INSTITUTE OF IMAGE-GUIDED SURGERY

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Meeting your needs for research, device performance evaluation and training

A unique Innovation Cluster

DEDICATED TO MINIMALLY-INVASIVE THERAPIES

The Strasbourg Institute of Image-Guided Surgery (IHU Strasbourg) is a multidisciplinary institute with internationally renowned expertise on **image-guided minimally invasive therapies.**

The IHU Strasbourg offers a **unique imaging platform** and a broad range of **research services** to support experimental and preclinical studies conducted by medical technology companies and academic R&D centres.

We have a long-term expertise in **all minimally-invasive techniques** – laparoscopy, flexible endoscopy and interventional radiology – along with medical imaging, computer-assisted surgery and robotics.

We provide a one-stop cluster for **contractual preclinical research, evaluation of innovative medical devices** and **education.** Relying on an unprecedented team of seasoned experts and Key Opinion Leaders, we propose a set of **tailored services** to demonstrate the value of your innovations for the management and treatment of pathologies in various domains, e.g. hepato-digestive, neurovascular, urology and cardio-vascular.

The IHU has already been chosen by **more than 50 companies** (major industries, mid-size and start-up companies) and academic laboratories to conduct research, evaluation or training. At the core of one of the most active international clusters for surgical innovation, it is an ideal setting to conduct cutting-edge research and establish **Proof-of-Concept** for novel devices.

The Institute of Image-Guided Surgery

- 2000m² of **Experimental Platform**
- 5 operating theatres including
- **3 hybrid rooms** with high-standard medical imaging equipment
- Fully dedicated to **research, training** and **testing**
- Videoconferencing and **live streaming** from experimental operating theatres

High-quality operating theatres

INTEGRATED WITH ALL MEDICAL IMAGING EQUIPMENT

The IHU Strasbourg has established a unique multimodal interventional imaging platform for **research, experimentation** and **training**.

The platform is fully equipped for all image-guided surgery practices, e. g. flexible endoscopy, laparoscopy, percutaneous surgery and interventional radiology, thanks to our partnership with Siemens Healthineers and Karl Storz Endoskope.

We provide the following equipment:

- A Magnetic Resonance Imaging (MRI) system – 1.5T
- A Computed Tomography scan (CT-scan) – 20 to 128 slice configuration
- A robotic Cone-Beam Computed Tomography (CBCT) system
- Two C-arms
- Two echographers
- Two endoscopy systems with gastroscopes, colonoscopes, duodenoscopes
- One endoscopic ultrasound (EUS) system
- Two laparoscopy systems

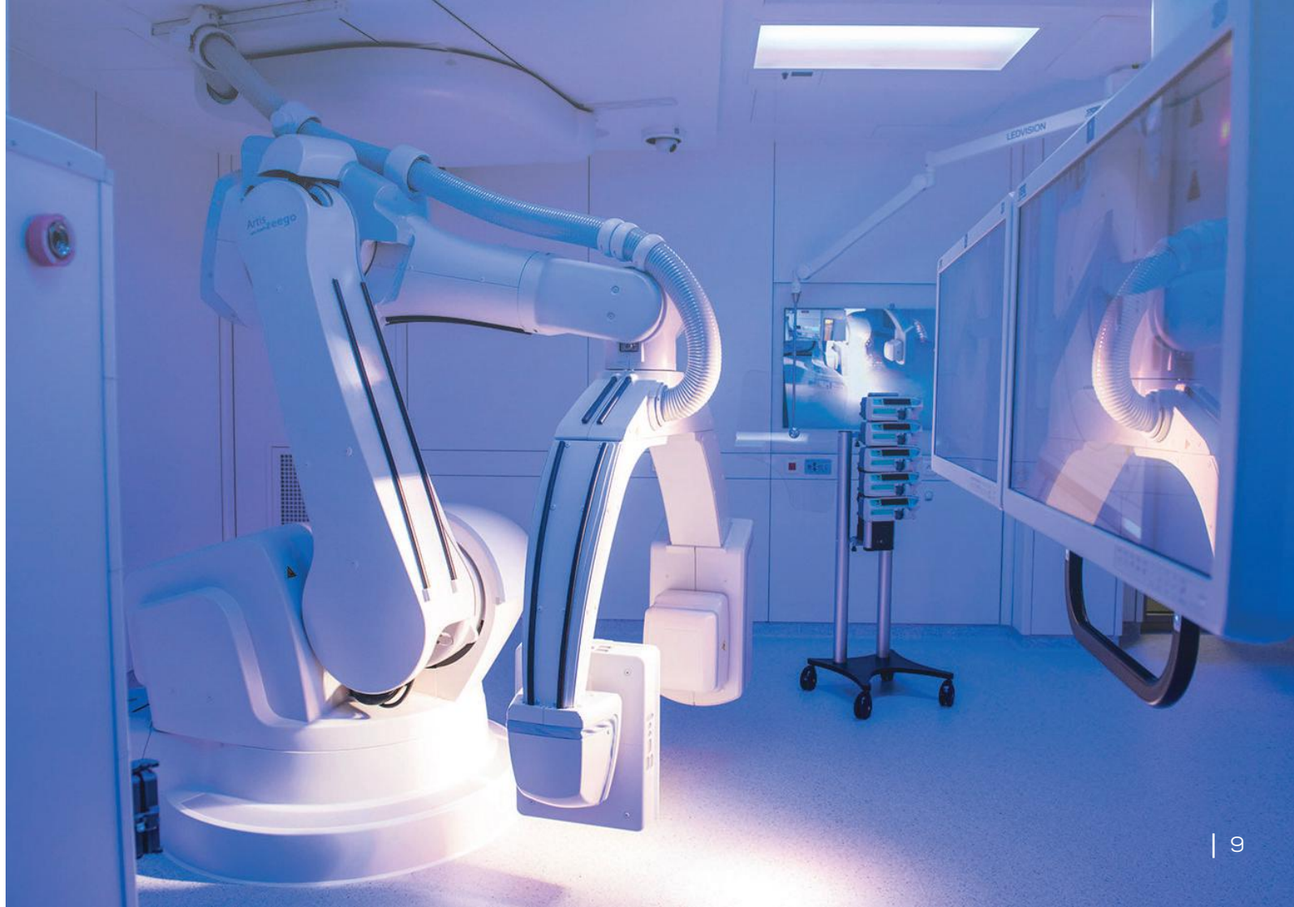
Multi-axis robotic CBCT system
ARTIS ZEEGO

Interventional CT scanner
SOMATOM Definition AS+

MRI
1,5T MAGNETOM AERA

Our services

- **Services tailored** to the specific needs of customers
- Full access to **Key Opinion Leaders**
- **Specific Management** Course
- **Quality Assurance** Approach (GLP studies)
- Eligibility to **C.I.R.** (Crédit d'Impôt Recherche) for **tax refund of R&D projects**



A team of experts

YOUR PROJECT VALUE

We work with internationally-renowned experts in minimally-invasive surgery

BENOÎT GALLIX

Prof. Gallix is a radiologist and Professor of Medicine in France and Canada. Prior to joining the IHU Strasbourg, Benoit Gallix served as **Chief of the Department of Medical Imaging, Hôpital Saint-Eloi, Montpellier University Hospital, France** (2008 to 2013) and **Chief of the Imaging Department at McGill University in Montreal** (2013-2019). At McGill, he created a research laboratory focused on **Automatic Quantification of Tumor Morphology using Machine Learning** and also developed an **Oncology Network** of different Montreal academic hospitals **for Artificial Intelligence.**

Benoît GALLIX, MD, PhD
Interventional Radiology
Chief Executive Officer

LEE SWANSTRÖM

Prof. Swanström is an internationally recognized American **innovator** in the field of Minimally-Invasive Surgery (MIS). He has made contributions in the field of **Advanced Laparoscopic Surgery and Endoscopy** by introducing new techniques (like NOTES) or developing techniques (like laparoscopic anti-reflux surgery). He has authored and co-authored many books, book chapters, and clinical papers on the topic of MIS. As CIO of the IHU, he is responsible for all the R&D projects on **medical devices** for MIS.

Lee SWANSTRÖM, MD, FACS, FASGE, FRCSEng
Laparoscopy/Endoscopy
Chief Innovation Officer

SILVANA PERRETTA

Silvana Perretta is an internationally recognized Italian foregut surgeon. She is **Professor of Surgery** and **Chief of Foregut and Advanced Gastrointestinal Endoscopy Division** at the University of Strasbourg. She also serves as **Director of IHU education and of the Surgical Endoscopy fellowship program**. Her fields of interest are Upper Gastro-intestinal surgery, Gastrointestinal Physiology, Bariatric Surgery, Interventional Endoscopy, Surgical Education and Innovation. For the past 8 years she has been leading nationally and internationally the **digitalization of medical and surgical education** creating dedicated endoscopic simulators and MOOC-oriented medical education worldwide.

Silvana PERRETTA, MD, PhD
Interventional Flexible Endoscopy
Education Director

RÉMY BEAUJEUX

Prof. Beaujeux has developed **neurovascular and vascular interventional radiology** activity at the University Hospital of Strasbourg. He pioneered the design of specific embolic materials for peripheral and neurovascular embolization and he is an international expert in the field of **peripheral and neuro as well as superficial vascular malformations.**

Rémy BEAUJEUX, MD, PhD
Endovascular Interventional Radiology

LEONARDO SOSA VALENCIA

Prof. Sosa Valencia is an internationally renowned Franco-Venezuelan expert in the field of Gastroenterology and more specifically in **Pancreatic Echo-Endoscopy**, a state-of-the-art technique for the diagnosis and therapy of pancreatobiliary pathologies. During the course of his career, he was President of the Venezuelan Gastroenterology Society and editor of the Venezuelan Journal. He was also a professor at West General Hospital and founder of CITE (Centro de Investigaciones Tecnológicas y Ecoendoscópicas), the national referral centre for Endoscopic Ultrasound (EUS) in Caracas. Since 2010, he has been **Adjunct Assistant Professor of the Division of Gastroenterology** at the Johns Hopkins University. Since 2017, he is both **Professor and Director of the International Endoscopic Ultrasound Therapeutic Course** at the IHU Strasbourg. He is also a doctor and researcher currently conducting several preclinical projects using **artificial intelligence** and **Endoscopic Ultrasound** (EUS).

Leonardo SOSA VALENCIA, MD, MCs
Gastroenterology and Endoscopic Ultrasound

MARIANO GIMÉNEZ

Prof. Giménez is Professor of Surgery at the University of Buenos Aires. His practice is focused on **Percutaneous Image-guided Surgery and Minimally-invasive Hepato-pancreato-biliary (HPB) Surgery**. He is **Chair of Excellence** in the Institute for Advances Studies at the Strasbourg University and **Scientific Director of Percutaneous Surgery** at IHU. He is furthermore "Taquini" Chair of General and Minimally Invasive Surgery at the University of Buenos Aires and Director of the DAICIM Foundation.

Mariano GIMÉNEZ, , MD, PhD
Percutaneous Surgery

BARBARA SEELIGER

Dr. Seeliger is an academic surgeon specialized in **Visceral Surgery** with a focus on **Minimally Invasive Digestive and Endocrine Surgery and Endoscopy**. She underwent an international and transdisciplinary training, including a first doctorate degree (Dr. med., Germany) **in cancer epigenetics,** and a second doctorate degree (PhD, France) in **fluorescence image-guided surgery** at the University of Strasbourg. She is a senior researcher at the IHU, an associate specialist surgeon at the Strasbourg University Hospitals, and a trainer for laparoscopy, robotics and endoscopy at various IRCAD and IHU courses. Her current research includes **robotics and artificial intelligence** within the evolving field of least invasive surgical approaches.

Barbara SEELIGER, MD, PhD
Surgeon and Researcher

Support team

DEDICATED TO THE SUCCESS OF YOUR PROJECT

Our Contract Research Organization activity is sustained by a robust organization based on a Quality Assurance Approach. We adhere to **Good Laboratory Practice** regulations (OECD and 21 CFR part 58, FDA) to assure the highest professional standards in the field of **large animal surgery** and **medical device assessment**

Our **Preclinical activities Manager** is in charge of helping you organize your course according to your needs.

Amélie GRESSIER, PhD
Preclinical activities Manager

Our team of **radiology technicians,** with expertise in both human and large animal models, takes care of all the imaging aspects of your experimentation.

We work with a **veterinarian** and an **animal caretaker** to monitor the animals and ensure the proper conduct of the study.

Our **IT Support Team** is available should you have any technical issues in terms of internet connection, videoconferencing, printing etc... for your courses.

A Top Tier Portfolio

OF TAILORED MODELS

The IHU Strasbourg has developed **a state-of-the-art portfolio of *in vivo* and *ex vivo* models,** covering a wide range of pathologies and applications for training and preclinical research.

Our team of experts can also develop new porcine models upon request and offer its expertise and advice. We are also able to with mini-pigs.

Examples of models:

Gastro-enterology:
- Intra-abdominal collections
- Biliary obstruction
- Tumors
- Cholecystitis

Vascular and neurovascular:
- Stroke
- Aneurysm
- Intracerebral parenchymal hematoma

They trust us

Practical Information

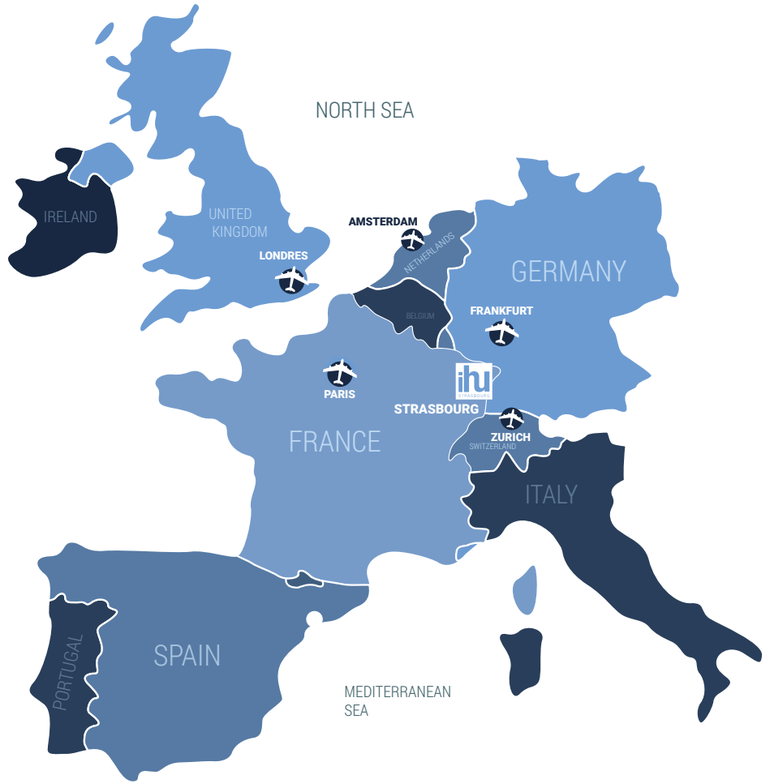
For any additional information or a quote:

Amélie GRESSIER PhD
Preclinical activities Manager
Phone: +33 (0)3 90 41 36 32
Email: amelie.gressier@ihu-strasbourg.eu

Localisation:

Strasbourg is easily accessible in less than two hours by plane from 5 international airports.

The IHU is located 30 minutes from Strasbourg airport.



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