin	Students' presentations - Susana Borrás	Closing session – Susana Borrás
After 17.00	Welcome reception			Course dinner	

## Annex 9: Ten Years of Community Building. Revisiting the Mission and Activities of EU-SPRI

Summary of the internal EU-SPRI Workshop at Karlsruhe, 06.12.2019

*Compiled by Deborah Cox and Jakob Edler*

### 1. Purpose of the workshop and this paper, and further process

Celebrating its 10<sup>th</sup> year anniversary in Utrecht in the summer, Eu-SPRI can look back on a successful decade of establishing a home for our STI policy community, providing space for academic discourse and opportunities, including scope for the "next generation" to express themselves. At the last General Assembly, we agreed that the anniversary is a good point in time to reflect upon our future role for the community and on the STI policy landscape more broadly. We decided to organise a one-day workshop in Karlsruhe, at the Fraunhofer ISI venue, to discuss the very identity of Eu-SPRI, its role for the academic STI community and its relationship with other academic and non-academic communities, as well as its activities, instruments and organisation.

This short note summarises the key outcomes of the workshop and outlines the next steps. The annex to this document contains a **list of participants**, the **agenda** and the **background paper** that was circulated before the workshop.

Representatives from 16 member organisations attended the workshop. A full list of the participants is included in Annex 2.

### 2. Positioning Eu-SPRI

Meeting attendees were engaged in a consultation to determine the **current positioning** of Eu-SPRI. Participants were asked to self-select where they thought Eu-SPRI is positioned between areas of science policy, innovation policy and domain.

The outcome amongst the audience indicated that Eu-SPRI still operates in a space between science policy and innovation policy, with a considerable and apparently growing openness to domain policies. The turn towards mission and transformative orientation in innovation policy has, therefore, not reduced the importance of science policy, while at the same time the need to better understand the connection between R&I policy and different domain policies appears to grow.

A second part of this exercise asked participants to self-select the **current** positioning of their organisations and their own profiles with an 'academic' or 'stakeholder' focus. This was overwhelmingly considered 'academic'. A discussion, however, about the **future positioning** concluded that going forward for the future of Eu-SPRI we should make further efforts to include and invite stakeholders, whilst maintaining a strong foundation in academia. Eu-SPRI is an academic community and we should retain that focus. We should open up to other policy domains and stakeholders in specific topics/areas of relevance, while academia remains the main community.

### **3. Our strengths - what is good about us and what should be maintained?**

The three core missions of the Eu-SPRI forum were discussed and the following strengths identified:-

#### **New generation**

- PhD Training and circulation are important.
- The younger researcher's mobility scheme is very useful and should be used more extensively. It is easy to find partner institutions and it is a flexible, easy to apply for scheme
- A key strength is that Eu-SPRI allows different disciplines to come together, which helps to build an inter-disciplinary community.
- The summer and winter training schools are attractive and successful. These have improved over the duration of the scheme.
- The Early Career Conferences (ECCs) are appreciated by everybody. They are considered to be an extremely positive experience. Young people are given access to experts in the field and the ECCs bring new material and activities to the field.

#### **Structuring the field**

- Eu-SPRI has created a good platform for activity in the relevant fields. We have mobilised resources. Our institutions have accepted the annual payment toward the Eu-SPRI Forum. This is very important recognition.
- Member organisations appreciate the conferences. The direction of the various conferences is thought to be good and the conference is a key mechanism for growing the community.
- Eu-SPRI is pretty inclusive in terms of themes and great topics. It is a platform for the whole STI community.
- The Eu-SPRI Forum has promoted diversity and it is not only purely academic institutions that participate. This brings a lot of added value and training. Diversity is positive and should be maintained and encouraged going forward.
- The broad coverage of the inter-disciplinarity is visible. The strength is in making a broad forum for inter-disciplinary work on the topic.
- Opening up to trends attracts young people. The average age of conference attendees has fallen from 47 to 37.
- Good group efforts, new topics and good intent to integrate and bring coherence and the conference is a good instrument to do that.

#### **Exploratory initiatives**

- Eu-SPRI has identified good and important topics for exploratory initiatives
- Eu-SPRI is very flexible and experimentation is very important.
- In principle, it is a good idea to have a series of exploratory initiatives, as it allows us to conduct ad hoc and diverse activities (such as TIPC involvement or the Twente workshop in 2018).

## 4. The main changes in the landscape

The background paper to the workshop identified five dimensions to the changing landscape of science and innovation policy. The workshop debate essentially confirmed that these are the main changes in the landscape. The main changes discussed are summarised as:-

- Rapid digitalisation of Science and Innovation activities. Examples include Artificial intelligence, the Internet of Things, Machine Learning and Rapid Disruptive Innovation.
- Growing normativity and politicisation associated to science and innovation.
- Tension post-global society and globalisation.
- Growing engagement of new stakeholders.
- These four trends all impinge on governance of S&I policy, which has implications for the research agenda and the way we relate to governance activities.

## 5. The way forward - exploring new initiatives and modifying existing ones

### 5.1 The portfolio of future ideas

Based on a voting and clustering exercise, the group established that we should follow up three concrete ideas. For **each idea, a working party** was created, led by a main coordinator. Their task is to present a rationale for adapting the Eu-SPRI portfolio of measures and to present new suggestions for implementation.

The working parties will present the results of their deliberations to the General Assembly (GA) in Utrecht in June 2020, the GA then will decide on adaptations of the instrument portfolio and rationale of Eu-SPRI at its meeting one day prior to the start of the Utrecht conference.

The three working groups are shown below along with the basic rationale for their formation.

### 5.1 Three working groups

#### 5.1.1 Training Activities

With the advent of new methods and data that we know little about, we need to consider if and how we adjust our training offer. This includes some critical reconsideration of the overall consequences of mobilising new data (big data) and artificial intelligence, which threatens the scientific method. It also includes the need for and use of big data infrastructures.

Further, the idea of opening up the training agenda for mid and late career colleagues given the speed of method developments was discussed. One mechanism suggested is to consider the opportunities for advance career researchers in a mobility scheme similar to that offered for early career and doctoral researchers. A second idea is to create two 'clubs' for people to experiment with new methods and new data.

The working party is jointly led by Massimiliano Guerini and Hennig Kroll, who will work with Kate Barker, Wouter Boon, Carlos Montalvo, Gaston Heimeriks and Philippe Laredo

### **5.1.2 Stakeholder Involvement**

The rationale for greater stakeholder engagement in the Forum is in part to help ensure that the community of researchers in Eu-SPRI continue having an impact on policy, by engaging the enormous community of staff in Ministries working in Science and Innovation.

Engagement with these stakeholders will allow us to better understand their views and understanding of STI policies.

One mechanism discussed was to engage stakeholders in the introduction of special sessions at the annual conference. Targeting and inviting specific categories of stakeholders and having sessions and workshops aimed at joint reflection.

The working party for ‘thinking about the need to engage with stakeholders and making suggestions for new mechanisms’, is led by Michael Dinges and the members are Carlos Montalvo, Emanuela Reale and Jose Guimón.

### **5.1.3 Understanding Innovation and engagement with experts with domain specific knowledge**

The rationale for this working group is based on the recognition that we have to understand the complexity of innovation in particular in the context of its application in other domains, for example, energy, health, transportation etc. We do have the advantage of seeing and understanding dynamics across domains. To keep our credibility and to be relevant to the community and stakeholders we should actively engage with domain experts and develop a broader understanding of the domain specific and cross-domain generation and application of innovation.

Jürgen Howaldt leads this working party and the members of the working group are Jakob Edler, Matthias Weber, Kornelia Konrad, Markus Bugge and Mireille Matt.

## Annex 10: Rules for supporting Eu-SPRI events and activities

### 1. Type of support

The Eu-SPRI Forum offers support, only in the form of grants, for the organisation of events (Early Career Researcher Conferences/ECRC; PhD summer/winter schools; Eu-SPRI bi-annual Conferences; Exploratory Initiatives).

The grant is a lump sum earmarked for the effective completion of this activity.

The grant is fixed on the basis on an initial budget (see below).

Payment is made once the activity has taken place and is documented on the website of the Forum (<http://www.euspri-forum.eu/>; e.g. for conferences the programme, presentations made, results from panels and discussions, a synthesis of the main achievements of the event, for summer/winter schools the presentations of lecturers and summary of plenary events, for exploratory activities documentation of the activity and the actual output paper). A final financial statement of the activity supported will have to be produced within 3 months of the payment.

### 2. Establishing a budget

We underline below 3 important principles that member organisations asking for support need to take into consideration.

a) The grant aims to cover basic costs incurred by the host. As budgets are limited, we encourage organisers to organise the events wherever opportunities exist to obtain cheaper accommodation. We wish to keep this approach in order to maximise the number of events supported.

In the case of ECRC and PhD Schools Eu-SPRI will cover accommodation and food including conference events. Participants should be accommodated at a cost of around €50 euros per night per person. This is important since we intend to provide support for as many as participants as possible.

b) This principle applies only for early career researchers from member institutions. While we wish to keep these events open to all, there is a need to differentiate between Eu-SPRI members and non-members. The principle adopted is that non-members will not receive any financial support from the Eu-SPRI Forum. Non-member will have to cover all costs generated by their participation (including all meals); as an example this amounts to €300 per participant for the 2011 Doctoral conference in Manchester. The proposal may include a small number of bursaries for targeted audiences (e.g. early career researchers from non-OECD countries or from European new member states).

c) The Forum is a joint investment by our institutions to provide a European-level framework for our field. They in turn expect that we, as academics, invest our time and effort in making it productive. It would be difficult for them to accept that the colleagues we invite do not share the same objectives. These points have two very practical financial consequences: - in organising operations, account should be taken only of managerial costs incurred (not academic working time dedicated to the scientific aspects of the organisation of the event); - Eu-SPRI Forum cannot pay honoraria for invited speakers and these should not be included in the budgets. Only travel and subsistence expenses should be considered as eligible costs, for selected Early Career researchers and participants of Exploratory Initiatives of Eu-SPRI members and for invited speakers.

As an example that applicant should feel free to follow, we attach the budget that has been submitted for the 2011 Early Career researcher Conference in Manchester.

### 3. Types of Resources

In addition to the Eu-SPRI grants, we expect that events will be able to use three types of resources:

- \* Fees from participants (these for instance amounted for the 2010 Eu-SPRI-IGS conference to some 14.000 Euros).
- \* In kind contributions made by the organisers (rooms, student time...)
- \* Other external resources.

The consideration of all expected resources is central for deciding the amount of the grant to be offered. The ExCo trusts colleagues for the fact that these estimates are well prepared so that the Forum as a whole does the best use of its limited resources.

## **Annex 11: Financial Report by the Treasurer**

The financial report will be presented by the Treasurer as a separate document.