



CSTP-TIP Workshop:

Boosting knowledge transfer between science and industry: New models and business practices



WORKSHOP: BOOSTING KNOWLEDGE TRANSFER BETWEEN SCIENCE AND INDUSTRY: NEW MODELS AND BUSINESS PRACTICES

Date: 14 March 2018

Location: Paris, OECD Conference Centre (room CC6)

Organisers:





Introduction

Science-industry interactions are widely recognised as key to foster innovation and growth: they allow coordination of efforts and exploitation of synergies and complementarities among science and industry capabilities; increase the impact of publicly-funded research; and stimulate the development of science-based activities. Science-industry knowledge transfer can also play a critical role in building more sustainable and inclusive societies, if efforts are devoted to collaborative research that supports innovation to address social challenges (such as environmental sustainability and health-related challenges).

Over the last decades, a variety of instruments have been implemented to strengthen science-industry knowledge flows. These include financial incentives for collaborative university-industry research; researchers' mobility programmes that allow researchers to temporarily join industry; or cluster and incubator policies that improve opportunities for collaborations in specific regional contexts, among others.

While boosting knowledge transfer between science and industry remains at the top of the research and innovation policy agenda of most countries, the current context of digital transformation is giving rise to new questions: How is this changing context affecting the opportunities and challenges for science and industry to interact? Are traditional policy instruments still relevant? How to manage data flows? What are new emerging practices to promote knowledge transfer? In which ways can digital technologies help policy makers to improve design and implementation of policies?

This joint workshop of the Committee for Scientific and Technological Policy (CSTP), the Working Party on Innovation and Technology Policy (TIP) and France Stratégie will discuss new innovative experiments that successfully boosted knowledge transfer, and business perspectives on partnerships with science and how this supported their collaboration. The workshop will gather representatives from academia, business and policy-making bodies, as well as members from the CSTP and the TIP to discuss and exchange perspectives on knowledge transfer policies, with a focus on new business needs and policy responses.

This workshop will be held back-to-back with the <u>CSTP-TIP</u> workshop on semantic analysis for innovation policy (12-13 March 2018), the <u>CSTP-GSF</u> workshop on access to public data for science, technology and innovation (13 March 2018) and the meeting of the OECD Committee for Scientific and Technological Policy (CSTP) (15-16 March 2018).

Objectives of the workshop

This workshop aims to provide insights on:

- New policy instruments and emerging practices implemented in the context of digital transformation to foster knowledge transfer between science and industry
- Business perspectives on opportunities, challenges and needs for knowledge transfer
- Innovation policy responses to emerging opportunities and challenges for knowledge transfer

The workshop will be informed by and contribute to the ongoing OECD TIP project on Assessing the Impacts of Knowledge Transfer and Policy.

AGENDA

Wednesday, 14 March 2018

Opening and introduction to the workshop

9h30-10h00

Chair: Patrick Vock, Chair of CSTP

Speakers:

- **Dirk Pilat**, Deputy Director, Directorate for Science, Technology and Innovation, OECD
- Gilles de Margerie, Commissionner of France Stratégie

Panel 1: Advanced experiments in knowledge transfer

10h00-11h15

The session will present different experiments that have helped in making knowledge transfer work where it had not worked before. Questions to be addressed by the panel speakers include:

- What are new instruments and emerging practices implemented to foster knowledge transfer between science and industry?
- In what ways should traditional policy instruments be adjusted in order to better respond to emerging challenges?

Chair: **Bruno Rostand**, Director of innovation and entrepreneurship, Université Paris Sciences et Lettres Speakers:

- **Haio Harms**, Executive Board member, Christian Doppler Forschungsgesellschaft (CDG), Austria
- Maylis Chusseau, President, SATT Aquitaine Science Transfert, France
- **Byeongwon Park**, Research Fellow, Science and Technology Policy Institute (STEPI), Korea, and vice-chair of the TIP Working Party
- Markus Wilkens, Head of Operations, Photonics21

11h15-11h45 – Coffee break

Panel 2: Business perspectives on knowledge transfer

11h45-13h00

The session will involve representatives from companies that collaborate with research institutions to understand better their motivations. Questions to be addressed by the panel:

- What role do collaborations with universities play for business? How is this role likely to evolve in the future in the context of the digital transformation and other market trends?
- What are the key challenges in for successful university-industry collaboration and how can policy-makers help?
- Have businesses identified particular mechanisms or policies which work/does not work well?

Chair: Lars Frølund, Development Manager, Aarhus University and Research Affiliate, MIT Innovation Initiative, Massachusetts Institute of Technology

Speakers:

- Max Riedel, Senior Consultant University Relations, Siemens, Germany
- **Søren Bregenholt**, Corporate Vice President and Head of R&D External Innovation and Strategy, Novo Nordisk, Denmark
- Alberto Lopés-Oleaga, Director of Innovation and Processes, Ferrovial, Spain
- Philippe Roy, Deputy Executive Officer, Cap Digital, France

13h00-14h30 - Lunch

Breakout session: Recent experiences and policy lessons

14h30-16h00

Breakout groups will discuss recent experiences in countries and policy lessons learnt. The starting point will be a set of recommendations made in the OECD 2002 report on "Benchmarking Industry-Science Relationships", that includes notably (p. 9-11): preserving the mission of the public research sector, ensuring appropriate frameworks for Intellectual Property, establishing bodies to transfer knowledge, targeting smaller firms, mobilising human resources, improving the evaluation of research, building of clusters and networks.

Questions the groups will address include:

- To what extent have these recommendations been successfully implemented in countries?
- Are these recommendations still up to date?
- What new policy lessons are suggested by the recent experience of countries?

Breakout group 1 (room MB1122)

Topic: Policies for knowledge transfer targeted at the public research side

Chair: **Agni Spilioti**, Director, Policy Planning Directorate, Ministry of Education, Research and Religious Affairs, Greece

Ice-breaker intervention: **Wolfgang Polt,** Director, Institute for Economic and Innovation Research, Joanneum Research, Austria

Group discussion

Support: Martin Borowiecki, Junior Economist/ Policy Analyst, OECD

Breakout group 2 (room MB3122)

Topic: Policies for knowledge transfer targeted at the business side

Chair: **Ian Hughes**, Senior Policy Advisor, Department of Jobs, Enterprise and Innovation, Ireland

Ice-breaker intervention: **Agnès Estibals**, Deputy Director, Science Technology and Innovation economics, Department of Business, Energy and Industrial Strategy (BEIS), UK

Group discussion

Support: Sandra Planes, Junior Policy Analyst, OECD; Teru Koide, Economist, OECD

Breakout group 3 (room MB4122)

Topic: Policies for knowledge transfer targeted at the business side

Chair: **Benat Bilbao-Osorio**, Senior Economist, European Commission

Ice-breaker intervention: **Chris Cannizzaro**, Foreign Affairs Officer, US Department of State, and vice-chair of the CSTP

Group discussion

Support: Andrés Barreneche, Policy Analyst, OECD

Breakout group 4 (room CC6)

Topic: Policies for knowledge transfer targeted at the public research side

Chair: **Patrick Monfray**, Deputy Director of Strategy, Research and Innovation Service, Ministry of Higher Education, Research and Innovation (MESRI), France

Ice-breaker intervention: **Yongsuk Jang**, Senior Research Fellow, Science and Technology Policy Institute (STEPI), Korea

Group discussion

Support: **Diogo Machado**, Junior Economist/ Policy Analyst, OECD; **Blandine Serve**, Statistician, OECD

Panel 3: Knowledge transfer policies: lessons learnt and future perspectives

16h30-18h00

The panel will take stock of the discussions of the day and reflect on what an action plan to boost knowledge transfer could look like. Questions to be addressed by the panel include:

- What have we learnt over the past two decades on what works and what does not work with regards to knowledge transfer?
- How does the changing context (e.g. digital transformation, globalisation) impact on the effectiveness of existing policy instruments?
- Should policy measures be revised in view of such changes?
- What are future perspectives for knowledge transfer policies?

Chair: Göran Marklund, Deputy Director General for External Matters, VINNOVA, Sweden, and Chair of the TIP Working Party

Speakers:

- Prof. Mathias Fink, Professor at ESPCI Paris and Director of the Langevin Institute, France
- **Prof. H. Kotera**, Technical advisor to MEXT; Professor, Kyoto University, Graduate School of Engineering, Japan
- Anne Kjersti Fahlvik, Executive Director, Norwegian Research Council, Norway
- **Ryan Hampel**, Science Programs and Partnerships, Innovation, Science and Economic Development Canada

Workshop Website: www.innovationpolicyplatform.org/KT

OECD project 'Assessing the Impacts of Knowledge Transfer and Policy': www.innovationpolicyplatform.org/impact

