



### InsSciDE Work Package 5:

#### Health Diplomacy as a Tool for a Strengthened and Innovative Europe

<b>Case Study n°5.2</b>	<b>Biodiversity and natural resources as Global Public Goods for Global Health: how do European actors negotiate, succeed or fail?</b>
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#### Abstract

This case study will examine the notion of collective ownership in the area of biodiversity and its consequences for science diplomacy. We will assess past attempts to frame biodiversity as a global public good and explore the possible lessons for strengthening European science diplomacy. To understand the current EU position on the collective nature of biodiversity resources, which has become central to diplomacy at today's critical juncture, we will ask how diplomats have acquired and drawn on shared knowledge about these resources. We will also investigate how exchanges of natural botanic substances are co-constructed by European diplomats and scientists as matters of health and science diplomacy with countries outside Europe.

We will attempt to trace how, in the past 60 years, scientists at the French National Centre for Scientific Research (CNRS) Institute of Chemistry of Natural Substances (ICSN) moved from a sampling logic to one of transnational cooperation in the management of plants and of training through research. We will show how at the same time, in cooperation with the French Institute of Research for Development and the French Ministry of Foreign Affairs these scientists expanded their interactions beyond basic and applied research to propose methods to protect biodiversity.

We will then explore the extent to which these scientists may have contributed to the emergence of a more virtuous diplomacy by taking into account the sustainability of resources beyond immediate national interests. We will focus on the case of ICSN chemists and botanists who inventoried Malagasy plants, thereby facilitating the development of Navelbine (an anti-cancer drug prescribed for the treatment of breast cancer). We will try to determine whether this sequence led in part to the French and European cooperation seen in the development of the Malagasy environmental protection program.

This research will help us identify ways to reinforce the relations between European scientists and diplomats at a time when European-level scientific policy is being strengthened. We will investigate how diplomatic staff are trained to take into account data provided by European scientists, data whose specific agendas and temporalities are often far removed from those of political diplomacy. Additionally, we will investigate what kind of training, if any, diplomats receive that allows them to use scientific information effectively, and conversely. Finally, we will delve into whether divergent international agendas are reconciled: political agendas, but also, the protection of natural resources, the facilitation of scientific cooperation, and the assurance that natural substances remain available for the future manufacture of therapeutics.



## Actors

The main actors for this analysis include academic chemists and botanists, industrial chemists, French diplomats who were in charge of academic or economic cooperation, and EU experts/diplomats in charge of international cooperation with countries producing natural substances.

## Fields and disciplines, interfaces with technology

For our study, we will utilize information derived from transnational history, history of science, history of natural substances (chemistry), history of science diplomacy and business history.

## Disciplinary/methodological approach

Based on interviews with chemists we will reconstruct the paths they followed to obtain access to natural species (plants) in territories beyond continental France. Actors' testimony will be cross-referenced with archival materials. We will analyze this history with the help of the concept 'compagnonnage'<sup>1</sup>, which we used (2017) to tell the story of the discovery of two molecules used to develop major anti-cancer pharmaceuticals.

## Essential bibliography

Muriel Le Roux and Françoise Guéritte, *Navelbine and Taxotere, histories of sciences*, London, Iste Press – Elsevier 2017.

Vivien Walsh and Muriel Le Roux, « Contingency in Innovation and the role of National Systems: Taxol and Taxotère in the USA and France », *Research Policy*, vol. 9, n°3, nov. 2004, p. 1307-1327.

Florence Descamps, *L'historien, l'archiviste et le magnétophone. De la constitution de la source orale à son exploitation*, Paris, Comité pour l'histoire économique et financière de la France / IGPDE, 2005.

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<sup>1</sup> 'Compagnonnage' traditionally is the trade guild practice of apprenticeship and fellowship, through work-shadowing and mentoring.