



CENTRE DE RECHERCHE
INSTITUT UNIVERSITAIRE
DE CARDIOLOGIE
ET DE PNEUMOLOGIE
DE QUÉBEC

AFFILIÉ À  UNIVERSITÉ
LAVAL

CathLab Information Guide



**Institut universitaire de cardiologie
et de pneumologie de Québec**
2725, chemin Sainte-Foy
Québec (QC) G1V 4G5, Canada

CathLab Information Guide

Introduction

Created in 1918, the Quebec Heart and Lung Institute (IUCPQ-UL) is the only hospital in Canada to offer in one location specialized and ultra-specialized care and services in cardiology, respirology and obesity surgery. Affiliated with Université Laval, this university institute provides a vibrant environment conducive to establishing a synergy between clinical activities, research, teaching and the evaluation of health technologies and interventions.

With more than 20,000 m² of lab space dedicated to basic and clinical research, the research centre of the IUCPQ-UL enables teams in clinical and basic sciences to conduct innovative and effective research in cardiovascular and lung disease prevention and treatment.



Institut universitaire de cardiologie et de pneumologie de Québec – Université Laval
2725, chemin Sainte-Foy, Québec (QC) G1V 4G5, Canada
Phone: +1-418-656-8711
E-mail: animalerie@criucpq.ulaval.ca
Website: <https://iucpq.qc.ca/en/research/research-centre>

General Information

The catheterization laboratory (CathLab) at the research centre of IUCPQ-UL is a modern, fully equipped animal facility specifically designed for supporting preclinical cardiovascular research. The CathLab offers a unique environment for physician investigators and industry partners to test novel cardiovascular devices and techniques.

Our on-site facility includes:

- ✓ A digital fluoroscopy and angiography system (Philips Azurion 7 C12 with FlexArm).
- ✓ An ultrasound system equipped with transthoracic and transesophageal echocardiography probes (Philips EPIQ 7).
- ✓ An echocardiographic-fluoroscopic image fusion system (Philips EchoNavigator).
- ✓ An experimental surgical suite with a preparation room.
- ✓ Animal housing rooms and facilities for large animals including swine and sheep (capacity of 18 livestock pens).
- ✓ An access to advanced medical imaging equipment dedicated to research including multi-slice computed tomography (MSCT; Philips 6000 iCT) and 3-Tesla magnetic resonance imaging (MRI; Philips Ingenia).
- ✓ A possibility of translational application to humans by using the hospital's hybrid operating room (First-in-Man studies).

Our staff includes passionate and highly trained professionals. Experienced animal health technicians are conducting all animal preparation, assisting surgery during angiographic intervention as well as post-procedure care. All cardiac procedures are supervised by a team of experts from the department of multidisciplinary cardiology at IUCPQ-UL.

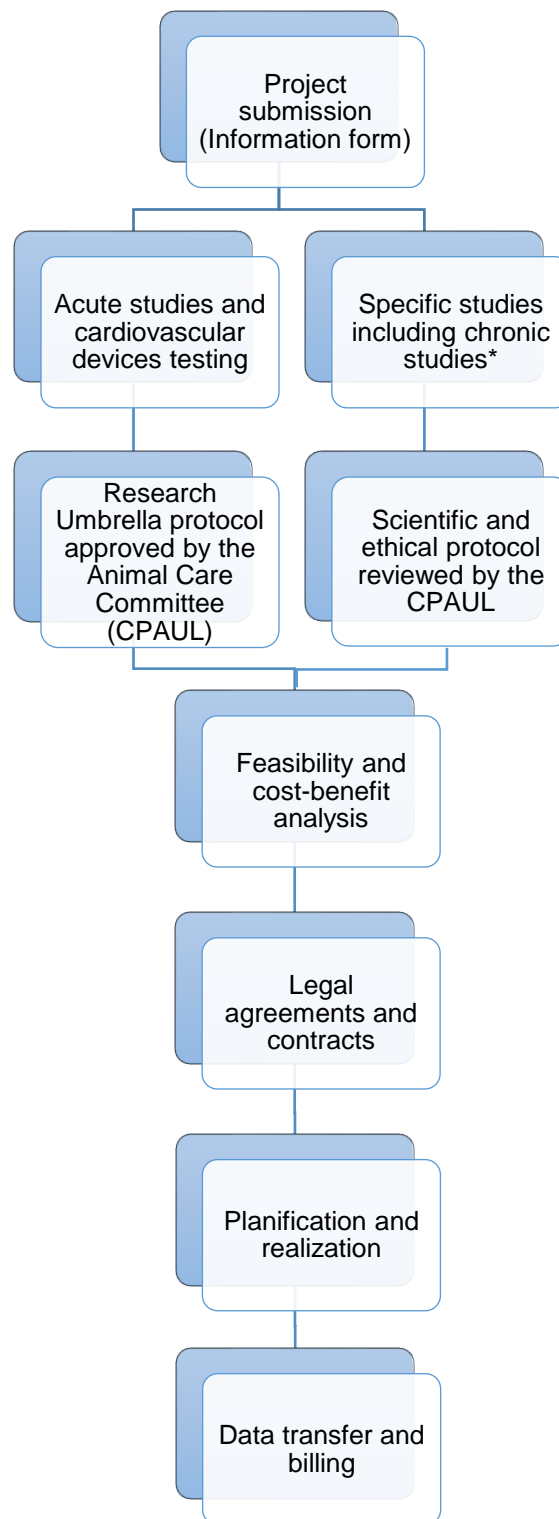
Our expertise and offered services:

- ✓ Acute studies
- ✓ Cardiovascular devices and implants (coronary stents, heart valve devices and systems, heart failure devices, pacemakers and defibrillators)
- ✓ Electrophysiology studies (pacemaker, cardiac defibrillator, etc.)
- ✓ Multimodal assessment of cardiac and implantable medical device functions (echocardiography, MSCT and MRI)

For any service request: please complete the e-form at <https://redcap.link/5hf2n5jh>



Application Process



**Available soon*

At IUCPQ-UL, every research project undergoes scientific and ethical reviews in order to be authorized: any project carried out with animals has to previously receive an ethical approval from the Animal Care Committee of Université Laval (CPAUL). Usually the estimated starting time for a project from application submission is 1–2 months, for an acute study that fit with the preapproved CPAUL's Umbrella protocol, and 3–4 months, for a new study protocol requiring a prior approval from the CPAUL.

Service Request Form – CathLab

Applicant information

Name of the PI:	
Organization/Company:	
Contact/Resource person	
Name:	
Address:	
E-mail:	
Phone:	

Ethics and Budget

Do you have an ethical approval for your study?	<input type="checkbox"/> Yes (CPAUL No _____)	<input type="checkbox"/> No
Funding source:	<input type="checkbox"/> Public (specify the organization): _____	<input type="checkbox"/> Private
Budget No (internal):		

Study summary:

Short title of the study:	
Brief description of the study protocol:	

Study information

Category:	<input type="checkbox"/> Training	<input type="checkbox"/> Implantable medical device evaluation		<input type="checkbox"/> Other (Specify): _____
	<input type="checkbox"/> Acute study		<input type="checkbox"/> Chronic study	
Animal model:	Species	<input type="checkbox"/> Swine	<input type="checkbox"/> Sheep	<input type="checkbox"/> Dog
	Quantity	N =	N =	N =
	Weight (kg)			
	Sex (M/F)			
Proposed starting date (YY/MM/DD):				
Duration:				
Specific material requirements:				
Additional services:	<input type="checkbox"/> Doppler ultrasound system	<input type="checkbox"/> Transesophageal echocardiography (TEE) probe	<input type="checkbox"/> Echocardiographic-fluoroscopic image fusion (EchoNavigator)	
	<input type="checkbox"/> Advanced imaging: 3T MRI	<input type="checkbox"/> Advanced imaging: MSCT	<input type="checkbox"/> Image registration (PACS system for research)	

Comments

Bibliography:

Philips Azurion 7 C12:

https://www.documents.philips.com/assets/20200403/23fe7d73f44243eb8e33ab9200bd9d82.pdf?_ga=2.132096911.1482032739.1606918448-730250843.1601564345

<https://www.philips.com.au/healthcare/product/HCNCVD003/azurion-7-c12-azurion-7-f12-image-guided-therapy-system>

Philips EPIQ 7: <https://www.usa.philips.com/healthcare/product/HC795200C/epiq-7-ultrasound-system-for-cardiology>

Philips CT 6000 iCT: <https://www.usa.philips.com/healthcare/product/HCNOCTN194/ct-6000-ict-ct-scanner>

Philips Ingenia 3.0T MRI: <https://www.usa.philips.com/healthcare/product/HC781342/ingenia-30t-mr-system>

Philips EchoNavigator tool: <https://www.philips.co.uk/healthcare/product/HCOPT08/echnavigator-live-echo-and-live-x-ray-fusion-tool>