Vol. 16, N° 5, 2021

swiss academies of arts and sciences

swiss academies communications

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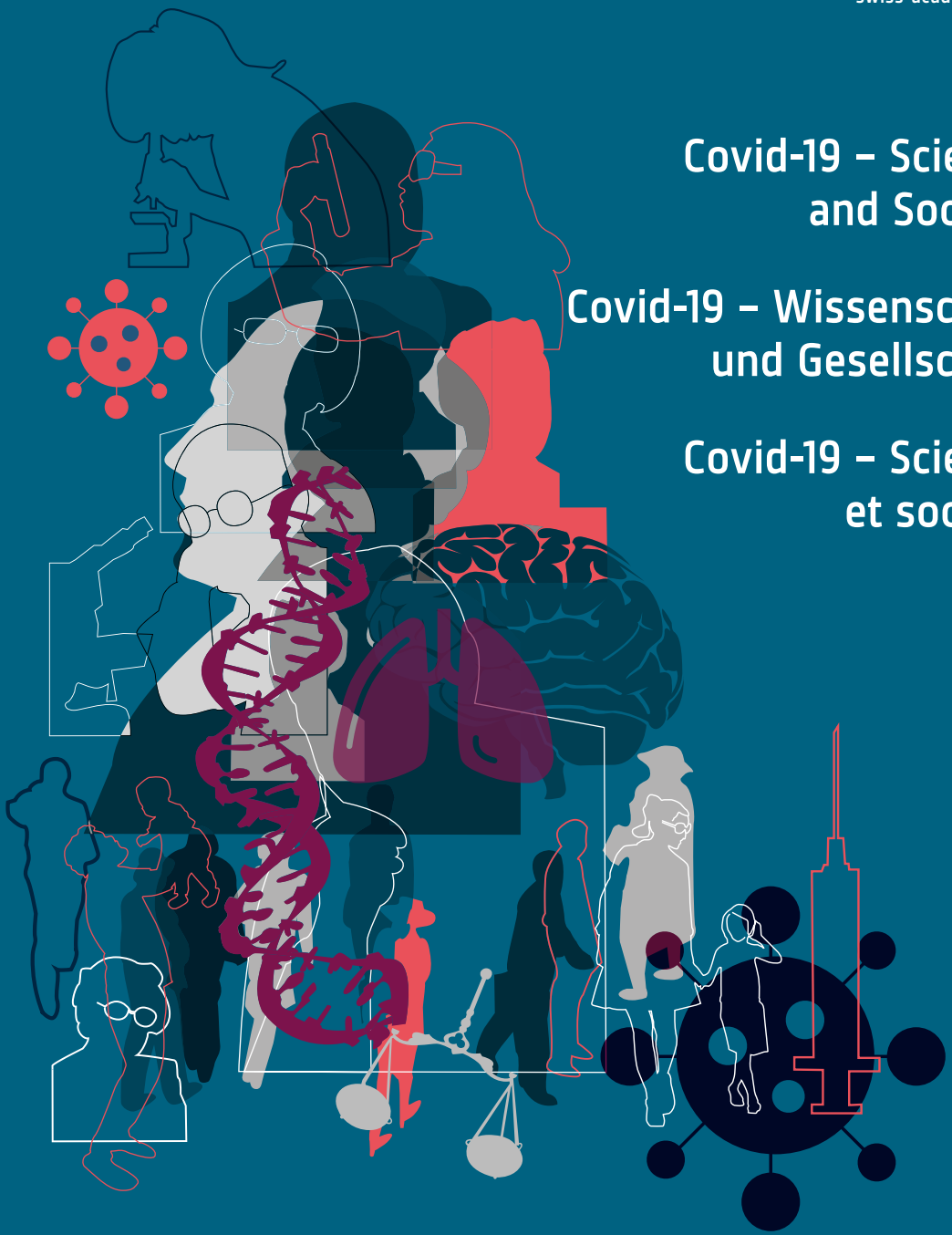

Covid-19 – Science and Society

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Covid-19 – Science et société

Impressum

HERAUSGEBER
Akademien der Wissenschaften Schweiz · Laupenstrasse 7 · Postfach · 3001 Bern · Schweiz
+41 31 306 92 20 · info@akademien-schweiz.ch · akademien-schweiz.ch
academies_ch swiss_academies Swiss Academies of Arts and Sciences

KONTAKT
Appenzeller Claudia, Generalsekretärin der Akademien der Wissenschaften Schweiz · Laupenstrasse 7
Postfach · 3001 Bern · Schweiz · +41 31 306 92 20 · claudia.appenzeller@akademien-schweiz.ch
go.akademien-schweiz.ch/covid-19-science-society

AUTORINNEN & AUTOREN
· Ackermann Sibylle, Schweizerische Akademie der Medizinischen Wissenschaften
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Holderegger Ursin, Akademien der Wissenschaften Schweiz

ÜBERSETZUNG: Marie-Jeanne Krill, Dominique Nickel

LAYOUT: Push'n'Pull Bern

2. Auflage, 2021

ISSN (online): 2297-1807

ZITIERVORSCHLAG
Akademien der Wissenschaften Schweiz (2021) Covid-19 –Wissenschaft und Gesellschaft. Beiträge in Zeiten der Pandemie. Swiss Academies Communications 16 (5) http://doi.org/10.5281/zenodo.5518888

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Covid-19 – Science and Society
Contributions in the times of the Pandemic

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Beiträge in Zeiten der Pandemie

Covid-19 – Science et société
Contributions en temps de pandémie

ALEXANDRA HOFMÄNNER

4. Science in the Swiss Policy Response to the Covid-19 Pandemic in 2020

Author: Alexandra Hofmänner

As in other countries, the role of science in the Swiss policy response to the new SARS-CoV-2 virus has been the subject of heated debate in politics, the media, and public life. Decision-makers all over the world have consulted scientists' advice during the pandemic. Science advice for policy, however, involves much more than a simple transfer of knowledge to decision-makers and depends on political systems and procedures, legal provisions, and institutions. Accordingly, the roles that individual nations assign to science in their policy responses to the Covid-19 pandemic differ considerably. Covid-19 has hurled into public spotlight the important role that science plays in policies and traditions of liberal democracies. The crisis presents a unique opportunity to reconsider the terms and conditions for science advice.

Switzerland has an exceptionally well-resourced scientific system, an excellent record of international scientific competitiveness, and political traditions of extensive policy consultation. These features indicate promising preconditions for the performance of this country's system of science advice to policy during the Covid-19 pandemic.

The policy setting in 2020

Two policy circumstances set the scene for science's role in pandemic policy response in Switzerland in 2020. First, decision-making power shifted between federal and cantonal governments over the course of the Covid-19 pandemic (KSBC, 2020; Bundeskanzlei, 2020). Second, in contrast to many European countries, the role of science in the health emergency situation in Switzerland was not regulated

by statutory provisions such as the Swiss Epidemics Act, the Influenza Pandemic Plan, or the Covid-19 Act[1]. By default, the standard regulations for science advice in Switzerland applied, which assign a central role to offices and departments of federal public administration (Himmelsbach, 2019).

The Swiss National Covid-19 Science Task Force (NCS-TF)

Two agencies figured prominently in public debates over science and policy in 2020: the Swiss Federal Office of Public Health (FOPH) and the Swiss National Covid-19 Science Task Force (NCS-TF). The NCS-TF was established on April 1, 2020, and is unique in Swiss history. It is composed of a large interdisciplinary network of reputable scientists.[2] Its interdisciplinary composition, efficient operational structure, productivity and output stand out in international comparison – all issues that caused turmoil in other countries in 2020. As in other countries, criticism was directed to the NCS-TF on the issues of legitimacy, transparency, and communication. These issues have to do with problems that are generic to the science advisory process and typically occur because science advice is conveyed through both formal and informal communication channels. In liberal democratic societies, policy activities conducted through informal channels naturally provoke critical debate. The NCS-TF, however, was only one of many components in the national science advisory arrangement during the crisis, and the systemic performance of science advice during the pandemic raises critical questions and reveals several shortcomings.

Swiss features of science advice for policy

A brief comparison with its neighbours Austria, France, Germany, Italy, and the United Kingdom reveals several specific features for the Swiss setup of science advice in the year 2020. Among others, these features concern the NCS-TF's origins and initiators,[3] its status as a task force rather than an advisory council or committee, its operation outside of emergency legislation, and its change of status in federal crisis organisation from a strategic-political level to an operational level amid the pandemic.

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[1] Communicable Diseases Legislation – Epidemics Act, (EpidA) [SR 818.101]; Swiss Influenza Pandemic Plan. Strategies and measures to prepare for an influenza pandemic. Swiss Federal Office of Public Health (FOPH), Department of Home Affairs (FDFA), 5th edition 2018; Federal Act on the Statutory Principles for Federal Council Ordinances on Combating the COVID-19 Epidemic (COVID-19 Act) of 25 September 2020 (status as of 1 July 2021) [818.102].

[2] The NCS-TF from the beginning was composed of ten expert groups convening around sixty scientists from the fields of clinical care; data and modelling; diagnostics and testing; digital epidemiology; economics; ethics, legal, social; exchange platform; immunology; infection prevention and control; and public health. The task force has no own budget, its members are not remunerated, and its operations are directed by a small advisory council and a management team (https://sciencetaskforce.ch/en/home/).

[3] Leaders from four institutions representing the Swiss scientific community - the Swiss National Science Foundation (SNSF), the ETH-Domain, swissuniversities, and the Swiss Academies of Arts and Sciences (a+) – approached executive decision makers in mid-March 2020 to propose establishment of a national science advisory body.

The reasons for the specific Swiss features may be found in the general political, legal, structural-organisational, and procedural conditions of science advice for policy in this country. These conditions have created a situation in which science advice is primarily channelled through offices, agencies, and departments of federal public administration. This exclusive focus on federal public administration placed a strain on the FOPH and the NCS-TF during the pandemic. Historically, it has also restricted the development of a diverse landscape of science advisory instruments and mechanisms in Switzerland, as it exists in other countries such as Germany or the UK. Consequently, contrary to other countries, the direct provision of science advice to key decision-makers along horizontal and vertical policy spheres in Switzerland is limited.

Roles of science advice

An important criterion for the performance of national science advisory systems is separation between two different purposes of science advice (OECD, 2015): scientific advice for decision-making in public policy ("science for policy"), and scientific advice for decision-making on how to fund or structure the scientific pursuit of knowledge ("policy for science") (Brooks, 1964). These two roles must be separated to avoid conflicts of interest because strategic advice on science policy potentially affects the home institution and research prospects of the scientific advisor (Gluckmann, 2018). For this reason, some countries established or activated two separate science advisory bodies to provide scientific advice to policy during the Covid-19 pandemic.[4]

The Swiss model of science advice did not establish separate science advisory bodies to cover these different roles during the Covid-19 pandemic.[5] The NCS-TF was only mandated to deliver "science for policy" advice. Moreover, unlike many liberal democratic countries, Switzerland has no national science policy council with explicit statutory responsibility to provide advice on "policy for science", which could have stepped up during the pandemic and assume this important role. As a consequence, important national decisions for pandemic response were made without broad consultation, for example, decisions on special research promotion instruments and investments, such as vaccines or clinical studies. The record suggests that Switzerland would have profited greatly from an independent national agency authorised explicitly to advise on short-term science policy matters of national significance: to set national goals, to formulate national strategies, and to develop national action plans. Such an advisory body is likely to have disburdened the FOPH and the NCS-TF and may have prevented debate over their respective tasks and responsibilities.

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[4] For example, France's two new advisory bodies, the Conseil Scientifique and the Covid-19 Analysis, Research and Expertise Committee (CARE) are designed as different but complementary bodies for pandemic response. The Conseil Scientifique advises on technical, specific or regulatory scientific issues ("science for policy"), and CARE advises on strategic and science policy issues ("policy for science") (Bakhta et al., 2020).

[5] See both NCS-TF Mandates, dated March 30 and July 19, 2020.

Balancing demand and supply

One way to consider the performance of a national science advisory system is to study the interplay of demand and supply of scientific advice (Lentsch, 2016; Lentsch & Weingart, 2011). The analysis suggests that several key decision-making authorities on the demand side were not reached by the science advisory channels during the public health crisis in 2020. First, the Swiss parliament has no science advisory instruments at its disposal, nor are direct science advisory instruments at the disposal of the Federal Council, as in other countries such as New Zealand, Germany, or the UK. Second, the same holds true for cantonal authorities and organisations which, in the Swiss federalist system, possess substantial decision-making power over policy matters. Third, professional associations and unions are strongly dependent on offices, agencies, and departments in federal administration because they have no direct access to other science advisory sources. Despite concerted and professional efforts by the FOPH and the NCS-TF, increased demand for science advice for policy could not be covered during the Covid-19 pandemic. However, analysis of the Swiss case suggests that the reasons for this imbalance between supply and demand for scientific advice may be found in the broader circumstances of the Swiss science advisory system rather than in the special science advisory agencies and measures established for the Covid-19 pandemic.

The Swiss science advisory system

Over the past few years, several countries have revised, expanded and professionalised their national systems of science advice for policy (e.g. New Zealand, Japan, and the UK), often spurred by past experiences with infectious diseases (OECD, 2018). Switzerland is not part of this group; if anything, a contrary trend may be observed in the country. In the past decade, scientific advisory responsibilities have been increasingly concentrated in the domain of public administration. This may be explained in part by the new Research and Innovation Act (RIPA) of 2012, which introduced the notion of "departmental research" ("Ressortforschung") as a statutory research category in its own right. This category, indirectly but by one stroke, assigned responsibility for many aspects of national science advice for policy in bulk mode to the domain of public administration. The range and scope of these responsibilities include decisions on science policy agendas and goals, strategic planning, coordination, administration, and management. The pandemic has shed light on this concentration of tasks and responsibilities and has shown that public administration cannot shoulder them on its own.

Furthermore, the current system of science advice favours the instrument of short-term consulting projects and the advisory format of evaluations. As a result, the majority of science advice for policy is delivered by private consulting companies (Himmelsbach, 2019). This predisposition raises issues of transparency, quality, and independence of the expertise consulted in the policy process. In addition, the prominence of evaluations comes at the expense of science advice for decision-making in other stages of the policy process, such as agenda setting, policy formulation, strategy building, and policy implementation. At the same

time, this focus leaves untapped the potentially valuable scientific expertise at higher education and research institutions.

Meanwhile, there is little incentive for scientists at higher education and research institutions to actively participate in science advice for policy. This type of scientific activity is not remunerated in monetary terms or by academic recognition, nor does it benefit higher education and research institutions, as science advice is not a criterion for institutional accreditation. In sum, science advisory activities are not part of Switzerland's cultural tradition of science. The NCS-TF has provided ample evidence that the Swiss scientific community is motivated and willing to engage in science advice for policy. However, contrary to other countries, the task force was not assisted by professional societies, exchange platforms, communication channels, guidelines, and codes of practice on science advice for policy to respond to the great demand for science advice during the Covid-19 pandemic.

Systemic challenges

Apart from these systemic obstacles, scientific policy advice for the Swiss policy response to the Covid-19 pandemic displays a good track record which is mainly due to the exceptional professional commitment and concerted efforts of individuals in science, public administration, public policy, professional associations, the media, and others. Several of the difficulties encountered along the way concern problems which are generic to the professional trade of science advice for policy. At the same time, the record also shows potential for improvement (KSBC, 2020; Bundekanzlei, 2020; Wenger et al. 2020). The analysis has disclosed systemic problems in the broader conditions of science advice for policy in Switzerland that do not fall within the scope of the FOPH or the NCS-TF. There is some indication that the current system is not ideally positioned to achieve balance between demand and supply. Its set of instruments and measures do not result from strategic considerations to strike such balance, but are rather inclined to implement existing rules and legal provisions.

No evidence has suggested that establishing one or two new temporary science advisory bodies can meet the massive national short-term demand for science advice for policy during a global health crisis. There is, however, evidence to suggest that the overall condition, flexibility, and resilience of national science systems are important requirements to address this demand. The study concludes that conditions for science advice in Switzerland require careful revision to professionalise the national system's quality and performance.

Science advice at a historical crossroads

In many ways, Covid-19 has conjured historical crossroads for science's role in society. The crisis has exposed the national conditions of science advisory systems for policy, which in most countries are likely to reveal plenty of room for improvement. How Switzerland chooses to address these challenges will likely affect the quality, effectiveness, and resilience of the national system of science advice, and science's role in society, for the next generation.

At this crossroads, two possibilities lie ahead for Switzerland: a path of affirmative or of transformative change. The path of affirmative change will lead toward discussions on whether to transform the NCS-TF into a more permanent advisory body, either for health crises specifically or for national crises in general. This would include addressing questions on when such a body should be activated and what its tasks, legal basis, institutional affiliation, and communication strategy should be. However, this study indicates that such agency alone is unlikely to improve substantially the quality and performance of national pandemic preparedness and response. No national or international evidence indicates that any single advisory body could meet the extensive vertical and horizontal demands for science advice during crisis situations. No matter how heated and difficult these debates might be, they would eventually have relatively minor impact on the national system of science advice for policy.

The second optional path is more protracted because it involves systemic change. Since there are no one-size-fits-all models for national science advisory systems, or even standard criteria by which to measure their success, systemic change requires tailored options and solutions across varied levels and components (Weingart & Lentsch, 2008). Although probably the more strenuous choice, this option currently offers unique opportunities because a great many science advisors and decision-makers' experiences during Covid-19 present invaluable capital with which to address the challenge and improve the system's performance. Rather than focusing exclusively on devising a single new agency for crisis situations, these efforts would address the systemic shortcomings outlined here and develop a strategic framework and measures to address them. It would also emphasise capacity building and training to professionalise contributions of the many actor groups involved in science advice for policy.

Science advice's role in democratic decision-making

Covid-19 has demonstrated that performance indicators for national science systems, for instance, publication count or innovation index, tell us little about how well a country is equipped to face a pandemic. The crisis has reminded us that science's role in society is not quantifiable by economic competitiveness or material and social well-being, but that science advice for policy is essential for liberal democracies' decision-making procedures. Contrary to common perception, this role cannot be improved simply by instituting rules to separate the scientific from the political, or by improving communication channels.

Public debates on the role of science in Swiss policy response have on occasion reverted to simplistic accounts. The interface of science and politics, however, is essentially complex, dynamic, and challenging because it mediates the inherent tension between these two domains. In liberal democratic societies, this tension requires constant and independent attention to ensure that science advisory arrangements reflect current needs and circumstances.

Status quo bias is likely to favour the first path mentioned above because it involves few new agents and measures. The second path, however, requires strategic, pioneering actions and measures to revise the Swiss system of science advice for policy to be better prepared to address the many challenges that lie before us in the 21st century.

This article is based on a research project conducted in the field of Science & Technology Studies (STS) between October 2020 and May 2021, involving interviews with decision-makers from public policy, science, the media, public administration, and professional associations. Research grants by the Freiwillige Akademische Gesellschaft (FAG) Basel and the Ernst Göhner Stiftung are greatfully acknowledged.

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