

PhD Project on

***Innovative Business Models for the French
health system in the face of the ecological
crisis and demographic ageing***

PhD Position

Sufficient Health Systems (3S)

A three-year doctoral research project on innovative business models for the French health system in the face of the ecological crisis and demographic ageing

Host institution : World Sufficiency Lab (WSL) - Laboratoire Mondial des Sobriétés

Research affiliation: i3 - Centre de Recherche en Gestion de l'Ecole Polytechnique

About the host institution(s):

The World Sufficiency Lab (WSL) - Laboratoire Mondial des Sobriétés is a non-profit think tank (association loi 1901) registered in Paris. Its mission is to embed the concept of sufficiency into public policies and decision-making by producing scientific knowledge on the contribution of sufficiency to socio-economic and environmental objectives. The WSL also federates experts on sufficiency around the world through national sufficiency laboratories currently being established.

The doctoral project will be carried out under the co-supervision of Yamina Saheb, Director of the WSL, together with the host research institution, which will co-host the doctoral student.

Project context

The 3S project (Sufficient Health Systems / Systèmes de Santé Sobres) is part of the WSL's strategy of co-producing and sharing scientific knowledge with relevant stakeholders on priority sufficiency-policy issues. The doctoral candidate will develop an innovative action-research approach with French health system actors¹ to support the adaptation of their business models to the future health needs of the population, in the context of demographic ageing and the worsening ecological crisis.

To our knowledge, no current research project specifically aims to prepare the French health system for the systemic transformations it will inevitably face. This multidisciplinary research will mobilise robust scientific tools (systematic literature review, modelling, focus groups, machine-learning techniques) to co-create, with sector actors, public-policy proposals facilitating the transformation of the French health system.

Research objectives

The principal objective is a forward-looking exercise aimed at co-identifying, with relevant stakeholders, the changes required for the French health system to meet the future needs of the population in the face of the ecological crisis and demographic ageing. The doctoral candidate will analyse the business models that can guarantee equitable access to quality healthcare services, their financing, their socio-economic and environmental impacts, and the actors involved in these new models.

Specifically, the doctoral candidate will identify:

1. Business models guaranteeing universal access to quality health services while avoiding or limiting the overshoot of planetary boundaries.
2. The necessary financing as well as the training needs of health personnel.
3. The socio-economic and environmental impacts of selected models, estimated through a modelling exercise.

¹ WSL has partnerships with the French health insurance sector and research institutes on ageing.

4. Public-policy proposals promoting the development of the selected models.

Research questions

The research will address the following four questions:

- i) What changes are required for the French health system to protect the population, and particularly elderly people, in a digitalised world and an overheating planet?
- ii) What contribution can sufficiency make to the resilience of the French health system?
- iii) What role could current actors in the health system play in the future?
- iv) What transformations of the business models of the main health-system actors in France and Europe are possible?

Methodology

The project mobilises a multidisciplinary approach combining quantitative and qualitative methods drawn from scientific research:

- Systematic literature review on health systems and sufficiency.
- Modelling of the socio-economic and environmental impacts of selected business models.
- Focus groups and workshops with health system actors (mutuelles, ministries, healthcare practitioners, elected officials).
- Machine-learning tools supporting evidence synthesis and stakeholder analysis.

Ahead of the doctoral work, *Francophone Assises of Sufficiency* will be organised to bring together sufficiency actors from France, Belgium, Luxembourg and Switzerland and mobilise them on cross-cutting issues, in particular health.

Target audiences and intended impact

The research will inform and engage senior staff of administrations and ministries, particularly those of Health, Labour and Finance, the network of mutuelles, elected representatives (members of parliament and local officials), medical practitioners and health organisations. The objective is to engage decision-makers and sector professionals in a transition toward a more resilient and sustainable health system, ensuring equitable access to prevention and care adapted to tomorrow's challenges.

Deliverables and timeline

The thesis will run for three years. The doctoral candidate will produce:

- An intermediate progress report six months after the start of the thesis.
- An end-of-Year-2 progress report.
- Three peer-reviewed scientific articles submitted to international journals.
- The thesis manuscript at the end of Year 3, ideally structured as a synthesis of the three articles.

Governance: a steering committee bringing together the financial partners, institutional partners and research partners will meet every four months to associate funders fully with the governance of the thesis. Co-supervision discussions between the doctoral candidate and the funders will be organised throughout the thesis to feed and disseminate the work.

Funding and conditions

WSL has already secured funding for the project through its partnership with the insurance sector and will apply for complementary funding from the ANRT once the candidate has been selected.

Duration: three years, with an effective start date no later than September 2026 and an end date no later than 31 December 2029.

Location: Paris, with possible missions in France and Europe in connection with the steering committee and fieldwork.

Candidate profile:

Required qualifications:

- Master's degree (or equivalent) in health economics, public health, environmental economics, ecological economics, political science, economics, sociology, innovation management, etc..
- Demonstrated interest in sufficiency, planetary boundaries, ecological transition and/or health-system transformation.
- Strong quantitative and qualitative research skills; familiarity with systematic literature reviews and modelling techniques is a plus.
- Excellent command of French and English (written and oral).
- Capacity for autonomy, interdisciplinary dialogue and stakeholder engagement.

Considered an asset:

- Prior experience with the French health system, mutuelles or public health administration.
- Knowledge of integrated assessment modelling, input-output analysis or machine-learning tools.
- Publication record (working papers, peer-reviewed articles or policy briefs).

How to apply

Applications should be submitted as a single PDF file including:

1. A cover letter (max. two pages) explaining the candidate's motivation and fit with the 3S project.
2. A detailed CV.
3. A research statement (max. three pages) sketching the candidate's preliminary approach to one or several of the research questions above.
4. Transcripts of Master's-level grades.