













# The ImaSpiiR-X consortium receives support from France 2030 to improve the management of cancer and cardiovascular diseases through medical imaging

France 2030 has announced its support for the ImaSpiiR-X consortium, providing €18.2 million in funding over 60 months to move from black-and-white X-ray medical imaging (which displays only tissue density) to full-colour spectral imaging (capable of identifying tissue composition). To achieve this, the consortium will develop next-generation flat-panel detectors that will provide enriched digital radiographic images, along with advanced analysis algorithms.

ImaSpiiR-X will help physicians in real time to perform more comprehensive and accurate diagnoses, better guide their procedures with the assistance of an advanced imaging system, and therefore save precious minutes in patient care. This is particularly crucial for certain critical conditions such as strokes (cerebrovascular accidents), during which two million neurons are lost every minute. Strokes are the leading cause of disability and the third-leading cause of death in France.

ImaSpiiR-X brings together key national players from industry and academia: **Trixell, the project coordinator, CEA, Thales, Pyxalis, and Claude Bernard University Lyon 1**. Located in the Rhône-Alpes region within the world-class competitiveness clusters of Minalogic and Lyonbiopôle, they complement each other by providing the **necessary expertise in materials, semiconductors, electronics, and algorithms, with breakthrough technologies serving the <b>medical community**. These five partners will oversee the technological development of the project, preclinical validations, and industrial optimisation for the commercialisation of spectral flat-panel detectors. They will also be supported by a team of international medical experts.

This project will strengthen the French ecosystem, a global leader in interventional radiology and real-time image-guided surgery, while improving the quality of care provided to patients. The flat-panel detectors resulting from this collaboration will be manufactured in France, with the majority of supplies sourced from more than 200 French suppliers.

# A propos de Trixell

Trixell is a joint venture between Philips Healthcare, Siemens Healthineers, and Thales, holding 24.5%, 24.5%, and 51% of the shares respectively, with a share capital of €8,500,000. Created in 1997, Trixell was the response of these three major European players, each ranked among the top five in the medical imaging market, to the upcoming digital revolution in X-ray imaging. Today, this joint venture represents more than 50% of medical examinations worldwide.

1













### **About Thales**

Thales (Euronext Paris: HO) is a global leader in advanced technologies for the Defence, Aerospace, and Cyber & Digital sectors. Its portfolio of innovative products and services addresses several major challenges: sovereignty, security, sustainability and inclusion.

The Group invests more than €4 billion per year in Research & Development in key areas, particularly for critical environments, such as Artificial Intelligence, cybersecurity, quantum and cloud technologies.

Thales has more than 83,000 employees in 68 countries. In 2024, the Group generated sales of €20.6 billion.

# **About CEA**

The CEA (French Alternative Energies and Atomic Energy Commission) is a public research organisation whose role is to inform public policy and provide French and European companies, as well as local authorities, with the scientific and technological resources to better address four major societal transitions: the energy transition, the digital transition, the future of healthcare, and global defence and security. Its purpose is to act to ensure that France and Europe maintain scientific, technological, and industrial leadership, securing a safer and better-controlled present and future for all. To this end, three core values guide the actions of the CEA and its teams: curiosity, cooperation, and a sense of responsibility.

# **About Pyxalis**

Pyxalis is an SME based in Moirans (38430), founded in 2010, specialising in the development and sale of CMOS image sensors. With a team of 50 people, it operates mainly in three market pillars: medical, security, and environmental applications, offering innovative, tailor-made solutions (custom products) as well as off-the-shelf solutions (standard products).

# **About Claude Bernard Lyon 1 University**

Intensive, inclusive, and innovative, Claude Bernard Lyon 1 University has more than 46,500 students and has been delivering excellence in education and research for 50 years in the fields of science, technology, health, and sport. Its 5,000 staff members work every day to provide demanding academic programs, closely aligned with cutting-edge research, supported by 2,800 teacher-researchers. The university is also deeply committed to developing high-quality research conducted in 85 research units equipped with unique facilities. Ranked first in France for patent filings, UCBL is also a hub of innovation, having launched 80 start-ups since 2011. Strongly anchored in its region and resolutely open to the world, Claude Bernard Lyon 1 University is advancing science.

**Trixell / Thales** 

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