

FEDERATIVE RESEARCH STRUCTURE CAP SANTE

 AP | Structure
Santé | Fédérative
de Recherche

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PROMOTE
INNOVATE
ANIMATE
SCIENTIFIC
EXCELLENCE



UNIVERSITÉ
DE REIMS
CHAMPAGNE-ARDENNE

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The Cap Santé (SFR Cap Santé) federative research structure exists in its actual form since January 1st, 2018.

Its aim is to promote a regional coherent strategy for basic and translational research and for academic training in health areas.

Strongly supporting emergence of new federal projects and hosting chairs of excellence, SFR Cap Santé focuses on consolidating scientific excellence and international impact of our community around coherent federative and transdisciplinary scientific projects.

It has considerably contributed to develop synergies between laboratories, technological platforms and major partners, namely the Reims University Hospital (CHU) and the Godinot Institute Reims (Cancer Center) or also large research organizations.

It develops strong partnerships with international ambitions with other interface structures of the region, in particular SFR Condorcet specialized in agro-sciences, the Grand Est material and nanoscience federation (FRMNGE), Carnot Institute MICA, and competitiveness clusters (BioValley France, IAR, Materalialia). It also switches to all the academic actors of crossborder regions, in particular Luxembourg and Belgium, by initiating great projects with CRP Santé Luxembourg, University of Mons, Liège...



OUR SCIENTIFIC PROJECT

Biology/Chemistry/Imaging/Human and Social Sciences interface intends to develop a continuum between basic and clinical research, for a true translational research from bench to bedside and conversely.



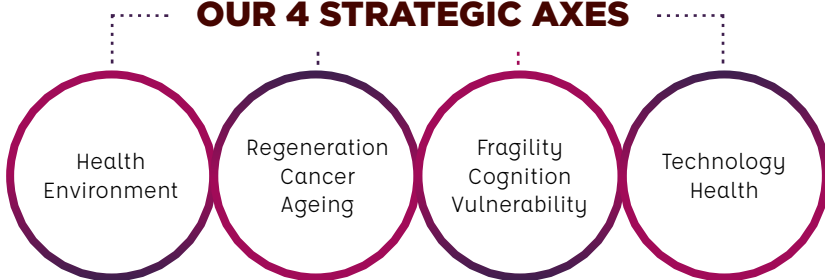
MISSIONS

The aim is to instil dynamism and to shape the research around the four strategic axes of the SFR and to promote coherent financing and event policy by and for research.

- ◆ Animate a space for scientific exchanges of excellence
- ◆ Support the organization of national and international scientific meetings in the health field
- ◆ Support researcher exchanges in the context of cooperation between federative structures



OUR 4 STRATEGIC AXES



LANDSCAPE OF THE SFR CAP SANTÉ

A research potential of 350 lecturer-researchers, engineers, technicians and students



4 Research teams in Health



7 Research units with application in Health



Synergies between teams

- ◆ to transdisciplinary projects (health, chemistry, biology...)
- ◆ through a multiscale approach up to the patient, including molecule and cell, tissue and animal

01. STRATEGIC AXE

HEALTH / ENVIRONMENT



Thematic description of the axis:

- impact of ecodynamic on pathogens and on human health
- influence of anthropic rejection on natural environment quality in connection with the maintenance of resources and ecosystemic services, and on humans
- original tool development associating chemistry, biology, cheminformatics and modelling for new small antimicrobial molecules discovery

Laboratories involved:

- BIOS • CardioVir • ESCAPE • GEGENAA • ICMR • IRMAIC • P3Cell • SEBIO



SFR partners:

Establishment network of higher education and research (ESR) in Champagne-Ardenne:

Privilege partners in field :



Others partners from ESR network :



Large public research organizations:



02. STRATEGIC AXE

REGENERATION / CANCER / AGEING

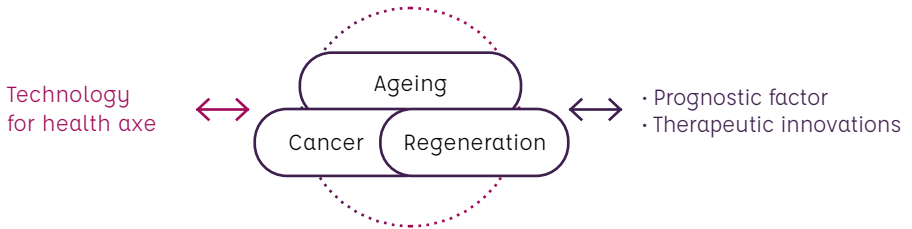


Laboratories involved:

- BIOS • BioSpect • HERVI
- ICMR • IRMAIC • MEDyC • P3Cell • LRN

Thematic description of the axis:

- Understanding of mechanisms involved in a pathological context (tumor progression, bone, vascular, respiratory fragility) in ageing persons
- Identification of screening biomarkers (biology health)
- Development of new tools and methods for diagnostic purposes
- Improvement of therapeutic approaches: development of new substances with added clinical value
- Dedicated bioinformatics tools discovery



Competitiveness clusters:



Structures of innovation:



Carnot institute:



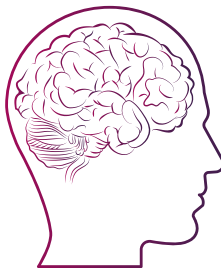
Society of technology transfer acceleration



Pharmaceutical and cosmetic industrial laboratories

03. STRATEGIC AXE

FRAGILITY / COGNITION / VULNERABILITY



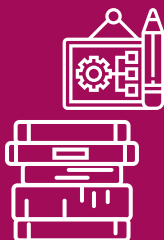
Thematic description of the axis:

- Study of intrinsic, biomedical, cognitive, emotional or behavioral factors contributing to vulnerability or fragility of a person
- Research aimed at prevention, re-education or rehabilitation
- Questioning the acceptability of the aid by technological devices

Laboratories involved:

- C2S • PSMS • VieFra

Courses supported by the SFR:



- ◆ Master of Biology health, course on cellular and pathological microenvironment
- ◆ Master of Chemistry and life science, course on drug, quality and regulation
- ◆ Master of Medicinal product science, course on biotechnology and bioproducts for health
- ◆ Master of Public health, course on epidemiology, clinical research, evaluation

04. STRATEGIC AXE

TECHNOLOGY / HEALTH

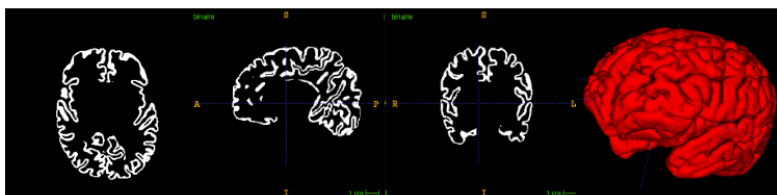


Thematic description of the axis:

- Development and use of disruptive therapeutic solutions (protocols, methods and tools) for:
 - Early and/or invasive diagnosis
 - Medical prognosis and improved treatments
- Development and optimization of new medical devices (prosthesis, biomaterials...)
- Domomedicine and health
- Mathematic modelling and development of digital simulation for the living

Laboratories involved:

- BIOS · BioSpecT · CReSTIC
- ICMR · IRMAIC · LMR · LRN
- MEDyC · PSMS · P3Cell · ESCAPE



Platforms supported by the SFR:

- Cellular and tissue imaging (PICT)
- Flow cytometry (URCACyt and MOBicycle)
- Conventional and transgenic animal facilities (URCAAnim)
- Regional CRB (Center of Biological Resources) (Tumorothèque (tumor biobanks), CRB Toxoplasma, CRB CHAR)
- Regional data center (ROMOEO)
- Multiscale molecular modelling (P3M)
- Simulation, virtual realities, digital image processing (Centre Image)
- Structural analysis and purification of organic compounds, radiation synthesis tools (PIAnET)
- Imaging and material nanocharacterisation (Nano'Mat)

CONTACT

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