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FARIAtalks

Finnish Science & Innovation Diplomacy in the U.S.: Updates from Team Finland Knowledge Experts

01.03.2023

Dr. Jérôme Rickmann

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Housekeeping:

- Please keep microphones switched off
- Please write questions in the chat, we will collect and answer them at the end of the session
- Session will be recorded and slides shared

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Agenda:

Welcome & introduction

Dr. Jérôme Rickmann, Aalto University/FARIA

Team Finland Knowledge Network Updates: U.S.A.

Dr. Petri Koikkalainen, Washington D.C.

Dr. Sari Tojkander, Los Angeles

Q & A

Moderated by Jérôme Rickmann, Aalto University/FARIA

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- Open doors/Supportive environment
- More funding and instruments for collaboration
- TFK team strengthened in U.S.
- Diversity of stakeholders
- Partial alignment of activities

Good opportunity to pro-actively utilize momentum to build on these activities and impact their outcome.

Drivers of Momentum

https://www.faria.network/projects

Not syncing

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Who we are | Programs & Activities | Get in touch

WANTED!

Find collaborators for projects/funding proposals

On these pages we highlight current initiatives which are looking for additional U.S. or Finnish collaborators (for example to utilize joint funding calls by the Academy of Finland and its U.S. partners.

HERE COULD BE YOUR PROPOSAL!

We are currently in the collection phase.

LOOKING FOR COLLABORATORS?

Add your project idea to the site!

First Name *

Enter your first name

Last Name *

Enter your last name

Email *

Enter your email (this information will not be published on the website)

Your institution *

Enter the name of your (research) organization

Title/name for the initiative *

Enter a short title that captures your core idea

Cookie settings

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Speakers:

Dr. **Petri Koikkalainen** has worked as a TFK Expert at the Embassy of Finland in Washington since October 2021. Petri has extensive experience in the university and research field and in education, research and innovation policy.

Dr. Sari Tojkander has started at the Consulate General of Los Angeles as a TFK Expert in October 2022. Although Tojkander is based in Los Angeles, he is responsible for the entire west coast of the United States and, in addition, for Canada. Sari has extensive experience in research and education collaboration.

The outlook of U.S. science and technology policy in 2023 and S&T cooperation with Finland

FARIAtalks: TFK Expert session

March 1, 2023

Petri Koikkalainen (Washington DC)

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2023: “the year of implementation”

Key elements of U.S. science and technology policy are largely in place for the 118th U.S. Congress (2023-24) and for the remainder of Biden’s presidency:

- **Inflation Reduction Act** 12/2022, USD 738 billion: clean energy, climate, reindustrialization
- **Chips and Science Act** 12/2022, USD 280 billion: semiconductor manufacturing and research; other scientific research
- Earlier, more incremental investments in RDI funding by the early Biden administration

  ⇒ significant **new investments in RDI funding**

  ⇒ **protective elements in trade & industrial policy** (especially IRA) vs. more liberal attitude in **research & pre-commercial technologies**

Mission and technology-oriented policy goals (White House: ”Multi-agency research priorities”, 8/2022)

- Preparing for and preventing **pandemics**
- Reducing the death rate from **cancer** by half
- Tackling **climate change**
- Advancing **national security and technological competitiveness** [AI, quantum, advanced communication, HPC, biotech, robotics, space…]
- Innovating for **equity**
- Cultivating an equitable **STEM education**, engagement, and **workforce ecosystem**
- Promoting **open science** and community-engaged R&D

Reflections on the Biden adminstration's science policy

- Geopolitics plays a big role, China an adversary in developing key critical/dual-use technologies, such as quantum, 6G, AI, nuclear fusion

  => international collaboration to speed up the maturation of technologies, or to reduce costs, or to reduce risks

- The democratic party-political ethos shows in the emphasis of social trust, justice, diversity and inclusion of disadvantaged social groups and geographical regions

  => R&D project spill-overs to social sciences, law, humanities… you can't address complex problems without understanding the human aspect

- The "**new US industrial policy**" combines regional revitalization and onshoring of supply chains with R&D investments, workforce development and investments in (STEM) education

FI–US Science and Technology Cooperation

- The Agreement Relating to Scientific and Technological Cooperation between the United States and the Republic of Finland (1995)

  => Joint Committee Meeting (JCM) on the implementation of the S&T Agreement, Helsinki, September 2023

- Parallel talks and negotiations regarding some technologies and branches of government (cf. the FI-US quantum statement, signed 4/2022)
- National Council of University Research Administrators (NCURA) research funding workshop planned in Helsinki for autumn 2023, in collaboration with FARIA
- NATO membership and closer FI-US relations give opportunities and create pressure to increase RDI activities in Finland: defense-related, but also basic research

FI–US cooperation: the way ahead

- U.S. federal R&D funding is alloacated to more than 25 different agencies (including DoD, NSF, NIH, DoE, NIST, NOAA, DHS, etc…)
- ”The year of implementation” includes major decisions regarding research themes, instruments, eligibility, international partners, etc.
- FI-US JCM under the S&T agreement comes at a good time (9/2023)
- For the Finnish Embassy in Washington DC, the bilateral governmental talks and agreements a central task in 2023
- The Team Finland **state collaborations** have reached full scale (Maine, Michigan, Minnesota, Washington state, Colorado, Texas)
- After 2023, the U.S. presidential election (Nov 5th, 2024) will start to dominate the political agenda => **??**

Thank you!

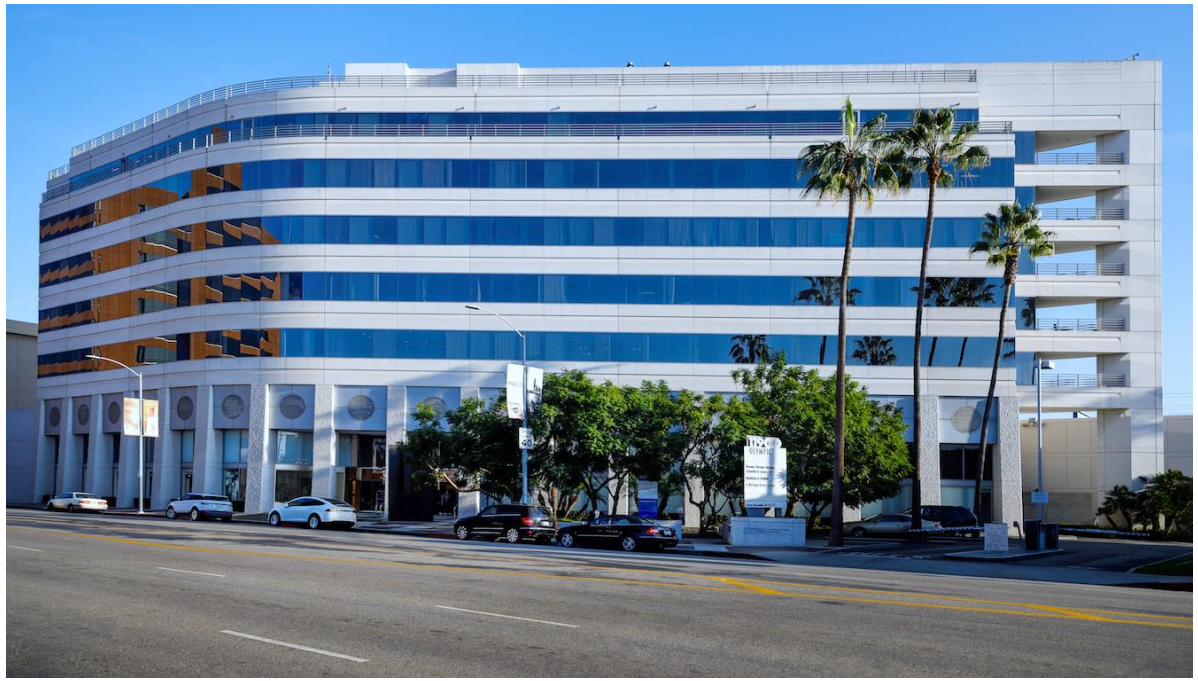
Finnish Science and Innovation Diplomacy in the US

FARIA webinar 1st March 2023

Sari Tojkander, Councelor for Science and Higher Education, Consulate General of Finland in Los Angeles

Consulate General of Finland in Los Angeles

- Represent Finland in 13 States in the Western parts of US
- Consular Services and Team Finland services; team of 10 people
- Close collaboration with the Embassy of Finland in Washington D.C., the Consulate General of Finland in New York, members of the Team Finland USA network, as well as with other local organizations and honorary consuls



Tasks of TFK specialist and the area of operation

- Tasks include following the scientific activities and science policy; Promoting collaborative activities in between US and Finland and enhancing mobility possibilities

- The area of operation covers Western parts of USA and Canada

California – World´s 4th largests economy

- Economically the most important state for Finnish companies
- Responsible for almost 15% of the GDP in the country and has the highest population among all the States, population being almost 40 million
- 3/4 of the most important start-up hubs are in California
- The leading state in green transition in the US

Science and higher education in California

- Over **730** higher education institutes, several top universities, f.i. Stanford, UC Berkeley; Los Angeles county has **63** higher education institutions and several top universities such as UCLA, USC ja CalTech
- Invest a lot in research; For ex. UCLA is in the top 10 universities in funding (almost 1,4 billions yearly budget)
- Translational research and commercialization of innovations is valued; In Los Angeles alone there are over 100 innovation incubators

Science and higher education in California

- **Top 10 Universities in research funding in USA**

Johns Hopkins University: $3,110,494,000
University of Michigan: $1,673,862,000
UC San Francisco: $1,651,073,000
University of Pennsylvania: $1,579,364,000
University of Washington: $1,456,902,000
UC San Diego: $1,403,735,000
UCLA: $1,392,941,000
University of Wisconsin: $1,363,931,000
Harvard: $1,239,983,000
Stanford: $1,203,950,000

Source: NSF, National Science Foundation

So, what is my typical workday like ?

- Meetings with various networks
- Visits to Universities and innovation hubs
- Participation to various scientific events
- Searching for background information for ongoing and possible future collaboration activities & arranging meetings

Examples on ongoing projects

Los Angeles, California

- Health & Health tech innovation activities; Possibilities for Finnish researchers and start ups
- Green transition, LAGND, LA Green New Deal and its possibilities for Finnish innovators

Western parts of Canada, British Columbia and Alberta

- Mapping potential fields for research collaborations
- Forestry, bioeconomy, arctic technologies, carbon capture methods important for Canada

Topical Issues in Science and Higher Education in California

- Higher education – Improvement of the working conditions at higher education institutions & alternative education pathways

- IRA, Inflation reduction act and its impact on research & development

Lecture at USC Marshall Business School, December 2022

Largest higher education strikes in California

- Higher education strikes – Staff demands improvement of the working conditions at higher education/research institutions
- Almost 50 000 staff members from Californian Universities were on strike for weeks

Trends in education

- Opinions on the University degrees have clearly changed and amounts of University students have dropped
- Vocational training and other alternative study choices are more valued than before
- Many companies hire young people directly from the Universities
- Lifelong learning and education has also been a topical issue at the higher education institutions

Alternative education pathways were discussed at the Times Higher education event in Culver City, November 2022

Inflation Reduction Act (IRA) – Impact on Science

- In August 2022, Biden signed the inflation reduction package that aims in improving economical competitiveness, innovation, and industrial productivity in the US
- Almost $400 goes to clean energy
- $1.5 billion were directed to National laboratory infrastructure and especially to research and technologies related to energy transition and climate change

Inflation Reduction Act (IRA) – Impact on Science in California

- 4 of the funded National Laboratory Institutes located in California (Lawrence Berkeley National Laboratory, SLAC National Accelerator Laboratory, Menlo Park CA, Lawrence Livermore National Laboratory)

- Together about 350 millions

- Biopharma will most likely be loosing due to IRA; Price limits for drugs will lower revenues and decrease R&D investments on this field

Thank you for your attention !!

Please, don´t hesitate to contact:
sari.tojkander@formin.fi

Higher education in US

- Almost 4700 higher education institutes (universities and colleges)
- Community colleges in US – 935 public + 72 private in US (2022)

University system in California

- UC, the University of California
- CSU, California State University
- CCC, California Community College
- Private Colleges and Universities

Collaborations in student exchange

- Partnerships in student exchange between several universities in the US and Finland
- In California: Santa Clara University; UC Davis; USC, University of Southern California, CA; Stanford
- Western Coast of Canada: UBC, University of British Columbia, BC; University of Galgary; Uvic, University of Victoria, BC; SFU, Simone Fraser University, BC