# New pricing strategy for GIfMI

Dear GlfMI users, collaborators, and colleagues,

We have to announce an increase in the hourly rate for using the MRI scanner, peripheral equipment and facilities at GlfMI for **new projects**, which means for projects that will receive funding in 2023 and beyond.

We know this is not an easy message, but it has to be done to keep GIfMI sustainable as one of the largest collaborative research units at UGent. GIfMI is following the CORE facility model from UGent, which will ensure future availability of the MRI facility to all researchers.

In this document you will find background information and pricing strategies for different project types.

The rates that we announce today are the result of almost two years of discussions and gathering information about all assets available at GIfMI, , detailed prognostic simulations and extensive discussions with stakeholders. We will not be able to discuss and/or change prices.

Best,

GlfMI Team

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## Summary

Prices for newly awarded projects after January 1, 2023, for 1 scan hour + mandatory fee for consumables and peripheral equipment:

User	Fee	BTW (VAT)	Total Price per hour in 2023
UGent user	€300.71	0%	€300.71
UZ Gent user	€300.71	21%	€363.86
External academic user	€360.85	21%	€436.63

Prices are subject to indexation at the start of each year.

## (!) Important

The type of user is determined by the institution where the funds are located.

UGent user → funding at UGent etc.

UZ staff with funding at UGent will therefore be considered UGent users.

## Take note!

UGent projects approved before January 1, 2023 will be charged with a reduced fee of €173.22/hour (42.4% discount).

This fee will be re-evaluated at the end of each calender year.

Every booked hour, including pilots, test scans, no-shows, etcetera, will be charged from March 1, 2023.

## ! Important

After 31/12/2025: full fee for all projects.

#### **Business** case

### **Key facts**

GlfMI is a successful research unit. The number of projects and associated PIs makes GlfMI one of the larger research units at UGent.







GlfMI quick facts 2018-2021					
2018-2021 operating revenue:	Projects:	Staff			
<ul> <li>Academic Services 400k</li> </ul>	90 Projects UGent	<ul> <li>1 full time engineer (ATP)</li> </ul>			
<ul> <li>Industry Services 200k</li> </ul>	15 UGent research groups	<ul> <li>0.5 MR physicist (UZ)</li> </ul>			
• In kind contributions (UZ Rad)	<ul> <li>+ projects from UZA, UA,</li> </ul>	<ul> <li>0.1 visiting professor</li> </ul>			
650k	VUB, Univ Luxembourg	<ul> <li>0.5 MR technologist (UZ)</li> </ul>			
		<ul> <li>SVO 6 ZAP members + 1 ATP</li> </ul>			
Researchers	Output	Positioning			
• 36 Pl's (4 UZ clinicians)	• > 100 PhD theses since 2010	GIfMI is unique in Belgium,			
<ul><li>&gt; 60 PhD students</li></ul>	• > 160 A1 papers from the SVO	offering high end MR			
	Pl's	infrastructure, expertise and			
	• 3 doctoral schools on MRI	training to the scientific			
		community			

#### Financial plan

In the past 1.5 years we have analysed the financial situation of GlfMI together with the core facility manager, department of finance of Ghent University, and the department of Radiology at UZ Gent. We have also looked at the number of booked and paid hours, and have built a business case around these numbers.

The goal of this business case was to come up with a financial plan that allows us, as MRI research community, to have sufficient funds to buy a new scanner in 2029<sup>1</sup>, while keeping costs as low as possible and offer competitive market price compared to other academic centers running a research scanner. We have also looked at the way funding agencies reimburse scanning costs.

We acknowledge the fact that we cannot ask competitive market prices for projects that already received funding.

## ! Important

We do ask from you to request new funding at the new rates, and, for every hour you are using the scanner, including pilots, test scans, etcetera. Include budget for unforeseen circumstances (no-shows, failed experiments etc.).

<sup>&</sup>lt;sup>1</sup> In 2029, the magnet will be 25 years old and will need replacement. The new UZ Hospital will be built by then and we will move in with the dept of Radiology, while keeping research and clinic separated.







### What does it cost to run an MRI facility?

Running an MRI research facility comes at a large cost. There are costs for the MRI scanner itself, including hard- and software upgrades and maintenance. We want to be transparent and give you some insight into the costs associated with running a MRI facility:

Expense	Cost € (euro)	Type of cost
MRI scanner + associated hardware	2.5M	Investment
Major upgrade (every 7 years)	800k	Investment
Minor upgrade (every 3 to 5 years)	200k	Investment
Software licenses (per license)	10 to 100k	Investment
Peripheral equipment (stimulus, monitoring etc.)	200k	Investment
MRI maintenance per year	140k	Running cost
Peripheral equipment maintenance & upgrades	20k	Running cost
Disposables, consumables and other operational costs	10k	Running cost
GlfMI staff operating costs	15k	Running cost

If we then look at the revenue we need only to stay running, we need approx €185k per year. This does not include investments in new equipment or a new scanner, nor PACS data storage (65k/year).

#### Personnel

GlfMI has an operational team of 3 people, accounting for 2.3 FTE. 1 FTE is UGent ATP, 1.3 FTE is UZ Gent dept of Radiology staff.

The department of Radiology is responsible for the safety of subjects and follow up on accidental findings. Furthermore, advice and/or help from radiology staff is needed in some more specialized research topics.

#### How many hours is the scanner booked per year?

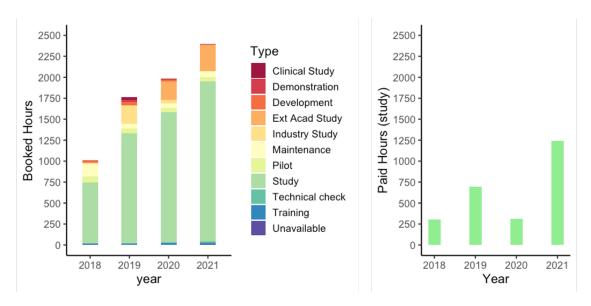
The scanner is available for 3280 hours per year. This amount is based on a 10hr availability, and 328 scanner days (including weekends) per year.

We have analysed the number of booked hours per year, based on the GlfMI scanner agenda. We are very happy to see that there is a gradual increase of the number of booked hours. However, if we look at the number of paid hours, we see that there is a huge discrepancy with booked hours. We are looking into a fair system to close this gap, as this means a possible loss of income.









## What is a fair hourly rate?

We have determined the actual costs of maintaining the scanner as is, and to be able to replace it with a new system in 2029, when the magnet is likely to be end of its technical life. This cost amounts to €265.24/hour in 2022. In 2023, this is indexed to €293.44.

To determine a fair hourly rate, we have looked into a number of factors:

- 1. Sustainability. We need to ensure future availability of the scanner infrastructure, even when the scanner breaks down or needs replacement
- 2. Competitive market price. We have looked at other imaging centers, and compared the prices of a high-end 3T MRI research scanner with ours.
  - GIGA Liège €300/hr
  - KU Leuven €350/hr
  - Scannexus Maastricht NL €350/hr
- 3. Fairness. We understand that funding that is currently available has been applied for, using the current hourly rate. We therefore decided to build in a grace period.
- 4. Billing of all hours. Even when not actively running, there is a cost associated with the scanner. Every hour will be billed, except for technical development initiated by GIfMI staff. Pilot experiments are part of the experimental setup and will be charged for. No-shows will also be charged. *Note: in the future offline protocol creation will be possible, using a virtual scanner.*
- 5. Discount rates for weekend and off-hours (outside 8:00-18:00) will be abolished. We notice that there is a high demand for weekend use. We wish to even out prices to encourage researchers to spread scanning during all available hours.
- 6. Use of peripheral equipment and consumables. As almost all projects at GlfMl require the use of stimulus devices or some form of physiological monitoring. We have decided to include a flat fee for peripheral equipment for all users.
- 7. Indexation. In the past, prices were never indexed and did not reflect the actual costs of running the scanner.
- 8. The department of Radiology, UZ Gent, as preferred partner. The radiology department is of vital importance to GlfMI. Without Radiology, human in-vivo research would not be possible. We gratefully acknowledge the past investments, both financially and in kind.







### Standard peripheral equipment and consumables

Almost all researchers make use of peripheral equipment during their experiment. This equipment needs to be replaced, maintained and repaired. We have decided to apply a flat fee for every scan hour for the use of the following equipment:

- Stimulus Presentation core (PCs, scanner interface etc.)
- Video system
- Audio system OptoActive
- Audio system Siemens in-ear
- Response system

This totals to €12.01 per hour.

Consumables (earplugs, MRI table paper, disinfection materials) come at €1.12 per hour.

To acknowledge the fact that some research projects do not make use of the equipment, and equipment might not be used for a full scan session, we have decided to charge half of the costs to everyone. This means a flat fee of (12.01+1.12)\*0.5 = €6.57 per hour in 2022. In 2023, this is indexed to €7.27 per hour.

#### Additional equipment

Depending on your project, additional equipment is needed.

Equipment	Rate per hour
Eyetracking	€2.18
MR Elastography	€4.41
ASL Phantom	€4.36
Physiological monitoring Biopac	€2.80
Physiological monitoring Siemens	Free
ECG electrodes	€0.60/set
Contrast Administration	On request
Bite bar	€0.18
Mock MRI system	Free

Note: contrast administration has to be customised for each experiment.

#### Additional services

The following services are offered. Contact GlfMI staff for pricing.

- MRI Safety Training & MRI User training
- Instruction about peripheral equipment
- GlfMI team assists during set up
- GlfMI team assists during scanning
- GlfMI team carries out scanning
- Protocol development
- Hardware development







#### **Facilities**

The use of the meeting room Hippocampus, kitchen, toilet etc. inside the GIfMI facility is included in the scan prices. The Hippocampus meeting room needs to be booked seperately, because it may also be used for meetings by others.

### Hourly rates

We distinguish between different user types, depending on institution and type of funding. The main distiction to determine the scan price is made by the institution of the researcher (UGent, UGent stratigic research center, non-UGent research institution) and the location of funds (internally at UGent or outside of UGent).

The hourly rate includes use of the scanner and GlfMI housing facilities for 1 hour, including use of standard peripheral equipment and consumables. This rate is valid for all hours that the scanner is available for booking. This rate is also applicable to booked hours for pilot scans and other scans that do not belong to data collection scans for your experiment.

The hourly rates do not include personnel.

Institution	Location of funds	Hourly rate
UGent	UGent	€301.16
UGent strategic research center	UGent	€301.16
UGent strategic research center	Non-UGent	€301.16 + 21% BTW
External academic center	Non-UGent	€361.39 + 21% BTW
Industry	Industry	At request

UGent Strategic research centres are VIB, imec-UGent, VITO, Flanders Make, and UZ Gent.

## What will change for you?

### Funding (UGent) approved or honored before Jan 1, 2023

You will be charged €173.22/hour (42.4% discount) for all booked hours.

### Billing procedure

GlfMI will implement booking and billing software provided by DFIN, UGent. When in production, aimed for the second quarter of 2023, all booked hours will be directly charged from your UGent budget.

#### **Price Evolution**

Prices will be subject to change, determined by the financial department of UGent (DFIN) together with GIfMI and/or CORE facilities management.

In the event of major investments by GlfMI, which expand the technical capabilities of the scanner, prices may be re-evaluated.







## **Future costs**

As said, the scanner has an expected lifetime to 2029. In the near future (1st quarter 2023), the system needs a critical upgrade of the host and reconstruction computers, including a new operating system. This amounts to an investment of around 175.000 euro.





