

THE S4D4C OPEN DOORS TOOLKIT

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HOW TO CITE THIS CONTENT

If you want to refer to this content, please use:

Lacunza, Izaskun; Josten, Maria; Elorza, Ana; Meyer, Nadia and Melchor, Lorenzo (2021): How to set up a knowledge exchange experience in policy and/or diplomacy for researchers. The S4DC4 Open Doors Experience. Report, Deliverable D5.9, S4D4C.



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CONTEXT

During 2018 and 2019, the Horizon-2020 funded project, "Using science for/in diplomacy for addressing global challenges-S4D4C", organized the "Open Doors" programme, a knowledge exchange scheme for researchers affiliated to European-based institutions who had an interest in science diplomacy and more broadly, into connecting scientific knowledge with policymakers. This programme was designed as part of the networking and training activities of the S4D4C project and it was conceived as a pilot to test the usefulness and impact of exchange mechanisms in science diplomacy and of promoting networking among grantees and science diplomacy experts and practitioners.

This document captures the lessons learnt during the design and implementation of the programme. Also, it describes a few recent exchange programmes for researchers in diplomatic or other public policy environments so as to show the very many different shapes these programmes can take while sharing the objective of fostering better connections between researchers, diplomats and/or policymakers. Finally, it intends to serve as a toolkit for institutions interested in establishing their own exchange programmes for bringing together and facilitating mutual knowledge and trust building among researchers, diplomats, policymakers and/or politicians.

¹ Project website available at: <u>https://www.s4d4c.eu/</u>

WHY WE ORGANIZED THE S4D4C OPEN DOORS PROGRAMME

The S4D4C project strongly advocates for science diplomacy, understood as the practices at the intersection of science, technology, and foreign policy, to become a fundamental asset in EU foreign policy for addressing global challenges.

However, the <u>Madrid Declaration on Science Diplomacy</u>² states that, often, the potential of science diplomacy is not fully exploited, especially at supranational levels, not even in the EU. Among others, the declaration calls for improved interfaces between science and public policies, better collaboration and inclusion of diplomats, researchers and other professionals at the intersection of science, technology and foreign policy, and a commitment towards capacity building of these professionals, all of which needs to run in parallel with the establishment of new career paths for science diplomats.

Along the same lines, the S4D4C policy report "Calling for a systemic change: towards a EU science diplomacy for addressing global challenges" sets a vision for the EU science diplomacy and proposes a number of recommendations to accomplish such a vision; the report – among other recommendations – calls for a systemic change in the way scientists, diplomats and policymakers need to be prepared to work in a more collaborative way. In particular, the report recommends to:

- Empower and train researchers and diplomats to work together to address the United Nations Sustainable Development Goals.
- Diversify career paths for scientists and diplomats to include professionals in knowledge brokerage.
- Launch a fellowship scheme for scientists to work in the European Commission (EC), the European External Action Service (EEAS) or in Member States (MS) governmental institutions.

The Open Doors programme is part of the set of training tools that S4D4C has developed for researchers and diplomats, such as the European Science Diplomacy Online Training⁴, the <u>S4D4C Interactive Webinar Series</u>⁵, and the Science Diplomacy workshops held in Trieste⁶ and Vienna⁷. The Open Doors programme was designed as an experiential learning scheme for grantees to become familiar with the EU science diplomacy landscape, interacting with scholars, diplomats, practitioners, and policymakers, and understanding the role of Embassies, Ministries and other governmental departments, research organisations and international organisations, all play in international relations and global affairs. The Open Doors programme feeds into the above recommendations and hopes to inspire many other exchange programmes for researchers in science policy and science diplomacy in the EU.

² Information available at: https://www.s4d4c.eu/s4d4c-1st-global-meeting/the-madrid-declaration-on-science-diplomacy/

³ Information available at: https://www.s4d4c.eu/calling-for-a-systemic-change-towards-a-eu-science-diplomacy-for-address-ing-global-challenges/

⁴ Information available at: https://www.s4d4c.eu/european-science-diplomacy-online-course/

⁵ Information available at: https://www.s4d4c.eu/s4d4c-interactive-webinar-series-exchange-views-and-build-your-science-diplo-macy-community/

⁶ Information available at: https://www.s4d4c.eu/science-diplomacy-workshop-trieste-10-2019/

⁷ Information available at: https://www.s4d4c.eu/science-diplomacy-workshop-vienna-11-2019/

THE S4D4C OPEN DOORS PROGRAMME AGENDA

The agenda for the five Open Doors grantees was put together by S4D4C partners: the Spanish Foundation of Science and Technology (FECYT) and the German Aerospace Centre (DLR) with collaboration of the following host institutions: the Embassy of Spain in London, the Embassy of Spain in Brussels, the German Aerospace Centre (DLR) and Ministry of Education and Research (BMBF), the German Academic Exchange Service (DAAD), the Helmholzt Association, the German Scientific Council, the "Deutsche Forschungsgemeinschaft", and the European Space Agency (ESA) and the United Nations (UN) campus in Bonn.

Moreover, grantees participated in the two global and European conferences organised by S4D4C in Madrid (December 2018) and Berlin (October 2019). This gave them the opportunity to engage with global leaders in the field of science diplomacy, participate in the conversation with scholars, diplomats, practitioners, and policymakers, and, lastly, be exposed to the empirical research and policy studies undertaken by S4D4C partners.

The detailed agendas of each visit can be found in the host testimonials in the "My Open Doors Experience" section of this report.

With these visits to host institutions, grantees were offered a view of (i) how Embassies and diplomatic corps work and to what extent science can become an important asset of bilateral relations, (ii) the international cooperation dimension of research performing and funding organisations, (iii) the achievements of European scientific collaboration, and (iv) the functioning of international organisations.

The programme was structured in five different visits8:

- Madrid (December 2018). The Open Doors grantees participated in the first S4D4C networking meeting "EU science diplomacy beyond 2020". As a means to interact with the science diplomacy community, they were asked to video-interview a number of speakers and participants. Those videos were used as the visual material of the S4D4C European Science Diplomacy Online Course.
- London (January 2019). Three Open Doors grantees visited the Embassy of Spain in London accompanied by FECYT. The Office for Cultural and Scientific Affairs of the Spanish Embassy in London organised an agenda for the grantees to exchange impressions with diplomats and civil society representatives. Also, they participated in a workshop organized by the UK Parliamentary Office for Science and Technology (POST UK). POST trained researchers on how Parliament and Government work and which are the communication channels available to the public. They also trained researchers on how to identify the impact their research can have in public policies and, finally, how this can be effectively communicated to politicians and policymakers.
- Brussels (February 2019). Two Open Doors grantees visited the Embassy of Spain in Brussels also accompanied by FECYT. Additionally, they had the opportunity to attend the "European Leadership in Cultural, Science and Innovation Diplomacy El-CSID" final conference, another Horizon-2020 funded project

⁸ Information available at: https://www.s4d4c.eu/open-doors-programme/

⁹ Information available at: https://www.s4d4c.eu/s4d4cs-1st-global-meeting-took-place-in-madrid/

¹⁰ Information available at: https://www.s4d4c.eu/european-science-diplomacy-online-course/

focused on science diplomacy and part of the EU science diplomacy cluster¹¹.

- Bonn and Cologne (April 2019). The Open Doors grantees, accompanied by DLR, visited the Ministry of Education and Researcher (BMBF), the German Academic Exchange Service (DAAD), The European Space Agency (ESA) and the United Nations (UN) campus in Bonn.
- Berlin (October 2019). The Open Doors grantees participated in the <u>2nd S4D4C networking meeting</u>"12 "Towards a European Science Diplomacy Roadmap", where they interviewed an additional number of speakers and participants, and also presented their experience in Open Doors during one of the interactive sessions.

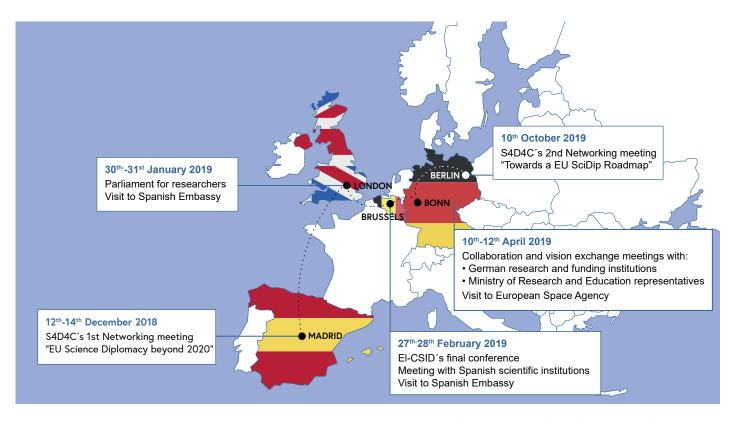


Figure 1. Map with the (Open Doors Programme: Bringing scientists into science diplomacy. Marta Pulido, Alexandra Middleton, David Velázquez, Antonethe Castaneda and Marta Pulido) Available at: https://www.s4d4c.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/uploads/2020/01/10. https://www.sadau.eu/wp-content/up

¹¹ See <u>www.science-diplomacy.eu</u> for more information on this cluster composed by the three Horizon-2020 funded projects on science diplomacy: EL-CSID, S4D4C, and InsSciDE.

¹² Information available at: https://www.s4d4c.eu/berlin-networking-meeting/

WHY WE THINK THE OPEN DOORS EXPERIENCE WAS A SUCCESS

THE APPLICATION FIGURES

The public call (open during two full weeks) to select the five researchers that would participate in the Open Doors programme received 63 valid applications from researchers affiliated to research institutions from 20 countries (Figure 1), which shows the high interest of the research community for this kind of exchange programmes and the willingness to be active in science diplomacy. Out of all countries, the

number of applicants from Spain represented almost half of all applications (31, 49.2%). This may be due to the fact that one of the programme organising institutions, FECYT, is Spanish, it has been working on science diplomacy for over five years and it is well known by early career researchers interested in career development, science communication and other science with and for society fields. Also, FECYT has a strong social media presence (more than 228 200 followers on Twitter).

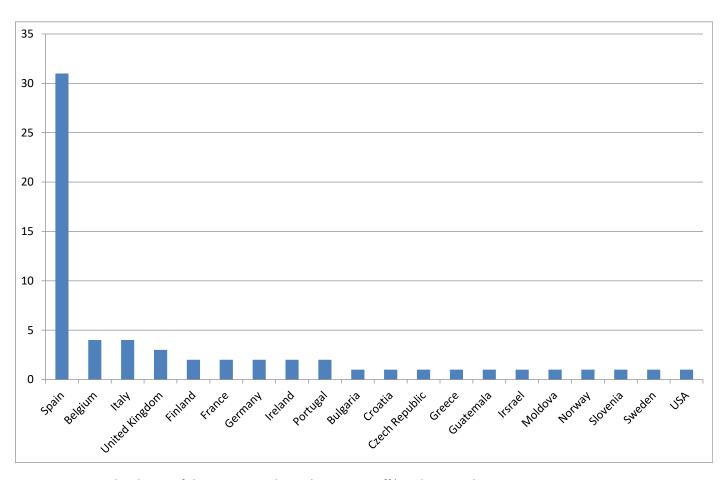


Figure 2. Country distribution of the institutions the applicants were affiliated to. Sample size=63

Among the candidates, the majority, 63%, were between 31-40 years-old (see Figure 2) and 64% were women. Thus, 42% of the applicants were mainly "Recognised Researchers" (R2 research profiles according to the <u>European Framework for Research Careers</u> (3), followed by "Leading Researcher" (R4) research profiles (23%). Furthermore, there were applicants with a "management profile" (ranging from communications managers of research institutions to Directors of research centres or science policy makers). There were applicants from all the areas of knowledge, which was explicitly called for.

As a result of the selection process, five Open Doors grantees were chosen. They were affiliated to institutions in Spain, Croatia, Finland, and Greece. Four of them were in the 31-40 years range and one of them was in the 20-30 years range. Among the five, four of them were women. At the moment of the selection process, they were postdoctoral research fellows (2), associate professor (1), assistant professor (1) and a focal point of Guatemala and Central America to UNESCO. Their academic disciplines were neuroscience, regional development, economics, environmental microbiology and sustainable development.

■ 20-30 ■ 31-40 ■ 41-50 ■ >50

Figure 3. Age distribution of the Open Doors applicants

RAISING AWARENESS ABOUT SCIENCE DIPLOMACY AMONG THE OPEN DOORS HOSTS

The Open Doors programme was also impactful for the host institutions, in the sense that they became more aware of the need to facilitate knowledge exchange and dialogue interfaces between policymakers, researchers and diplomats, and thus promoting the 'demand side' for science diplomacy mechanisms. For example, as a result of the Open Doors experience, DLR has put in place its own internal exchange programme (see "My Open Doors experience" section), it has received additional funding for the design of new training activities (for DLR staff and also for external partners), and has proposed a new science diplomacy funding programme to the Federal Ministry for Education and Research¹⁴.

¹³ Information available at: https://cdn5.euraxess.org/sites/default/files/policy_library/towards_a_european_framework_for_research_careers_final.pdf

¹⁴ Information (in German) available at: https://www.bmbf.de/foerderungen/bekanntmachung-3065.html

OPEN DOORS GRANTEES EXPERIENCE

ALEXANDRA MIDDELTON

Oulu Business School, University of Oulu, Finland



"The programme was significant for me to realize how to make my research more accessible to different stakeholders and communicate the practical relevance of my research [....]. I believe that all researchers should have a basic immersion course on science diplomacy and its mechanisms."

WHAT IS YOUR JOB ABOUT?

Researcher on sustainable business development in the $\mbox{Arctic.}$

WHY DID YOU APPLY TO THE PROGRAMME?

I wanted to learn about science diplomacy tools and gain practical experience of science diplomacy that I could later use to promote peaceful research cooperation in the Arctic.

HOW WAS YOUR PERSONAL EXPERIENCE IN THE PROGRAMME AND WHAT KIND OF IMPACT DID IT HAVE ON YOU?

I enjoyed taking part in the programme due to multiple reasons. First of all, we had a fantastic team of Open Doors grantees from multidisciplinary backgrounds and all very passionate about science diplomacy and its mission to create bridges between scientists and policymakers. I received excellent training in science diplomacy at embassies, ministries, and during programme visits to historically crucial science diplomacy places. I received continuous support from the programme organisers. I had

a chance to participate in international science diplomacy conferences, which facilitated meeting leaders in science diplomacy and expanding my professional network. With the programme's help, I can say that I understand the processes and actors involved in science diplomacy on a global scale. The programme was significant for me to realize how to make my research more accessible to different stakeholders and communicate the practical relevance of my research. For me, this has been a beneficial experience in developing my research and having a wider exposure of my research to the public.

DO YOU THINK THIS KIND OF INITIATIVES FOR THE RESEARCH COMMUNITY SHOULD BE FURTHER EXPLORED? HOW WOULD YOU SCALE THEM UP?

I believe that all researchers should have a basic immersion course on science diplomacy and its mechanisms. It is important to use some familiar cases like space and Arctic cooperation that demonstrate how science cooperation works despite at times difficult international ties.

DAVID VELÁZQUEZ

Alfred Wegener Institute (AWI), Helmholtz Centre for Polar and Marine Research, Germany



"In my personal view, programmes such as the S4D4C Open Doors one should be promoted by national research programmes and escalated in terms of experiences but keeping the programme in small groups of grantees."

WHAT IS YOUR JOB ABOUT?

I serve as Communications Manager of the EU-funded project EU-PolarNet within the International Cooperation Unit of AWI.

WHY DID YOU APPLY TO THE PROGRAMME?

I applied to the S4D4C Open Doors call because of personal curiosity. As a biologist, I have not been trained at all in diplomatic relations of any kind, so being part of the Open Doors programme has provided me with the appropriate tools to bridge the gap between the scientific and the policymaking communities.

HOW WAS YOUR PERSONAL EXPERIENCE IN THE PROGRAMME AND WHAT KIND OF IMPACT DID IT HAVE ON YOU?

I was lucky to join the programme in a transitioning phase of my professional career. Now, I also coordinate the EU Polar Cluster, which gathers all the EU-funded polar research projects with the aim of providing a common voice from the Polar research community, while maximising the dissemination efforts of all partners.

As examples of these efforts to convey the polar scientific community to the decision-making bodies, the management team of EU-PolarNet, in coordination with our consortium, has developed a set of five white papers on high priority polar research questions, a white paper on European polar data accessibility, a white paper on status of stakeholder engagement in polar research, a white paper on European Polar research infrastructures and the European Polar Research Programme, which will be published soon in our media outlets. We have supported the European

Commission in many fields related to the Polar Regions and helped them to identify topics for polar calls in Horizon 2020.

Thinking about the future, I am open to collaborate on any further initiatives such the S4D4C Open Doors Programme. I really value the efforts made by the S4D4C partners on coordinating and moving this programme forward. It has been an outstanding experience and a unique opportunity to learn what science diplomacy is and the different approaches that are already in discussion.

DO YOU THINK THIS KIND OF INITIATIVES FOR THE RESEARCH COMMUNITY SHOULD BE FURTHER EXPLORED? HOW WOULD YOU SCALE THEM UP?

Based on my experience, such efforts should be implemented in the future to train the current and future generation of professionals. It will facilitate information exchanges and points of view between different stakeholders in Europe and beyond. This approach will maximise any of the actions taken in the upcoming decades concerning research and development with positive impacts on citizens, the final beneficiaries of any possible advances. In my personal view, programmes such as the S4D4C Open Doors one should be promoted by national research programmes and escalated in terms of experiences but keeping the programme in small groups of grantees. This will secure personalised training by facilitating the contact among the grantees and the experts involved.

FÁTIMA ANTONETHE CASTANEDA MENA

Volunteer at UNESCO, Greece



"The COVID-19 pandemic has marked a before and after of working together. It would be nice if the European Union would offer systematic training on science diplomacy in their fellowship programmes."

WHAT IS YOUR JOB ABOUT?

My responsibility as a volunteer in UNESCO is to be the communication and institutional knowledge manager for Latin America and Greece and to link research and strengthen networks in energy projects, natural disasters, and ecosystem services for the Latin America region.

WHY DID YOU APPLY TO THE PROGRAMME?

I learnt about the call via twitter. Years ago, I had the opportunity to receive training in the AAAS-TWAS Summer Course on Science Diplomacy in Italy, and with the International Network of Government Science Advice (INGSA) in 2018 in Panama, because I have a real interest in science diplomacy. What motivated me the most to apply to Open Doors was the possibility to visit the German Aerospace Centre (DLR) as I wanted to understand how science diplomacy could be related to space.

HOW WAS YOUR PERSONAL EXPERIENCE IN THE PROGRAMME AND WHAT KIND OF IMPACT DID IT HAVE ON YOU?

I believe there were several impacts.

By being part of the Open Doors Programme, I had an overview of the essence of science diplomacy. Engaging with experts worldwide, talking to diplomats, scientists, decision makers, academics, and so forth, all allows you to have maturity and commitment to an interdisciplinary vision.

One of the biggest impacts after the experience of the Open Doors Programme was that I was selected from The Intergovernmental Panel on Climate Change (IPCC) to volunteer as Chapter scientist and contributing author to

(WGIII) AR6 Chapter 17, "Accelerating the transition in the context of sustainable development". In this position, they are training me, from the ground up, to continue with the following reports. Thanks to my Science Diplomacy training, I am able to offer a much more integrated analysis.

Also, my Open Doors experience has made me widen my views and approaches as volunteer at UNESCO Chair Con-E-Ect and share my experiences with my colleagues from Africa, Australia and Brazil.

With the COVID-19 pandemic, I have returned to America and I keep in touch with the S4D4C project through its online training, webinars, videos, etc. S4D4C is having quite an impact in Latin America and the Caribbean, indicating that science diplomacy is growing and having an impact worldwide.

DO YOU THINK THIS KIND OF INITIATIVES FOR THE RESEARCH COMMUNITY SHOULD BE FURTHER EXPLORED? HOW WOULD YOU SCALE THEM UP?

Indeed, the COVID-19 pandemic has marked a before and after of working together. It would be nice if the European Union would offer systematic training on science diplomacy in their fellowship programmes.

ANY OTHER COMMENT YOU WISH TO MAKE?

Definitely, the Open Doors programme was a unique experience for me and it would be interesting to try to scale it up for more researchers to enjoy it. Global challenges need professionals with a wide set of skills and competences.

MARTA PULIDO SALGADO

Investigación y Ciencia (Spanish Edition of Scientific American, Springer-Nature), Spain



"This kind of initiative represents a hands-on opportunity, which goes beyond the theoretical framework of courses, seminars, and conferences, where real-life interactions are difficult to achieve."

WHAT IS YOUR JOB ABOUT?

After 10 years devoted to biomedical research, nowadays, my job focuses on science communication. As a scientific writer and performance marketing manager at Investigación y Ciencia, my main duties include writing about the latest scientific advances in plain language, engaging with the audience through email and social media, promoting the journal's brand, assisting scientists in the edition and publication of their personal blogs, and monitoring marketing campaign performance.

WHY DID YOU APPLY TO THE PROGRAMME?

At the moment I applied to the programme I was a postdoctoral researcher interested in increasing science impact in society. To this end, I became involved in science communication and outreach activities, as well as in SciTechDiploHub¹⁵, the non-partisan initiative aimed to design a science diplomacy strategy for Barcelona. Participating in the S4D4C Open Doors programme represented a unique opportunity to learn how diplomats and policymakers work to face societal challenges. Moreover, I was eager to gain new skills and expertise in science diplomacy that could lead me to become a science diplomat.

HOW WAS YOUR PERSONAL EXPERIENCE IN THE PROGRAMME AND WHAT KIND OF IMPACT DID IT HAVE ON YOU?

I only have good words for Open Doors, since it allowed me to meet my outstanding fellow trainees as well as the no less incredible trainers. It was a mind-broadening experience that gave me the opportunity to engage for the very first time with high-level public officers, diplomats, and experts in science diplomacy. By exchanging visions with them, knowing about their daily work and having the opportunity to explain my own projects and research to them, I learned how to listen and find a ground language to engage in negotiations to promote evidence-based policies. Furthermore, having the opportunity to hold a lunch meeting at an Embassy or to visit the European Space Agency, one of the best examples of science diplomacy and international collaboration in research, was unforgettable.

DO YOU THINK THIS KIND OF INITIATIVES FOR THE RESEARCH COMMUNITY SHOULD BE FURTHER EXPLORED? HOW WOULD YOU SCALE THEM UP?

Undoubtedly! This kind of initiative represents a handson opportunity, which goes beyond the theoretical framework of courses, seminars, and conferences, where real-life interactions are difficult to achieve. Thus, it allows researchers to put themselves in the diplomats and policymakers' shoes. Although I am aware that escalating the programme is not easy, I would suggest publishing the Open Doors programme experience so that other institutions can develop similar schemes. I would also advocate the importance of funding this kind of programmes by funding bodies.

ANY OTHER COMMENT YOU WISH TO MAKE?

I hope this won't be the last opportunity to meet and I am looking forward to collaborating all together again. A big thanks to all the S4D4C team!

¹⁵ Information available at: http://www.scitechdiplohub.org/

MARTA BOZINA BEROS

Faculty of Economics and Tourism, Juraj Dobrila University of Pula, Croatia



"I had the chance to learn about science diplomacy from some of the most prominent figures active in the field as well as to 'learn by doing', participating in some of the more key milestones of science diplomacy, such as the Madrid Declaration on Science Diplomacy."

WHAT IS YOUR JOB ABOUT?

I am an Associate Professor teaching (under)graduate courses in Economic and Monetary Union law & governance and EU financial regulation. I also participate in several European projects - some focus on developing new teaching modules and academic curricula, while others study some of the most avant-garde developments in EU regulatory policy and politics and are funded by the EU research and innovation frameworks. As for my current research focus, I mainly study the phenomenon of EU financial market fragmentation driven by the establishment of the Banking Union. More concretely, I study relationship dynamics between Euro and non-Euro-zone countries within various regulatory agencies and supervisory mechanisms active in the EU financial market, such as the European Banking Authority (EBA), or the Single Supervisory Mechanism (SSM).

WHY DID YOU APPLY TO THE PROGRAMME?

Having started my professional career in the Croatian Ministry of Foreign Affairs, firstly, I was aware of the benefits that expert advice brings to policymaking, and I was also aware that the potential of the Croatian academic community was underexplored in that sense. Secondly, even though I have decided to pursue an academic career instead of one in foreign affairs, I still had the "foreign-policy bug" and science diplomacy seemed as a perfect solution to fusing these two interests into an exciting and fast-developing branch of diplomacy.

HOW WAS YOUR PERSONAL EXPERIENCE IN THE PROGRAMME AND WHAT KIND OF IMPACT DID IT HAVE ON YOU?

From my perspective, this programme enriched my "social capital" so to say. This is not to say that through this programme I haven't learned much about science diplomacy theory and practice, because I have! And I had the chance to learn about science diplomacy from some of the most prominent figures active in the field as well as to "learn by doing", by participating in the deliberative process that led to the Madrid Declaration on Science Diplomacy. Still, looking back, what first comes to my mind is how amazing and inspirational the people I've shared this experience with were. From my fellow grantees – some of the finest and kindest persons I had the pleasure to share a fellowship programme with, to the amazing ladies managing this programme and guiding us in our discovery of this exciting new field across the EU – a big, heartfelt thank you!

DO YOU THINK THIS KIND OF INITIATIVES FOR THE RESEARCH COMMUNITY SHOULD BE FURTHER EXPLORED? HOW WOULD YOU SCALE THEM UP?

Well, more recently I was made aware of science diplomacy's unprecedented potential when COVID-19 took over our everyday lives. This bleak and difficult pandemic underscored in a very tangible way the importance of cross-border exchange of meaningful information between scientists and – in my opinion – accentuated the value of multilateralism and international cooperation as the only approach to the biggest global challenges at this time and in the future. So, in short – yes, it is indeed important to

encourage similar initiatives. The EU and the world can only benefit from them.

As for potential improvements, a possibility would be to offer two types of fellowships (which depends from the funding available of course): one that could be residential and long-term, something structured as a visiting fellowship in one of the science diplomacy centres of excellence, research institutes, think thanks and similar (e.g. lasting for 3-6 months). This would advance the conceptualisation of science diplomacy. The other could be something more of a "professional refinement" fellowship that would entail fellows enrolling in the online science diplomacy course (and excellent theoretical background), followed by fellows being deployed to different science diplomacy "outposts" (e.g. embassies, funding agencies) to gain firsthand experience in the field. This would be an interesting opportunity for diplomats coming from countries where science diplomacy is underdeveloped, but also interesting from the perspective of the EEAS, for instance.

OPEN DOORS HOSTS EXPERIENCE

THE EMBASSY OF SPAIN IN LONDON

Miguel Oliveros Torres, Spanish career diplomat and Counsellor for Cultural & Scientific Affairs at the Embassy of Spain in London

WHY DID YOU OFFER YOUR INSTI-TUTION AS AN S4D4C OPEN DOORS HOST?

This Embassy previously had a scientific coordinator and is in close contact with the Spanish Foundation for Science and Technology (FECYT), co-organiser of the programme in S4D4C.

WHAT KIND OF AGENDA DID YOU PRE-PARE FOR THE FELLOWS?

The Embassy took part in the Open Doors programme thanks to FECYT. The visiting S4D4C team to London included one representative from FECYT with two grantees: one from Finland and one from Spain.

The aim was to connect European researchers with Spanish diplomats in charge of public policies to find common grounds for science diplomacy.

During this working day the team visited the Parliamentary Office for Science and Technology (POST) service at the UK Parliament and held different meetings at the Embassy with responsible diplomats for the following international organisations based in London:

• International Mobile Satellites Organization (IMSO)

- International Maritime Organization (IMO)
- International Fund for Damages caused by Hydrocarbons
- · Commission of the Whale
- International Sugar Organization
- Commission for the Northeast Atlantic Fisheries
- · International Council for Cereals and Food Help

The diplomats shared information and exchanged impressions with the S4D4C team about their works at these institutions and the nature of them.

DO YOU THINK THIS KIND OF INITIA-TIVES BENEFIT YOUR INSTITUTION? IN WHAT WAY?

The working day and programme reinforced the Embassy's commitment to making links with early-career scientists that eventually could be involved in diplomatic responsibilities or international relations.

HOW WOULD YOU SCALE THEM UP?

A programme for allowing these early-career scientists to work at different European embassies - under models of internships or scholarships - for a short period of time focussing their projects on science diplomacy could be explored. A general and formal agreement would be needed.

THE EMBASSY OF SPAIN IN BRUSSELS

Sergi Farré, Spanish career diplomat and Counsellor for Cultural & Scientific Affairs at the Embassy of Spain in Brussels

WHY DID YOU OFFER YOUR INSTI-TUTION AS A S4D4C OPEN DOORS HOST?

It was a great opportunity to internationalise and amplify our science diplomacy efforts.

WHAT KIND OF AGENDA DID YOU PRE-PARE FOR THE FELLOWS?

We combined a bilateral and a multilateral agenda, taking advantage of Brussels as not only a national capital, but the capital of Europe. Outside Spain, Brussels is the city with the highest concentration of Spanish institutions, including in science, technology and innovation. Thus, participants visited CSIC (Spain's Science and Research Council), CDTI-SOST (Spain's Science and Technology Office in Belgium), Spain's Permanent Representation to the EU – Science and Innovation Section, and this very Embassy, amongst other institutions. A working lunch was offered by the Ambassador of Spain, Ms Beatriz Larrotcha.

DO YOU THINK THIS KIND OF INITIA-TIVES BENEFIT YOUR INSTITUTION? IN WHAT WAY? HOW WOULD YOU SCALE THEM UP?

This was a unique opportunity to share and discuss our own national Science, Technology and Innovation Plan and approaches with those of other countries. Participants were able to better understand how the Spanish and, more generally, the EU system works, but hosts also benefited from participants' inputs and backgrounds.

ANY OTHER COMMENT YOU WISH TO MAKE?

I wish to congratulate FECYT and the Spanish Agency for International Development Cooperation (AECID), as well as S4D4C, for this great initiative which, in my view, and given its success, should be replicated elsewhere and also see future editions.



THE GERMAN AEROSPACE CENTER (DLR), Project Management Agency

Roman Noetzel, Head of the "Strategy and Monitoring" division at the German Aerospace Center (DLR), Project Management Agency

Simone Weske, Head of the "Internationalisation: Strategy, Instruments, Monitoring" unit at the "Strategy and Monitoring" division of the German Aerospace Center (DLR), Project Management Agency

WHY DID YOU OFFER YOUR INSTI-TUTION AS AN S4D4C OPEN DOORS HOST?

The DLR Project Management Agency has been a partner of the German government for a long time, providing consultancy services in the development and implementation of its strategies to take advantage of the opportunities presented by European and international networking. In addition to our analyses and consulting services, we provide our clients from government and key stakeholders within the science, innovation, and education sectors with the tools they need to represent and enforce national interests. In this context, we act at the interface between policy, diplomacy, science and education - we see us as science diplomats dealing with the whole spectrum of science diplomacy stakeholders at national, European and international level. In the last 2-3 years the topic "science diplomacy" has become one of the main pillars in the "Strategy and Monitoring" Division. Therefore, we use every opportunity to network and exchange with stakeholders with diverse backgrounds, experiences and visions. The Open Doors grantees (five early-career scientists thinking outside the box) build the new generation of science diplomats which will emboss the science diplomacy scene in the future. Their views and ideas should be strongly taken into consideration while adopting new instruments in this field.

WHAT KIND OF AGENDA DID YOU PREPARE FOR THE FELLOWS?

We hosted two meetings on 10 April 2019:

- Exchange with Science Diplomats from DLR
 In this meeting, three DLR heads of regional divisions presented their activities in Europe, Asia and Africa and discussed relevant elements of science diplomacy.
- Roundtable: Funding and research activities in the field "science diplomacy", exchange with the German Academic Exchange Service (DAAD), the German Research Foundation (DFG), and HGF: In this meeting, the Open Doors grantees learned what framework conditions German funding organisations offer for supporting science diplomacy activities and how research organisations deal with this topic. Furthermore, they have exchanged suggestions and ideas on how to strengthen actions in this field.

DO YOU THINK THIS KIND OF INITIA-TIVES BENEFIT YOUR INSTITUTION? IN WHAT WAY? HOW WOULD YOU ESCA-LE THEM UP?

As a funding agency we always look for new funding formats to support international initiatives. The DLR experiences gained as a part of the S4D4C project (and in this context, also the exchange with the Open Doors grantees) as well as the interaction with many different stakeholders dealing with international cooperation in science, education and innovation have shown us the potential of training activities and networking in the field of science diplomacy. In this

context, we have started several concrete actions:

- DLR internal exchange: The meeting with DLR head of divisions and the Open Doors grantees was the starting shot for a DLR internal exchange. Based on our experiences in international cooperation (funding instruments and strategy partners in more than 110 countries) as well as in the field of global challenges we have organised a regular exchange among the regional divisions in the "European and International Cooperation" department on science diplomacy. We have established a joint understanding about what science diplomacy actually means for our daily work and what challenges we see in the interaction among different stakeholders in this field. Furthermore, we are now able to better use synergies from our activities for different national and international clients.
- Additional budget for training activities for internal and external partners: We have received seed capital for conception and organisation of internal and external training activities. The DLR internal pilot training (with its own exercises and simulation game in German) took place in February 2020. Currently, we are planning similar activities for further German partners dealing internationally with early-career researchers.
- Promoting our expertise among German partner organisations: We have established an exchange among different German partner organisations like DAAD, DFG and HGF. Relevant experts are involved in dedicated events and exchange rounds (especially at the political level).
- Funding formats: Based on the experiences with the Open Doors programme we have prepared concepts for the implementation of three new funding instruments in the field of science diplomacy for our client, the Federal Ministry for Education and Research (BMBF). The first pilot called "Raising the Profile of Education and Science Diplomacy" was published in May 2020. The BMBF offers 250 000 euros for supporting better scientific communication and promoting excellent science diplomacy projects. The projects will be administratively managed by the "Strategy and Monitoring" Division.

ANY OTHER COMMENT YOU WISH TO MAKE?

We hope that we could continue the excellent collaboration with our S4D4C partners and Open Doors grantees also after the end of the S4D4C project.

GERMAN ACADEMIC EXCHANGE SERVICE (DAAD)

Christiane Schmeken, Director Strategy at the German Academic Exchange Service (DAAD), Germany

WHY DID YOU OFFER YOUR INSTI-TUTION AS A S4D4C OPEN DOORS HOST?

I was invited to join a panel discussion organised by DLR – PT. As I consider science diplomacy to be a highly relevant topic, I was glad to participate in the exchange. I really enjoyed the experience, and the fact that the early-career researchers selected by the programme were so enthusiastic about science diplomacy.

WHAT KIND OF AGENDA DID YOU PRE-PARE FOR THE FELLOWS?

I had been asked to talk about DAAD's position with regard to science diplomacy and about our activities in the field. I was happy to do so. In my understanding, a funding organisation like DAAD contributes to science diplomacy in different ways. Policy dialogue and other forms of debate with relevant groups of stakeholders are one means to take this issue further. Another, more indirect approach consists in building funding schemes and exchange programmes targeting global challenges. To my understanding, this form of support is highly efficient. By enabling researchers from different regional and disciplinary backgrounds to jointly tackle topics like climate, health or poverty, we help find solutions on a larger scale. The major problems created by humankind become more apparent every day. They need to be solved together, in an atmosphere of mutual trust and partnership.

DO YOU THINK THIS KIND OF INITIA-TIVES BENEFIT YOUR INSTITUTION? IN WHAT WAY? HOW WOULD YOU SCALE THEM UP?

I was quite impressed by the seriousness and the commitment of the researchers participating in the programme. I am convinced it helped them a lot to have this opportunity to meet with fellow researchers thinking in a similar way. Generally speaking, there always remains

a question mark when it comes to long-term results of short-term events. Creating longer-lasting networks and exchange platforms is what we should strive for. However, this does not always work. Digital collaboration may turn out to be an answer.

ANY OTHER COMMENT YOU WISH TO MAKE?

Although I appreciate the commitment of researchers to science diplomacy, I do feel doubtful about how close the links between research and the political sphere should be. Diplomacy or politics in general should not have a steering role in academic cooperation. To my understanding, Germans, given our history, should be particularly aware of the risks that are engendered by a lack of freedom in society. Furthermore, it is precisely the independence of higher education and science from political constraints which makes cooperation possible, even when relationships are getting difficult on the diplomatic level. I highly value the autonomy of science which enables us to keep in touch with civil society in autocratic regimes.

FEDERAL MINISTRY OF EDUCATION AND RESEARCH (BMBF)

Harald Lischka, Head of the "Policy Issues, Digitalization and Transfer" Unit within the Department of the "European and International Cooperation in Education and Research" at the Federal Ministry of Education and Research (BMBF), Germany

WHY DID YOU OFFER YOUR INSTI-TUTION AS A S4D4C OPEN DOORS HOST?

Whether it is climate change, species extinction or urbanization, no country can master the challenges of our time on its own. These challenges require international cooperation - particularly in the areas of education, science and research. The Federal Ministry of Education and Research (BMBF) therefore engages in global efforts to create suitable conditions for international networking and cooperation. Education and science build bridges between countries and contribute to mutual understanding. That is the basis for trusting relations and international policymaking, founded on scientific facts. In this context, early-career researchers who participate in international activities play a crucial role by advancing the mutual exchange of ideas and perspectives. The meeting with the Open Door grantees provided us with the opportunity of better understanding how to improve the interface between science, policy, and diplomacy.

WHAT KIND OF AGENDA DID YOU PRE-PARE FOR THE FELLOWS?

The main objectives of the meeting with the Open Doors grantees were to exchange information and impressions about the relevance and the challenges of science diplomacy as well as to present BMBF's good practice activity. In particular, the Governmental Strategy for the Internationalisation of Education and Science, the Research and Strategic, operational and supporting tools for science diplomacy, and the current Cooperation with Africa and the Middle East were introduced to the grantees. The presentations were followed by an open discussion with all participants about what was needed to enhance science diplomacy, which challenges should be expected, and which skills were necessary to be a good science diplomat.

DO YOU THINK THIS KIND OF INITIA-TIVES BENEFIT YOUR INSTITUTION? IN WHAT WAY? HOW WOULD YOU SCALE THEM UP?

The meeting with the Open Doors grantees were beneficiary for the BMBF and especially for the unit "Policy Issues, Digitalization and Transfer" due to the following reasons:

- Within our discussion, it became clear that scientific results should be better communicated to politics and society. In order to promote excellent examples of international activities in the field of education and science diplomacy, the BMBF is going to present its award for education and science diplomacy for the first time in 2021.
- Scientists, diplomats and policymakers should build bridges within one country, in one region as well as worldwide. With the aim to offer a suitable dialogue platform, we organised an evening reception within the S4D4C conference in Berlin in October 2019 where the Open Doors grantees – among many other guests – were invited.

ANY OTHER COMMENT YOU WISH TO MAKE?

The BMBF highly appreciates the outcome of the S4D4C project: We are interested in future exchange opportunities among relevant stakeholders like the Open Doors programme, and in receiving policy briefs with recommendations on how to enhance activities in the field of science diplomacy. We welcome suitable events for networking, spurring the communication between policy and science as well as strengthening international research efforts for addressing global challenges.

TIPS FOR SETTING UP A KNOWLEDGE EXCHANGE PROGRAMME IN POLICY/AND OR DIPLOMACY FOR RESEARCHERS

1. GOALS. DEFINE THE OBJECTIVES OF THE SCHEME

The objectives of each knowledge exchange programme need to be defined at an early stage. In our case, our objectives were:

- To give access to the Open Doors grantees to the networks of science diplomacy and science policy experts and practitioners
- To emphasise the need to facilitate practical experience on science diplomacy as a necessary complement to more formal trainings
- To give the Open Doors grantees exposure and practical insights on the work of Embassies, research and funding organisations, and international organisations in science diplomacy
- · To foster science diplomacy related institutions to promote dialogue and exchange with the research community
- · To raise awareness about the need of to better coordinating different science diplomacy activities among stakeholders
- To use the Open Doors programme as an opportunity to disseminate the S4D4C project among the research community and relevant science diplomacy stakeholders in Europe

2. SIZE. DEFINE THE SCOPE OF THE SCHEME

The main characteristics of the scheme are going to depend on the budget and available resources and time of both the organizers and the host institutions. As described in the "Other exchange programmes" section of this report, each scheme is designed for a different number of participants and levels of commitments.

In the Open Doors case, which was designed as a pilot, the scope of the scheme was to offer it to five grantees who would commit to participate in 3 to 4 international visits with 1-2 day agendas allocated throughout one year. It is not always easy for active researchers to commit to longer or more intense time schemes due to their work obligations. Precisely because of that, the S4D4C advocated these programmes to be part of the researchers' scholarship/fellowship schemes or to be recognised, incentivized and promoted by the researchers' home institutions.

3. PARTICIPANTS. DEFINE BENEFICIARIES' PROFILES

The beneficiaries' profiles need to be adjusted to the objectives of the scheme. In the Open Doors programme, and because of the objectives being quite broad and generalist, it was decided to go for a "wide spectrum" call in which researchers at an appropriate level of seniority (Postdocs, Principal Investigators and beyond) from all disciplines were

welcomed to apply. In addition a special emphasis was made for women to participate. The main requisites to candidates were the following:

- Applicants should be researchers with a PhD in any field of knowledge (sciences, humanities, technology, engineering, medicine, mathematics).
- · Applicants should work in either the academic or industry sector.
- · Applicants should work in (or be affiliated to) an EU-based institution.
- The call expects candidates to be able to travel within Europe (VISA conditions).
- The participants should be able to spend 9-10 days in a calendar year in the "Open Doors" programme.
- Previous experiences in science communication, science outreach, science policy and/or science diplomacy will be valued positively.
- · Applicants should be strongly motivated to develop their career in the field of science advice and science diplomacy.

Finally, in order to facilitate the participation in the programme of the selected candidates, a letter of support from their institution was required in the application process. In order to reach as many EU-based researchers as possible, all S4D4C partners contributed to the dissemination of the call.

4. HOSTS. IDENTIFY AND BRING HOSTING INSTITUTIONS ON BOARD

The host institutions are key to define the spirit of the exchange programme. In general, it will be easier for institutions to host 1-2 day meetings with participants, as internships or longer stays will require a bigger commitment and, possibly, a written or even legal agreement with the organising institutions.

For the Open Doors programme, it was decided to go for a wide range of stakeholders part of the EU science diplomacy ecosystem, as the intention was to give grantees a flavour of the diversity of actors, roles and responsibilities.

5. SELECTION CRITERIA. DECIDE ON HOW TO NOMINATE CANDIDATES

This kind of programme is usually very attractive for the research community, which is often willing to engage with public issues and international relations.

We decided to go for an open call both because as a publicly funded project we aimed at an open, transparent and meritbased selection of candidates, and because a public call is an effective way to get the programme widely known. The application form and the scoring system can be found in Annex 1.

The selection committee, composed by S4D4C members, evaluated all applications and scored all candidates between 0 and 100 points taking their CV, their application form, and the letter of support from their institution into account.

However, it may be the case, that another approach is better targeted to specific needs, e.g. a thematic programme or addressing researchers at a particular career stage.

6. IMPACT, DECIDE ON HOW TO MONITOR AND EVALUATE THE PROGRAMME

The evaluation of the programme needs to be part of the design.

As a pilot programme, the number of grantees as well as hosting institutions was small, so we used a qualitative evaluation of the programme using a self-evaluation questionnaire (see the "My Open Doors experience" section).

However, if an exchange programme includes a bigger number of participants, or several editions, a more in-depth evaluation of the impact on the grantees can be analysed using surveys, questionnaires, and interviews, mixing both qualitative and quantitative methodologies.

7. BUILD COMMUNITY. SPREAD THE WORD AND CREATE A COMMUNITY

In S4D4C, we believe these programmes add value to both grantees and hosting institutions, as they foster mutual trust and facilitate the creation of diverse professional networks with an interest in addressing global challenges through science diplomacy. For these exchange programmes to flourish, it is essential that they are disseminated as widely as possible. Also, the communities around the programme can be nurtured once the programme has finished. In the case of the Open Doors grantees, they keep in touch with the project and some of them have facilitated S4D4C partners with new contacts and contributed to other pieces of work in the project.

SOME OTHER EXCHANGE PROGRAMMES FOR RESEARCHERS IN SCIENCE POLICY AND/OR SCIENCE DIPLOMACY

The AAAS report "Connecting Scientists to Policy Around the World" compiles a detailed mapping of the wide variety of imersive knowledge exchange schemes present around the world. This report established four categories of knowledge exchange mechanisms: (1) fellowships, (2) internships, (3) pairing schemes, and (4) details and rotations.

It is difficult to fit the S4D4C Open Doors programme within any of these categories, as it is not fully immersive. Grantees were exposed to different diplomatic and science policy institutions, as well as to the global academic and policy discourse on science diplomacy, over the course of a whole year but only making use of short-term visits. It was a kind of a soft-immersion into science diplomacy that included components of several of the different categories established by the AAAS report. The benefit of this model is its compatibility with full-time research or industry work, but it will not be as transformative for the fellow and the host institution compared with full-time policy fellowships. Nevertheless, Open Doors offers an innovative and flexible option for researchers who do not wish or are not ready to transition out of their research careers.

The AAAS report presented immersive science policy programmes such as the AAAS S&T Policy Fellowship in the United States, the Mimshak Science and Policy Fellowships Programme in Israel, the Royal Society Pairing Scheme or the Parliamentary Office of Science and Technology (POST) Fellowships in the UK, or the European Parliament MEP-Scientist Pairing Scheme, among others. Since the report was published in 2017 additional schemes connecting scientists with policy environments have been established around the world, reflecting the growing appetite for these

experiential learning mechanisms at the science-policy and diplomacy interfaces. These include, among others, the Ambassadors for Science programme at the Embassy of Spain in London, the MITACS policy fellowships in Canada, and the "Estancias de Interfaz Ciencia-Política de Ciudad de México", the Quebec science diplomacy fellowship¹⁷ and the Inter-American Institute regional science policy fellowship¹⁸. Some of these programmes are described below with the purpose to showcase the different approaches that can be taken in order to foster science-policy interactions.

AMBASSADORS FOR SCIENCE

"Ambassadors for Science" (Amb4Sci)¹⁹ has been a pioneering pairing scheme between scientists and diplomats with the aim of finding common ground between the two communities that could foster science diplomacy. It was organised by the Spanish Foundation for Science and Technology (FECYT) and the Spanish Embassy in London, with the collaboration of the Society of Spanish Researchers in the United Kingdom (SRUK or CERU as for the Spanish acronym) for two consecutive editions from 2016 to 2018.

Objectives

The overall objective was bringing different professionals—scientists, diplomats and other policymakers—closer to foster mutual understanding and potential collaborations. In particular, scientists could (i) learn about the Spanish diplomatic endeavour in the UK, (ii) explore how their experience and scientific knowledge could feed or influence Spanish diplomatic actions, (iii) facilitate improvements in the Spanish science diplomacy strategy, (iv) build long-

¹⁶ Information available at: https://www.aaas.org/resources/connecting-scientists-policy-around-world, https://mcmprodaaas.s3.amazonaws.com/s3fs-public/reports/International-landscape-analysis-full-02162017.pdf

¹⁷ Information available at: http://www.scientifique-en-chef.gouv.qc.ca/en/nouvelles/signature-dune-entente-de-partenariat-fa-vorisant-contribution-de-releve-recherche-a-diplomatie-scientifique-2

¹⁸ Information available at: http://www.iai.int/en/step

¹⁹ Information available at: https://www.fecyt.es/en/info/ambassadors-science

lasting relationships with diplomats, and (v) relate with other scientific peers.

On the other hand, diplomats and other policymakers could (i) get familiar with the scientific rationale that may influence their own diplomatic portfolio, (ii) visit universities, research centres, or companies that may be related to their diplomatic activity, (iii) learn about science careers in academia and industry, (iv) understand how scientific and technological research may enable countries to achieve social and economic development as well as innovation, and (v) build long-lasting relationships with scientists who work in areas related to their diplomatic portfolios.

Scope

Amb4Sci fitted within FECYT's priority lines of embedding more science activities within Spanish embassies as well as increasing science outreach and science culture. Amb4Sci was conceived as a pilot experience with the aim of extending it to other diplomatic missions and even to the Spanish parliament and other institutions in Spain.

The first edition had a cohort of nine scientists and ten diplomats/civil servants, while the cohort of the second edition was composed of ten scientists and eleven diplomats/civil servants.

The scheme entailed:

· A one-day introductory session for all participants. During the plenary seminar, scientists received an introduction to the Spanish diplomatic action; diplomats deepening their knowledge about science and technology at the global and national level, focusing on Spain and the United Kingdom. Both professionals learned about the concept and current practices of science diplomacy using global as well as national lenses. All participants met their Amb4Sci scientific/diplomatic counterparts and were encouraged to proceed with the visits to their respective institutions. In the second edition, scientists received an extra day of training with seminars performed by the UK Chief Scientific Adviser to the Foreign Commonwealth Office and the Chair of the London Diplomatic Science Club, and academic lectures about the role of science in public policies. Also, they had the opportunity to participate in a role-playing game to improve their negotiation and communication skills.

- Arrangement of at least two visits for each Amb4Sci pair, for scientists to shadow diplomats during their daily routine to learn about the diplomatic activity, and for diplomats to get an insight about the world of science, technology and research by visiting the scientist's job place.
- A one-day joint session where all Amb4Sci pairs presented their shared experiences, followed by a brainstorming policy debate as to how to improve Spanish science diplomacy.

Beneficiaries' profiles

On the one side, Amb4Sci aimed at recruiting, diplomats and policymakers from across all offices of the Spanish Embassy in London. On the other, Amb4Sci opened public calls to select active scientists living in the UK, working in any scientific discipline (from Natural and Exact sciences, to Engineering and Social Sciences and Humanities), in either the academic or industry sectors, and at any career stage; and with previous experience in science outreach, science communication, and/or science policy.

Host institutions

On the diplomatic side, the Spanish Embassy in London was the main host institution. For two editions, selected scientists were exposed to the routine activities undertaken by different offices and institutions related to the embassy: the Office for Diplomatic and Policy Affairs, the Office for Cultural and Scientific Affairs, the Department of Economics and Trade, the Office for Agriculture, Fishing, Food and Environment, the Office for Employment and Social Affairs, Consulates, Instituto Cervantes, and so forth, to name just a few. In some cases, Embassy hosts also arranged visits to international organisations based in London (such as the International Maritime Organisation, IMO), the Spanish Chamber of Commerce in the UK, different schools and universities, film festivals, food exhibitions, and others, so that selected scientists could have a glimpse of the wide

array of networking activities that an embassy is required to perform.

From the scientific side, selected scientists organised tour visits to their universities, research centres, and private companies for their diplomatic counterparts. Scientists made sure Embassy officials would be exposed to their scientific practice, meet other scientists and scientific managers from these institutions.

Application and evaluation processes

A public call for scientists was open for one month for each edition. The application process entailed a short version of the applicant's CV (4 pages maximum, and an application form to assess the candidate's previous knowledge on science communication, diplomacy, and policy. All applications were evaluated by a mixed committee with representatives from organising and collaborating institutions. For the second edition, a participant from the first edition contributed as an additional evaluator.

Whereas over forty applications were received in both editions, only nine and ten applicants were selected for the first and second edition, respectively.

Impact and dissemination

Reports and interviews were published²⁰ summing up the experience of all Amb4Sci pairs. Some video highlights and documentaries were also published and are available on the FECYT <u>YouTube channel</u>²¹. All seminars and visits were covered on Twitter via #Amb4Sci. Scientists published their experience in their personal blogs, institutional websites, in specialised journals and in mass media. Amb4Sci also helped envision the S4D4C Open Doors programme.

MITACS POLICY FELLOWSHIPS

Established in 1999, Mitacs is a national, not-for-profit organization that designs and delivers research and training programs in Canada. Working with over 60 academic partners, thousands of companies, and both federal and

provincial governments, Mitacs builds partnerships that support industrial and social innovation in Canada.

Open to all disciplines since 2007, Mitacs designs and delivers research and development programmes that provide opportunities for advanced research, skills training, and work-integrated learning. Mitacs's approach to innovation leverages college, undergraduate, and graduate students, and post-doctoral fellow mobility as a mechanism for collaboration. Mitacs build relationships among businesses and not-for-profit organizations (NFPs), post-secondary education (PSE) institutions, and governments to create solutions that enable economic growth and sustainable development.

Since 2016, Mitacs has launched an annual call of <u>Mitacs Policy Fellowships</u>²² to place PhD holders in government host offices for a 12-month immersion into the policy-making process.

Objectives

Mitacs Policy Fellowships aims to i) create mutually beneficial relationships between government decision-makers and academic researchers in support of policy challenges in Canada, ii) enhance science communication, collaboration, and capacity in support of evidence-informed policy-making, iii) develop a network of expertise in science policy among academic researchers and one that complements the existing public service, iv) Create a pool of expert policy contributors across academia, government, non-for-profit organizations, and industry and, iv) contribute to a national network of science policy expertise across academia, government, not-for-profit organizations, and industry

Scope

Since 2016, around 20-25 policy fellows have composed every annual cohort. These fellows spend up to 12 months into government-related institutions at either the federal or provincial level.

²⁰ Information available at: https://www.fecyt.es/en/tematica/ambassadors-science

²¹ Information available at: https://www.youtube.com/c/FECYTciencia/search?query=ambassadors%20for%20science

²² Information available at: https://www.mitacs.ca/en/programs/canadian-science-policy-fellowship

Beneficiaries' profiles

Mitacs policy fellows should comply with certain eligibility requirements such as being a Canadian citizen or permanent resident, holding a PhD in any academic discipline at the start of the fellowship, and being able to participate full-time in a 12-month fellowship at the host office, among others. Fellows can be postdocs, faculty lecturers or professors, or belong to the industry sector.

By participating in this scheme, fellows will (i) get the training and first-hand experience of public policymaking during a 12-month period at a host office, (ii) receive professional development training and networking opportunities, and (iii) apply their academic expertise and skills to public issues of concern.

As part of the programme, Mitacs policy fellows receive professional development training at the start of their fellowship but also throughout the year. This training includes learning about science policy, science communication, government and public affairs, media training, and networking skills. For the 2020-2021 cohort, Mitacs policy fellows received their induction training from the Canadian Science Policy Centre, part of which was focused on science diplomacy with the support of S4D4C.

Host institutions

Eligible host institutions must be at the federal or provincial government level, be able to provide remuneration and employee benefits to the fellow, offer appropriate office space, deliver mentoring and guidance to the fellow throughout the fellowship, among others.

By participating in this scheme, host offices will (i) provide a range of policy tasks to their fellows, such as policy development, stakeholder engagement, and creating and maintaining key policy documents; (ii) increase their access to specialised expertise and the most up-to-date knowledge available in academia; (iii) increase the policy capacity within their department and (iv) support a growing

body of researchers uniquely trained to address key policy challenges.

Application and evaluation processes

The Mitacs Canadian Science Policy Fellowship programme has two application periods aimed at prospective fellows and hosts on an annual call cycle. The application and evaluation process is concurrent and double-blind, so fellows apply for the programme while host offices apply to host a fellow for the upcoming cohort year. Both fellows and hosts must submit an application through an online form.

Impact and dissemination

Mitacs monitors the development of each policy fellow and publishes news releases, quotes and reports about the policy fellows' experience.

Mitacs policy fellows can take advantage of this experience to support their career transition from academia to government. Some fellows also go back to academia and go on with their research career having grown their network of contacts and understood better policymaking and how to best fit their research into public policy.

ESTANCIAS DE INTERFAZ CIENCIA-POLÍTICA EN LA CIUDAD DE MÉXICO

In 2019, Mexico City (CDMX) launched a policy fellowship programme aimed at nurturing professionals in the science and public policy interface. The scheme was conceived and launched by the Dirección General de Ciencia, Divulgación y Transferencia de Conocimiento, of the Subsecretaría de Ciencia, Tecnología e Innovación; Secretaría de Educación, Ciencia, Tecnología e Innovación, of the Government of Mexico City. This programme²³ followed the trend of others such as the AAAS Science and Technology Policy Fellowships or the Mitacs Policy Fellowships, but being only applied at the state-level or subnational-level, similar to the California Council on Science and Technology (CCST)

²³ More information (in Spanish) available at: https://www.sectei.cdmx.gob.mx/convocatorias-sectei/convocatoria-2019-pa-ra-la-realizacion-de-estancias-de-interfaz-ciencia-politica-de-la-ciudad-de-mexico

<u>Science Fellows</u>²⁴. However, this is the first programme to be launched in the Latin American context.

Objectives

The main aim of this fellowship programme is training professionals in the science and public policy interface, in order to become knowledge brokers, promote both policy for science as well as evidence-based policymaking, and help harnessing the scientific and technological potential of Mexico City and its citizens.

Scope

The scheme was conceived as a pilot experience to be scaled up in following years. Its first edition selected six fellows for a 12-month period into different departments of the Government of Mexico City, with a possibility of a renewal for additional 12 months that was approved in 2020.

Fellows received an induction training to help them identify and develop their transferable skills at the beginning of their fellowship. A close monitoring of their performance in their host offices was also undertaken. By the end of the scheme, fellows must have developed their transferable skills but also be able to write policy discourses, press releases, individual policy briefs and reports, support policymaking processes, undertake policy analysis and evaluation, and liaise as knowledge brokers throughout the whole process.

Beneficiaries' profiles

Applicants to this call have to hold a PhD in any discipline, although preferentially from the Exact and Natural Sciences, Engineering, Environmental Sciences, Biotechnology and Agricultural Sciences, Health Sciences, and Energy. Applicants must be in their early stages of their career (no longer than four years since receiving their PhD degree).

For the application process, applicants have to fill up an online form, attach their CV, provide a letter of intention,

and two recommendation letters from academic staff and one from a civil servant, among other documents.

The evaluation comprised a review of all these documents and personal interviews with the Subsecretaria de Ciencia, Tecnología e Innovación as well as with host offices, followed by a final review by the selection committee.

A total of six fellows were selected for the first cohort.

Host institutions

Different departments of the Government of Mexico City host the first cohort of fellows involving environmental, energy sustainability, health, water management, transportation, mobility, and resilience policies.

Impact and dissemination

This pilot scheme is under close monitoring and evaluation for its improvement and scale-up. Five out of the six fellows from the first cohort have been granted a 12-month renewal in their host offices or relocated to another host office, which may be understood as having a positive impact that should be kept for the allowed maximum period.

It has been showcased as an innovative practice at the local level, demonstrating that global cities can also develop knowledge exchange schemes to raise the importance of science, technology, and innovation in their policymaking process and public image.

²⁴ Information available at: https://ccst.us/ccst-science-fellows-program/

FINAL REMARKS

The S4D4C Open Doors programme has shown the appetite among the European Union research, diplomatic and policymaking community for better connecting among each other. Moreover, different programmes with similar objectives and a different range of approaches are flourishing worldwide. We hope the S4D4C Open Doors programme will inspire future initiatives so that as many researchers and policymakers as possible can enjoy them and, ultimately, contribute to bringing these communities together to jointly address global challenges.

ACKNOWLEDGEMENTS

This project has received funding from the Research and Innovation Programme Horizon 2020 of the European Union under grant agreement 770342



We are thankful to all the host institutions for their willingness to participate in the S4D4C Open Doors programme. Finally, we want to especially acknowledge the Open Doors grantees Marta Bozina, Fátima Antonethe Castaneda, Alexandra Middleton, Marta Pulido and David Velázquez for their enthusiasm and engagement with the programme.

ANNEX 1. APPLICATION FORM AND SCORING CRITERIA FOR THE OPEN DOORS PROGRAMME

APPLICATION FORM
Name:
Surname:
Email:
1. PLEASE PROVIDE A BRIEF SUMMARY OF YOUR FIELD OF RESEARCH AS WELL AS ITS SOCIAL IMPACT IN INFORMATIVE TERMS (UP TO 10 POINTS)
MAXIMUM 200 WORDS
2. DO YOU HAVE EXPERIENCE IN SCIENTIFIC OUTREACH (EDUCATIONAL TALKS, PUBLIC SEMINARS, WORKSHOPS, ETC.) OR IN SCIENTIFIC COMMUNICATION (BLOGS, PODCASTS, SCIENTIFIC ARTICLES IN THE MEDIA, ETC.)? (UP TO 15 POINTS)
MAXIMUM 200 WORDS

3. DO YOU HAVE EXPERIENCE IN SCIENTIFIC ADVICE OR SCIENCE DIPLOMACY WITH ANY INSTITUTION? IF YOU ANSWER IS AFFIRMATIVE, PLEASE SUMMARISE YOUR EXPERIENCE AND ADD RELEVANT LINKS (UP TO 20 POINTS
MAXIMUM 200 WORDS
4. DO YOU HAVE EXPERIENCE IN SCIENTIFIC ASSOCIATIONS? HAVE YOU ORGANISED SCIENTIFIC MEETINGS
HAVE YOU PARTICIPATED IN SCIENTIFIC BOARDS? IF YOUR ANSWER IS AFFIRMATIVE, PLEASE SUMMARISE YOU EXPERIENCE AND ADD RELEVANT LINKS (UP TO 10 POINTS).
MAXIMUM 200 WORDS
5. WHY WOULD YOU LIKE TO PARTICIPATE IN THE S4D4C "OPEN DOORS" PROGRAMME? HOW DO YOU THINK THI EXPERIENCE WITH SCIENCE DIPLOMACY WILL BENEFIT YOUR PROFESSIONAL CAREER PLANS? (UP TO 20 POINTS
MAXIMUM 200 WORDS

PROJECT PARTNERS

Centre for Social Innovation - ZSI (Coordinator)

Charles University Prague - CU

German Aerospace Centre, Project

Management Agency - DLR

German Centre for Science Studies and Higher Education Research – DZHW

The Spanish Foundation for Science and Technology – FECYT

The World Academy of Sciences - TWAS

University of Lille - ULille

University of Sheffield - USFD

University of Twente - UT

Vienna School of International Studies - DA

ASSOCIATE PARTNERS

Center for Science Diplomacy at AAAS, Washington

Higher School of Economics, Moscow - HSE

InterAcademy Partnership - IAP

National Graduate Institute for Policy Studies, Japan – GRIPS

International Institute for Applied Systems Analysis – IIASA

Indian Institute for Science/DST - Centre for Policy Research

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