

“Anticipatory Science Diplomacy: An interview with Ambassador Pitteloud,” *Science & Diplomacy*, September 30, 2021, <https://www.sciencediplomacy.org/conversation/2021/anticipatory-science-diplomacy-interview-ambassador-pitteloud>

This copy is for non-commercial use only. More articles, perspectives, editorials, and letters can be found at www.sciencediplomacy.org. SCIENCE & DIPLOMACY is published by the Center for Science Diplomacy of the American Association for the Advancement of Science (AAAS), the world’s largest general scientific society.

Anticipatory Science Diplomacy: An interview with Ambassador Pitteloud

Ambassador Jacques Pitteloud was appointed as Ambassador to the United States in 2019. Previously, Ambassador Pitteloud was the first Intelligence Coordinator for the Swiss Government, Swiss Ambassador to Kenya, Uganda, Rwanda, Burundi, Somalia and the Seychelles, and Director General of the Swiss Federal Department of Foreign Affairs.

Ambassador Pitteloud hosted Dr. Sudip Parikh, CEO of AAAS and Executive Publisher of the *Science* family of journals and AAAS Center for Science Diplomacy staff at his residence, where he discussed Swiss science diplomacy. This is the fifth edition in the Ambassador Interview Series.

Kimberly Montgomery (interviewer): *You have had an impressive career that has spanned the Swiss Foreign Service, the Swiss Strategic Intelligence Service, and the Federal Department of Foreign Affairs (FDFA). What is your overall assessment of relations between Switzerland and the United States? What are Switzerland’s priorities in the U.S., in relation to science, technology and innovation?*

Ambassador Jacques Pitteloud: We have a great relationship with the United States, one that is based on common strategic interests, which have not changed over the last half century. Switzerland is a free market economy and, like the U.S., we believe in competition, excellence in education, and the close linkages between the world and science, the economy, and the government support function.

We are a more important partner to the U.S. than it might seem at a first look. In terms of investment, we are the sixth largest investor in the U.S. economy. Over the last 12 years, we have invested over 350 billion dollars—half of Switzerland's GDP—in the United States.

American scientists are important partners for Swiss scientists. Almost all research universities have exchange programs with U.S. universities, particularly on the post-doctoral level. We create jobs in the U.S., and export technology. It is about sharing technology and learning from each other, in the interest of mutually advancing scientific accomplishments.

We also want to increase our scientific presence and cooperation with the U.S., because we believe the future of science will largely be determined by societies that are open and that integrate scientists from all over the world. This is true both in the U.S. and in Switzerland, and is further reflected in the international diversity seen in our companies such as Novartis or Nestle.

Montgomery: *Your career has largely centered on security policy and intelligence matters, including serving as the first Intelligence Coordinator of the Swiss government and being the Director for Arms Control, Disarmament, Security Policy and Intelligence at the Department of Foreign Affairs. From a diplomatic perspective, how have you seen the intersection between science, technology, and security policy—especially emerging technologies—change over time?*

Ambassador Pitteloud: The speed at which technology evolves and the number of technological advances we need to keep an eye on pose huge challenges.

Switzerland is very committed to maintaining the tradition of security policy negotiations, which were almost lost after the fall of the Soviet Union because of the belief that the kind of threats present during the Cold War would never present themselves again. This false belief means we are facing multiple challenges: one is to ensure the continuance of the current security policy framework, which is under attack with treaties either elapsing or being ignored by one of the parties, and, at the same time, to analyze the challenges posed by new technologies. There will be a need for the international community to set the limits of what is possible

and what is acceptable and what is not, particularly in the areas of intelligence and bioscience.

Small countries like Switzerland rely heavily on international law to protect themselves. There are various initiatives both in the Swiss government and at the International Committee of the Red Cross (ICRC), an international organization Switzerland cooperates closely with, to try to assess the challenges related to the emergence of new technologies and what they mean in terms of security.

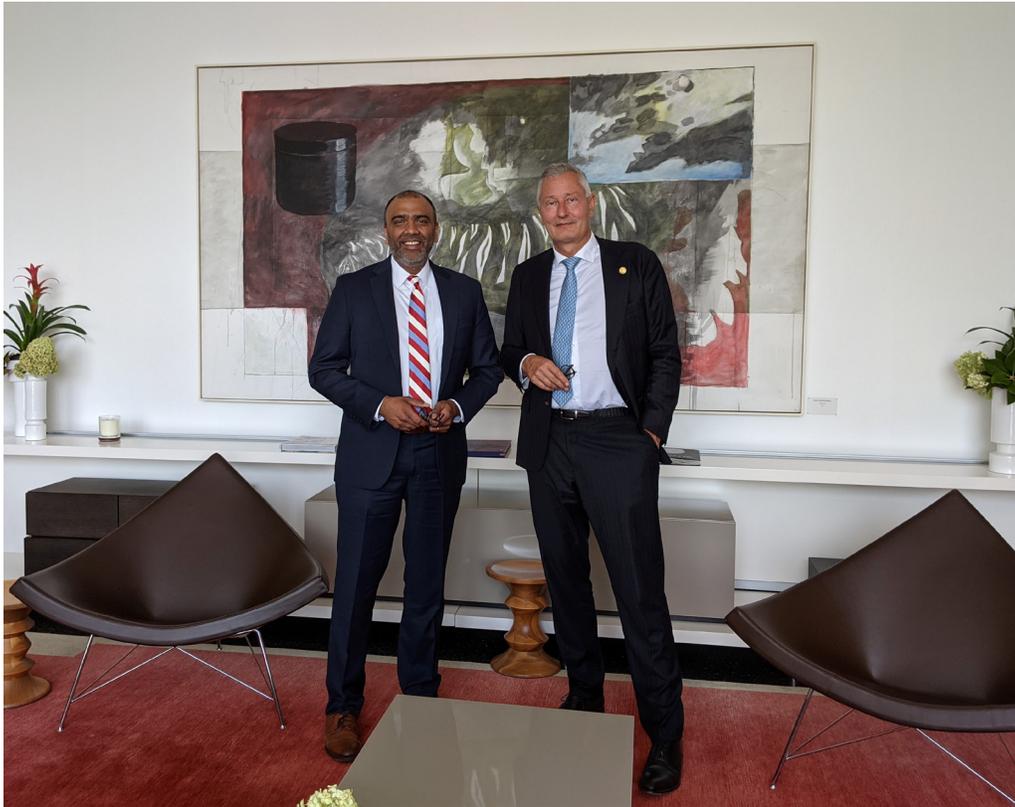
Montgomery: *How would you describe Switzerland's science diplomacy strategy? What is the connection between this strategy and the Swiss Federal Council recently appointing Ambassador Alexandre Fasel to serve as the Special Envoy for Science Diplomacy?*

Ambassador Pitteloud: Ambassador Fasel is one of the most brilliant minds in the Swiss FDFA, and is always at the forefront of integrating new technologies and modernizing the foreign service.

Our strategy is in keeping with the AAAS-Royal Society 2010 framework on science diplomacy: we try to include a scientific approach in our foreign policy and our bilateral and multilateral activities. For example, in a [recent Swiss-led expedition](#), we included scientists from all over the world, including from various countries in the Middle East, to go into the Red Sea to study how to save coral reefs. We are also active in the space sector. Switzerland chairs a UN committee on the long-term sustainability of space, working on international laws to address space debris. [A Swiss start-up, CleanSpace](#), received a mandate from the European Space Agency (ESA) to clean the lower orbit of space. The production of the Moderna COVID-19 vaccine in Switzerland is another fantastic example of international scientific cooperation. The research was carried out mainly in the U.S. and when they looked for the best possible supply chain and standards, they found them in Switzerland.

We would propose adding a new aspect to the science diplomacy framework, one that Ambassador Fasel is working on, which is that of anticipatory science diplomacy. This means trying to anticipate the potential benefits and risks of scientific advancements so that the international community can ensure that all countries can benefit from scientific innovations while developing any legal international frameworks that may be necessary to protect or regulate the new technologies.

Switzerland is so much more than chocolate and cows. Switzerland is very creative, productive, and international: 25% of the population are resident non-citizens and close to 40% of the population is foreign-born. In this sense, the Swiss FDFA is trying to position Switzerland, and especially Geneva, as a place where diplomats, politicians, and scientists can think together about the future.



Ambassador Jacques Pitteloud (right) and Dr. Sudip Parikh (left) at the Swiss Ambassador's residence in Washington, DC in August 2021. Credit: Estefania Ortiz Calva (AAAS).

Montgomery: *As a neutral state, Switzerland has a long tradition of acting as a mediator on thorny international issues—many of which are scientific and technical—including the Iran nuclear deal and, recently, hosting the new arms-control talks between Russia and the U.S. Can you give us an example of how has your country used science and technology to advance diplomatic objectives?*

Ambassador Pitteloud: It is important to distinguish between the role of facilitator and the role of mediator. Switzerland will frequently facilitate talks: we are a neutral venue, people trust that we will be able to gather people who normally do not speak to each other, and we try to create the conditions and the framework for people to talk.

The trust that many parties put in Switzerland relies precisely on the fact that we are neutral. Our neutrality has made Switzerland an important place for cooperative science. The best example is CERN, the European Organization for Nuclear Research; an important reason that it was built in Switzerland was our neutrality, in addition to Switzerland's geographic location and its scientific environment.

We use science as a tool for peace diplomacy as well. As Ambassador to Kenya, I fostered academic cooperation between Swiss and Kenyan universities on water management. If you can help countries manage water in a cooperative fashion, it is less likely there will be conflict between them. Everywhere we can we are pushing for academic freedom, access to science, scientific exchange, because we believe this is an important factor to achieve peace.

Montgomery: *Switzerland has been a pioneer in recognizing the value of posting science attachés at key Embassies and Consulates; the first hired at the initiative of the Swiss Ambassador in Washington in 1958. What can you tell us about the current state of the network of science attachés, Swissnex, and its efforts connecting individual scientists to provide advice to Ambassadors?*

Ambassador Pitteloud: Switzerland understands the necessity of being present in foreign markets. In a modern economy, you cannot just send a trade attaché; you have to understand the scientific trends and help companies get in touch with the right people in the academic world. This was a visionary initiative back in 1958 and now Swissnex has about 27 offices around the world, including in Boston, San Francisco, New York City and Washington. We just opened another office in Osaka, Japan, a scientific hub. The pandemic brought many challenges to the network as it traditionally relies on human interaction. At some point, we would like to go back to what we used to do before. I think fostering academic and research cooperation is essential.

Montgomery: *This question relates to an important issue for AAAS and for you as well: the need to work across the diplomatic and scientific communities to address challenges and rebuild a culture of trust in science.*

Ambassador Pitteloud: Traditionally, there is always a certain level of distrust towards diplomats, because they are seen as representatives of foreign interests. This wasn't the case with scientists; but that has changed. Today, we see mistrust towards the scientific community increasing in the United States and in Europe because there is a generation that has now forgotten all that science has achieved, from switching on a light to preventing polio deaths.

In the Swiss FDFA, we believe in fostering an understanding of the importance of science because we believe in defending Swiss interests. There are strong links between the economy and science. Our economy is based on the most advanced, technologically impressive products. We can only survive in the international market by being on that cutting edge. To succeed with any cutting-edge technology, you need science.

Montgomery: *This has been a wonderful conversation; I have learned a lot. To conclude this conversation, we are moving on to birds. We know you are a passionate bird photographer: one of your pictures has appeared in the Washington Post. How has this activity connected you with conservationists in the U.S. and abroad?*

Ambassador Pitteloud: Being a bird watcher means much more than just seeing the birds: you see the environment changing as well. You see species disappearing, others coming back, and you start to understand the dynamics between the local environment, the use of pesticides, illegal hunting, construction in key areas for birds, and what is happening to migratory routes. The more you are interested in birds, the more you understand ecology as a highly interconnected phenomenon.

If you are aware of what is happening around you, you can see all the changes happening. There is a connection between the massive disappearance of insects in parts of the United States and Europe and the loss of bird species that rely on insects. Having been watching birds for the last 50 years, I have seen species literally disappear in Switzerland. At the same time, we have seen species that I never dreamt of seeing in my youth coming from the South because of global warming.

I am proud to say we are developing a biodiversity space free of pesticides here at the Embassy. We have the largest bee-keeping facility in Washington, DC and there are now frogs and fireflies around for the first time in many years. It's beautiful! **SD**

Disclaimer

This interview has been edited for length and clarity.