FEDERATIVE RESEARCH STRUCTURE CAP SANTE

CAP Santé | Structure Fédérative de Recherche

PROMOTE

INNOVATE

ANIMATE

SCIENTIFIC EXCELLENCE

UNIVERSITÉ DE REIMS CHAMPAGNE-ARDENNE

FEDERATIVE RESEARCH STRUCTURE
CAP SANTE

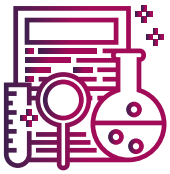
The Cap Santé (SFR Cap Santé) federative research structure exists in its actual form since January 1st, 2018.

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, techonological 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, Materalia). 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

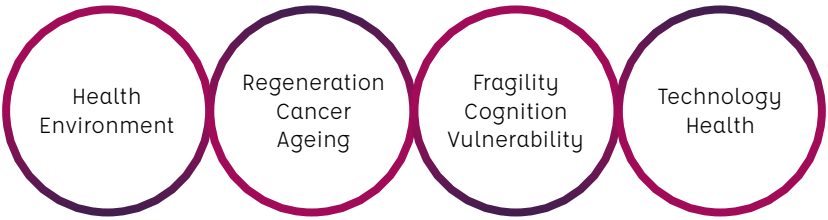
Biology/Chemistry/Imaging/Human and Social Sciences interface intends to develop a continuum between basic and clinical research, for a true translational research from bench to bedside and conversely.

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

1 Inserm – La science pour la santé / From science to health

1 INERIS – maîtriser le risque pour un développement durable

3 cnrs Centre National de la Recherche Scientifique

4 Research teams in Health

1 anses – agence nationale de sécurité sanitaire alimentation, environnement, travail

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 :

CHU DE REIMS

Institut Godinot
unicancer Reims en Champagne

Others partners from ESR network :

NEOMA BUSINESS SCHOOL
REIMS · ROUEN · PARIS

utt
UNIVERSITÉ DE TECHNOLOGIE
TROYES

Large public research organizations:

Inserm
La science pour la santé
From science to health

INERIS
maîtriser le risque pour un développement durable

cnrs Centre National de la Recherche Scientifique

anses
agence nationale de sécurité sanitaire alimentation, environnement, travail

02. STRATEGIC AXE

REGENERATION / CANCER / AGEING

Laboratories involved:

· BIOS · BioSpecT · HERVI · ICMR · IRMAIC · MEDyC · P3Cell · LRN

Thematic description of the axis:

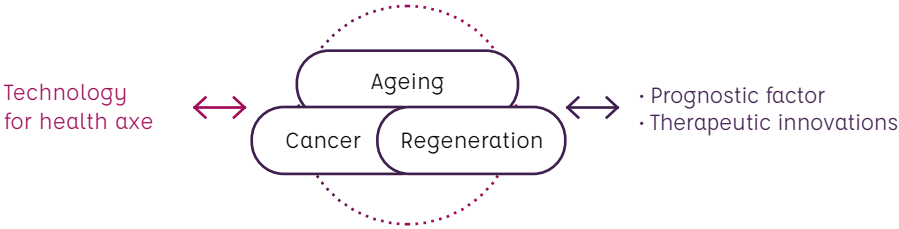
· Understanding of mechanisms involved in a pathological context (tumor progression, bone, vascular, respiratory fragility) in ageing persons

· Identification of screening biomarkers (biology heath)

· 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:

BIOVALLEY france l'innovation santé · materalia Pôle de Compétitivité Matériaux · IAR LE PÔLE DE LA BIOÉCONOMIE

Structures of innovation:

innovact CENTER · LE VILLAGE REIMS · CRÉATIV' LABZ INCUBATEUR · Grand E-nov L'AGENCE D'INNOVATION

Carnot institute:

INSTITUT CARNOT MICA

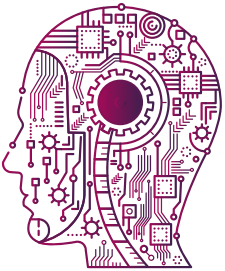
Society of technology transfer acceleration

SATT NORD

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

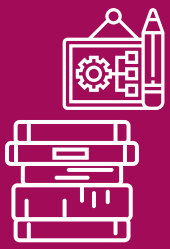
· Research aimed at prevention, re-education or rehabilitation

· 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

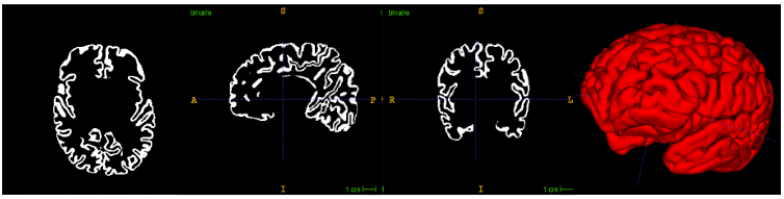
· Development and optimization of new medical devices (prosthesis, biomaterials...)

· Domomedecine 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 MOBIcyte)

· Conventional and transgenic animal facilities (URCAnim)

· 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 (PlAneT)

·Imaging and material nanocharacterisation (Nano'Mat)

CONTACT

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