HEALTH

HYPOXIA AND CARDIOVASCULAR AND RESPIRATORY PHYSIOPATHOLOGIES LABORATORY

hp2 LABORATOIRE

UMR 1042 UGA Université Grenoble Alpes Inserm

Hypoxia *Pathophysiology*

KEY FIGURES:

36 permanent researchers and lecturers

23 technical and administrative staff

26 PhD students and postdoctoral researchers

70 publications per year on (average)

8 patents over the last 5 years

OVERVIEW

The *Hypoxia and Cardiovascular and Respiratory Physiopathologies Laboratory* (*HP2*), established in 2001, was created to unite expertise around a clinical entity (Sleep Apnea Syndrome, SAS) and an experimental model (intermittent hypoxia). The lab brings together physiological, pharmacological, and biochemical methods in support of both fundamental and clinical research.

RESEARCH TOPICS

- **Cardiometabolic consequences of intermittent hypoxia, oxygenation disorders, and their links to tissue repair and vascular aging.**
- **Adaptations and maladaptations to hypoxia and exercise, including the study of altitude effects on the human body (Mountain-Altitude-Health Chair).**
- **Health trajectories and personalized medicine in treating SAS, including the implementation of AI in personalized care (MIAI Multidisciplinary Institute in Artificial Intelligence Chair).**
- **Methodological innovation and data analysis, including big data approaches for integrated care in chronic and sleep-related diseases (E-Health Chair).**