

Reflections on the state of biomedical research in France

PRESS KIT

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1. France Universities (France Universités) – Who we are

France Universités, formerly The Universities' Presidents' Conference (Conférence des présidents d'université [CPU] or French Rectors' Conference), represents the 74 French universities, numerous universities' groupings, national polytechnic institutes (INPs), French schools abroad, publicly funded Higher Education Institutions, National Institutes of Applied Sciences (INSAs), specialized institutions of higher learning (such as Sciences Po, Polytechnique, etc.).

Through its elected and selected leaders, France Universités represents close to 2 million students and 200,000 staff, out of which over 55,000 teachers-researchers, 71,000 PhDs et 3,000 public research laboratories. Universities are the primary public research operators in France.

Since its creation by decree in 1971, its recognition by Law and inscription in the Education Code, France Universités has carried the voice of the academic research in the public debate. Its position and strength allow it to be representative force of proposal and negotiation not only with the French executive and legislative authorities (government, Parliament, local authorities), but also with European and international authorities, elected representatives, public institutions, and economic, social, cultural and media actors.

2. Context

In the wake of the Covid-19 crisis, health issues have been identified by the French President as his second mandate top priority. However well-managed, the pandemic has revealed major public health weaknesses within the health management system, the existence of inadequate access to healthcare areas (“medical deserts”) and fragile innovation proposals. All of these weaknesses carry an academic dimension that imperatively needs to be taken into account in order to propose short, mid and long term efficient solutions. So far, this feature has been either sidelined (“Ségur de la Santé”) or

insufficiently and superficially tackled (*numerus clausus* reform, creation of the Health Innovation Agency...)

While the diagnosis has been certified and public^{1 2 3}, and in spite of the unanimous academic research endorsement^{4 5}, no government has been willing and able to challenge the basic roots of France's slow degradation in the field of health care, health prevention, and research and development.

The reluctance to involve academic knowledge can certainly explain the subsistence of this negative spiral, sometimes directly:

1. **Biomedical research is not up to France's ambitions, be it in terms of funding or organizational management.** France's GDP globally devoted to research is a mere 0.73 % while medical research benefits at 17.2 %, a sum largely inferior to its neighboring country (35 à 40 %). In regards to organizational management, over 20 years of crumbling public structures layering have taken their toll. As a result, France has dropped off the scientific race: the number of published scientific papers has plummeted in the last 15 years. France went from a global 6th position to 9th (from 4.5 % to 3 % of world publications) and medical research has plunged in the same proportions. France's innovation performance and industrial attraction have also weakened, ranking 16th in 2019, and stagnating in 2020 during the Covid-19 pandemic response in terms of health and medical innovation.
2. Although France remains a worldwide leading country in medical and health care efficiency through its **CHU (University Hospitals) system** combining medical academic research and health practice since 1958, the system **has become obsolete**: while the public hospital structures are in crisis, the academic dimension has gradually diminished. A deep transformation is urgently called for, to facilitate a merging with the French universities dynamic and share their ambitions in the fields of training, research and innovation.
3. The **hospital/academic staff**, employed by the University and more often than not in charge of organizing and providing healthcare, are very dedicated to the CHU system. However, the staff has gradually drifted away from its employer: it has become increasingly difficult, if not impossible in the current context, to reconcile strenuous teaching and research mandates with a clinical approach that has dramatically evolved since the 1970's. The hospital/academic staff are increasingly dissatisfied within a less attractive CHU system.

¹ Rapport de la commission sur l'avenir des centres hospitaliers universitaires, J. Marescaux, Mai 2009. https://sante.gouv.fr/IMG/pdf/Rapport_Marescaux.pdf

² Le rôle des CHU dans l'enseignement supérieur et la recherche médicale, Cour des comptes, Décembre 2017. <https://www.ccomptes.fr/sites/default/files/2018-01/20180117-role-des-CHU.pdf>

³ Rapport et recommandations de l'académie nationale de médecine : Réformer la recherche en sciences biologiques et en santé, juin 2021. https://www.academie-medecine.fr/wp-content/uploads/2021/03/Rapport-21-06-R-former-la-recherche-en-sciences-_2021_Bulletin-de-l-Acad-mi.pdf

⁴ Ségur de la santé, les présidents d'université alertent : « Une réforme du système sans formation ni recherche n'a aucun sens », Le Monde 17 juin 2020. https://www.lemonde.fr/idees/article/2020/06/17/segur-de-la-sante-public-et-prive-c-est-l-ensemble-du-systeme-hospitalier-qui-a-besoin-d-une-refonte_6043106_3232.html

⁵ Le CHU, ce « navire amiral » de notre système de santé, prend l'eau, surtout du côté académique, Le Monde 4 juin 2021. https://www.lemonde.fr/idees/article/2021/06/04/hopital-le-chu-ce-navire-amiral-de-notre-systeme-de-sante-prend-l-eau-surtout-du-cote-academique_6082763_3232.html

4. **Public Health**, often dismissed by medical interns, is in lack of recognition and academic ambition, in an environment driven by care in the absence of a solid prevention culture. As opposed to most countries, there are no health public schools in the French University system. In a recent report commissioned by the Ministry of Health, its authors shared the above analyses and recommended the creation of public health schools or/and institutes, placing academia at its center.

Identifying and listing the tailbacks with a fine-tuned analysis is compulsory to recommend a series of technically and financially feasible solutions, crucially, also politically sound and acceptable for such a critical topic.

Within this context, France Universités commissioned an analytic study in 2022 on the current state of the biomedical research in France. France Universités presents its recommendations and proposals below.

3. 10 proposals to relaunch biomedical research

French research is declining and the decline also applies to the field of biomedical research. Several papers have recently pointed to the fact: the SIRI study, commissioned by France Universités in 2023⁶, the joint Comité National de Coordination de la Recherche (CNCR)/Conférence Nationale des Doyens de Médecine⁷, the two parts joint report of the Académies de médecine et de pharmacie, Alain Fisher from the Terra Nova think-tank, the Court of Auditors (Cour des Comptes) 2018 report on the CHU in Research and Higher education, the 2023 Inserm report, the three preliminary reports to the Research programming law (LPR), and last, the three annexed to the LPR France Universités reports.

The Research programming law 2021-2030's aims at catching up on **the backlog of investments in health research**. Our country has indeed fallen to the level of an average power in the field of scientific research and innovation. France went from a global 6th position to 9th (from 4.5 % to 3 % of world publications). Medical research has similarly stepped back, with a notable disparity per disciplines.

Furthermore, French research has focused on classical rather than groundbreaking fields. French biomedical research may fall even further behind its competitors, especially in emerging fields that rely on social sciences, such as public health, and applied sciences, such as biological engineering.

Proposal 1: Increase the share of GDP allocated to Research & Development in our country to 3 %, including 1 % for public research, by 2027, and permanently raise the share devoted to health to at least 30 %.

Health research funding is insufficient. The permanent decrease in constant euros in the budgets allocated to research in biology and health is estimated at 25 %, between 2008

⁶ Supporting France Universités's Reflections on the State of Biomedical Research in France. <https://www.aefinfo.fr/assets/medias/documents/5/2/529679.pdf>

⁷ Rétablir la position de la France comme leader en recherche en santé d'ici 2030.

and 2020. Moreover, the share of the research budget allocated to this field is deficient: 17.2 % is a much lower rate than the 35 % to 40 % allocated in neighboring countries.

Proposal 2: Aggregate the national health research programs funding under a single umbrella to develop a common health research strategy.

Funding for health research is fragmented: health insurance for the Hospital Clinical Research Program (PHRC), on the one hand, and funding from the Ministry of Education and Research for universities and national research organizations, on the other. Additionally, national health research programs rely on funding dispersed between ministries, the General Secretariat for Investment (SGPI) and the National Health Insurance Expenditure Goal (ONDAM), which does not allow for a global vision to conduct a visible national policy.

Proposal 3: Simplify the cumbersome organizational structure by entrusting the National Institute of Health and Medical Research (INSERM) with the management of national health research programming, and the universities with the management of local scientific policy.

Research in biology/health is shared between the Ministry of Health and Prevention, the Ministry of Higher Education and Research and the Ministry of Finance. Its implementation is combined between universities, CHUs, national research organizations, including INSERM specialized in biology and health, and others (CNRS, INRAE, IRD, CEA, INRIA), to which must be added the agencies created for each new disease areas and the calls for projects of pioneering investments, the IHUs, etc.

Proposal 4: Re-universitarize and re-medicalize the governance of the CHU with a doctor-academic/administrative pairing.

Proposal 5: Formalize the objectives and terms of the research partnership by supplementing the current HU agreements with a goal-oriented means and performance contract, consistent with the respective multi-year contracts of each party.

Proposal 6: Replace the Biomedical and Public Health Research Committee (CRBSP) with a University Hospital strategic committee, entrusted with the responsibility of monitoring the goal-oriented means and performance contract.

The CHU has lost its academic dimension. Local coordination between the CHU and the University is often insufficient. The CHU system, created in 1958, originally aimed at instituting a relationship between the hospital and the faculty of medicine. However, the 1958 law has not evolved to accompany large multidisciplinary universities: agreements between the CHU and the University that had been at the crux of the CHU system are often not very strategic, and even obsolete.

Furthermore, health research does not benefit enough from the basic and experimental sciences and social sciences. Research strategies carried out in parallel by the CHU on the one hand and the university on the other, without overall coherence, is detrimental to health research.

The CRBSP is a consultative body, with no strategic function, and its functioning appears to vary greatly from one site to another.

Proposal 7: Sanctuarize the credits dedicated to hospital clinical research in the Social Security Finance Law.

Proposal 8: Allow the University and the CHU to jointly define the use of research and innovation credits, particularly from the PHRC, European calls for tender, the National Research Agency (ANR) and other bodies. This would be formulated within the framework of the contract of objectives and resources that binds them, particularly for priority research and innovation.

The budget for research in health care institutions does not finance hospital research. The economic model of the university hospital, mainly based on activity-based pricing (T2A), hence on care, is not conducive to research. The MIGAC (missions of general interest and contracting assistance) and MERRI (missions of teaching, research, reference and innovation) credits are not reallocated accordingly to clinical research activities. As far as MERRI is concerned, only a small part is allocated to the PHRC.

Proposal 9: Strengthen and evaluate the effectiveness of measures taken to promote the attractiveness of academic hospital careers, particularly within the framework of the “Ségur de la Santé”.

It is imperative to alleviate the frustration expressed by the academic hospital doctors. Their situation is deteriorating, the attractiveness of their careers is collapsing, as evidenced by resignations and the erosion of certain medical specializations, some of which are no longer represented in the university hospitals. Between 2018 and 2020, 139 university professors/hospital consultants (PU-PH) and university lecturers/hospital consultants (MCU-PH) (78 PU-PH and 61 MCU-PH) have resigned out of a total workforce of 6,395 university doctors (4,432 PU-PH and 1,963 MCU-PH, as of December 31, 2019). The strengthening of measures in favor of the attractiveness of university hospital careers is all the more necessary as the reform of health studies has led to an increase, since 2018, of 35 % of students trained to become physicians.

Proposal 10: Create public health institutes within universities.

As the report commissioned by France Universités reveals, France has invested little in the field of public health. The area of public health suffers from a lack of recognition and academic ambition, in a hospital environment essentially devoted to care without a solid culture of prevention.
