

Medical Faculty/LBIC

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## LBIC policy regarding scan costs and use of the preclinical LBIC equipment

In accordance to the decision taken at LBIC Steering Board meeting on the 31<sup>st</sup> October 2018, a new price list will be valid from 2019-01-01 until further notice, with maximum validity until 2020-12-31.

For general information about LBIC, please see: <https://lbic.lu.se>

### (A) Project planning

Projects start with a meeting between the researcher and LBIC staff representing the platform requested. The main goal of this first meeting is to inform each other on the preclinical imaging possibilities available (LBIC) and to identify the scientific questions and needs of the project (researcher). Publications provided by the researcher will be used to establish the strategy of the project. In this stage, a cost estimate for the project can be given.

The researcher will apply for approval from the research board to run the project within LBICs infrastructure (see below, section D). **LBIC staff will assist in preparing the application and walk you through the application process.** Currently, for the microscopy platforms a simplified application can be allowed for faster handling times.

For projects that require extensive preparation time (such as development of PET radiotracers, programming of new MRI sequences, etc), a case-by-case cost agreement regarding preparatory work can be made with the PI in advance. The platform coordinator (see homepage for contact details) has the responsibility to bring up such cases with the LBIC leadership. If adequate, it is the responsibility of the LBIC leadership to sign any agreements with the PI and the PI's director at the appropriate departmental level

LBIC generally requires that the scientist is present during the imaging sessions. Data analysis should preferably be taken care of by the researcher and LBIC staff will assist in guiding the researcher in this process. In complicated cases, LBIC can provide the service for analyzing data for a fee (see below).

## (B) User fees

The project costs are calculated taking external (outside LU) as well as internal grants for equipment and staff into consideration. LBIC as a core facility is dependent on external as well as internal funding. In order to keep our machine park well maintained and our research output at the cutting edge we must implement user fees. These fees are predominantly used for maintenance and service contract but also for competence and method development as well as consumables that is not covered by our internal and external funding agencies. It should be noted that user fees are significantly reimbursed for university users, and that LBIC strives to keep the user fees as low as possible in line with its mission as a core facility. Depending upon the future amount of external as well as internal grants, it can however be foreseen that fees will change over time. Fees are given below as charge per hour, however the platform responsible decides about reasonable time slots for the proposed experiments, taken into account preparation and finishing work occupying the scanner before and after each scan.

Prices below are valid from 2020-01-01 and are stated as prices per hour.

Instrument		Medical faculty, including Region Skåne research projects/ all <u>other academic users</u>	Other (eg industry), ex VAT	
<b>Electron microscopy</b>	SEM/Jeol 7800F	750/1000	1600	
	TEM/Tecnai BioTWIN	750/1000	1600	
	Staff support during scanning	650/650	1600	
	General staff support	Depending on experiment, please contact us		
<b>Light microscopy</b>	STORM/TIRF/Confocal	400/400	800	
	Staff support during scanning	650/650	800	
	<b>Visualisation/ Data processing services</b>	Staff support	650	1600
<b>Nuclear medicine</b>	PET/CT	750/1000	3200	
	SPECT/CT	750/1000	3200	
	μ-CT	750/1000	3200	
	Radiochemistry lab	250/250	300	
	Staff support during scanning	650/650	Included	
	Radioactive tracers	Paid by user, please contact us		
	Radioactive waste disposal per experiment	500 per experiment		
<b>Preclinical MR</b>	9.4T MRI	750/1000	3200	
	Staff support during scanning	650/650	Included	
	NMR (500 MHz)	500/750	3200	
	NMR tubes	Depends on quality required. From 200 SEK and upwards.		

Comments to the table:

- a) For fees on clinical LBIC platforms and the National 7T facility, please see <https://www.lbic.lu.se/practicalities> and <https://www.lbic.lu.se/platforms/the-national-7t-facility/how-to-apply-for-a-project> respectively
- b) The above costs are without overhead (LU overhead costs are carried by the user) and, for users for which it is applicable, without VAT.
- c) For the preclinical platforms users provide animals and animal care.
- d) Groups that want to use the laboratories at LBIC without using the imaging scanners can obtain permission to do so at the same charge as above, however it is the RB that decides about the priorities at the platform in question. For experiments involving radioactive tracers, users pay for these. In addition, radiation protective related issues as well as disposal and handling of radioactive waste require an additional specific fee for consumables etc. of SEK 500 per experiment.
- e) For the preclinical platforms the minimum booking time is 4h, due to the need of preparations before and after experiments, after which users are billed after active hours of use on the preclinical modality.
- f) Commercial research applications should be separated from research applications where collaboration takes place between an academic PI and a company. Commercial research applications should be filed by a representative of the company, while collaborative research applications can be filed by a PI inside LU (or at another university), and if so they will be handled by the RB using adequate prize tags for academic applicants.  
It is the responsibility of the company and/or the academic PI to decide which category that is adequate, and the RB will follow-up on the usage of allotted scanner time and other LBIC facilities.
- g) Cancellation of the bookings must be notified on a working day to the respective responsible platform 24h prior to planned experiment otherwise scan time will be charged accordingly.

### (C) How to apply for scan time

After the project has been approved (see section D below), please contact the respective platform leaders of the equipment you would like to use.

See: <https://www.lbic.lu.se/about-us/contact-us>

### (D) The research board and its decisions

All projects performed on LBIC's preclinical imaging platforms are evaluated before acceptance with respect to possibility to perform the intended experiments successfully, given the available equipment at LBIC. This evaluation is performed by the LBIC preclinical research board (RB). Please note that in the application the intended experiments should be described in their biological or medical context to facilitate the evaluation of the research board. The description should aim at showing that the intended in vivo or in vitro experiments are possible to realize.

Present members of the RB are:

Research Board chair: René in 't Zandt, PhD

Research Board secretary: Yulia Lindholm

Research Board Members: Lina Gefors; Ritha Gidlöf, PhD; Katarina Sjögren-Gleisner, Prof.; Thomas Blom, PhD.

The RB meets bimonthly to monthly. Please note that a particular experiment may require repeated handling from the RB. As a general rule the RB, or the relevant platform responsible on request from the RB, will communicate with the PI already during project planning in order to estimate e.g. the need for scanner time and LBIC support (see below) in the experimental phase. If external PIs are in need of a parallel ethics permission for animal handling when imaging is performed at LBIC, LBIC may be able to give support after evaluation on a case-by-case basis. The PI should inform the RB about such needs as soon as possible in the application procedure.

## (E) Support from LBIC staff for approved projects.

LBIC has a limited staff (for staff researchers and other staff members, see homepage). LBIC staff will to the best of their ability help researchers with their projects, given the complexity of the equipment. At present, however, LBIC cannot within its budget provide full service from start to goal for research groups that have received approval for their project.

As a general rule, LBIC staff will help with (see also (A) above):

- Initial discussions and design of experimental layout
- Writing adequate parts of the application form to the RB
- Performing pilot studies for the project
- Providing basic teaching in handling of the equipment when experimental series are made
- Providing platforms for data storage and image analysis and assisting in data transfer and selection of image analysis tools

Therefore, LBIC staff cannot be expected to perform e.g. large investigational experiment series, or to perform image analysis or statistical data analysis for the research group. We advise the research group to find a person within their group, that can be adequately trained with support from LBIC staff. Should the PI need LBIC staff support for such tasks as described above, or similar, the platform coordinator can decide if staff has the possibility to provide the services required for a fee (see table above).

## (F) Scientific results.

### **F:1 Acknowledgements**

It is the mission of LBIC to “establish and provide a major translational bio-imaging center at Lund university, combining knowledge in the fields of medical physics, preclinical and clinical medicine, chemistry, technology and applied mathematics in order to develop imaging methods for the advanced

study of human morphology, cellular metabolism and physiological function in health and disease". Published research results are the ultimate goal for the research groups using the LBIC equipment as well as for the research staff at LBIC and published results play a dominant role in funding equipment and staff at LBIC as well as everywhere else in the academic environment. Towards this background, the following applies for research groups using LBIC facilities:

It is necessary to acknowledge LBIC in any publication where data is retrieved using LBIC equipment. The acknowledgement should read:

Lund University BioImaging Center (LBIC), Lund University is gratefully acknowledged for providing experimental resources.

In addition, and if applicable, specific LBIC staff may be acknowledged as well.

### **F:2 Co-authorship**

With respect to co-authorship for LBIC research staff, we refer to the regulations and guidelines which can be found at the homepage of the Swedish Research Council <http://www.codex.vr.se/> Co-authorship requires a significant scientific contribution to the project, whereas e.g. routine technical assistance does not merit co-authorship. Furthermore, co-authorship should as far as possible be agreed upon during the core development phase. In cases of uncertainty, the chairman of the LBIC Research Board should always be addressed.

### **F:3 Media and press**

Each user group who wishes to publish information in media where LBIC is mentioned must inform the LBIC director and/or co-director in advance.

## **(G) Ownership and handling of data.**

Regarding ownership of raw data (spectra, animal and sample images etc.) the juridical situation has been discussed with the LU juridical department. One interpretation can be that LBIC possess ownership of such raw data, but the juridical situation is unclear.

LBIC's policy at present is:

1. LBIC (LU) has the right to use raw data as described above, however it is recommended that prior to public use (e.g. for LBIC advertising purposes), the adequate PI is contacted by the LBIC staff for acceptance.
2. Each registered user gets storage space on LBIC's servers for raw data acquired using LBIC's modalities and associated work documents. The data service consists of in- house primary storage and off-site backup systems. For projects with very high storage needs, LBIC reserves the right to discuss optimum storage procedures with the PI. Depending on the nature of the modality the data is either stored directly to the central

storage system during acquisition or transferred post acquisition using custom routines. Every night backups are performed to a second data center located in a separate building. Both the central storage arrays and backup systems uses industry standard technologies for data protection (e.g. RAID 5/6). Although the technical equipment is of highest industry standard and the probability for data loss is minimal, it should be noted that LBIC does not take formal responsibility for the data stored on LBICs systems.