**Small Animal Ultrasonography Core**

**Heart Lung Blood Vascular Medicine Institute**

**University of Pittsburgh School of Medicine**

Project Number Assigned by Core: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**REQUEST FOR RODENT ULTRASOUND SERVICES**

**Please email completed form to** Brenda McMahon (brm182@pitt.edu)

**We will respond within 48 hours to meet with you and review your request.**

For more information, contact Charlie McTiernan PhD (mctiernanc@upmc.edu) or Kang Kim PhD (kangkim@upmc.edu).

1. **General Information** (please print clearly)
Principal Investigator: Date of request:
Department/Division:
Phone: Fax: Email:
Contact Person, Phone, and email:

	1. BRIEFLY describe the cardiac/cardiovascular physiologic question to be addressed.

Please also indicate if your lab has previously studied any animal model using ultrasonography.

* 1. Groups to be studied:
	2. Number of Rodents per time point:
	3. Time points (if applicable):
	4. Data end points \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	5. Will Hemodynamics be done? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	6. Billing Source and Details:
		1. Billing account (04/05): \_\_\_\_\_\_\_\_\_\_\_\_
		2. Backup billing account (04/02): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		3. IACUC Approved Protocol Number: \_\_\_\_\_\_
1. **Services and Fees**Please review the charges section below to request service and estimate your total cost.

There are three general fee categories; A) image acquisition using Core sonographer and Vevo3100; B) rental of Vevo3100 (no Core sonography; instrument used by Core-approved PI team member); C) data processing by, or instrument use/analysis program training with, the Core sonographer.

Use of the Dongle with the analysis program, which can be installed in the user’s own computer, is free when arranged with the Core sonographer AND returned within the agreed upon time frame. After one week, if the Dongle is not returned, and other users need it, the PI will incur a daily fee of $25, for use.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **FEE CATEGORY** | **FEE PER HOUR**  | **# of animals** | **# studies per animal** | **ESTIMATED TOTAL** |
| A: Core sonographer and Vevo3100 | $117 |  |  |  |
| B: Vevo 3100 rental only | $107 |  |  |  |
| C: Core Sonographer Analysis/training | $65 |  |  |  |
|  |  |  |  |  |
| ***EXAMPLE*** |  |  |  |  |
| A: Core sonography interrogates 2 groups of 10 mice each, at two time points each | $117 | 20 | 2 | 40 studies est 0.33 hrs ea = 13.2 hrs13.0 hrs @ $117/hr = $1,521 image acquisition |
| C: Core sonography analysis above dataset | $65 | 20 | 2 | 40 studies est 0.167 hrs ea = 6.7 hrs6.5 hrs @ $65/hr = $422.5 data analysis |

Depending upon the technical expertise of the sonographer and the number of endpoints to be captured, you might anticipate each animal image acquisition study to take 15-20 minutes (~ 3-4 per hour). For analysis, the amount of time will vary upon the number of endpoints that need to be calculated.

Billable hours will be rounded up or down to nearest half hour.

Analysis will include provision of report and data to PI, and a meeting (unbilled) to discuss results and findings.

*Please note that the length of time needed for data acquisition and analysis is an initial approximation which will become refined as we expand our experience with the system*

1. **Terms**
	1. Prior to any use of the sonographer operator time or Vevo3100, the PI or his designee must arrange to meet with the Core Manager/Sonographer to review the study plan, process, timeline, schedule, and estimated costs, and confirm operator’s knowledge of instrument utilization.
	2. Agreed upon instrument usage dates/time reservations will be posted on a password-protected calendar by the Core Manager/sonographer
	3. Prior IACUC approval must be obtained by investigator before scheduling studies. Note that the Core sonographer will need to be listed on your IACUC protocol if involved with animal handling. The Core Manager/sonographer can assist in providing boiler-plate text for use of the Vevo3100 in imaging studies. If the IACUC protocol changes at any-time, please notify the Core Manager.
	4. The Investigator is responsible for providing a member of his team to assist in identification of animals to be used, animal transport if indicated, animal handling and monitoring anesthesia and recovery, and instrument transport to the DLAR facility.
	5. The Investigator will need to supply the isoflurane for the ultrasound examinations. The Core will provide all other supplies.
	6. The investigator agrees to (a) inform the Core manager of any issues with instrument operations, (b) adhere to the agreed upon reservation dates and projected hours, (c) return the instrumentation clean and fully functional with all instrument setups and defaults returned to pre-usage settings, (d) backup and remove data from the Vevo3100 drive as directed by the Core manger. Failure to adhere to these guidelines may require additional time spent by the Core Manager and additional charges made to the Investigator. Misuse-inflicted damage to the Core instrumentation that requires repairs may be charged to the instrument user/Investigator.
	7. It is the job of the PI to make sure all data is backed up on their external hard drive. Please see the core manager after imaging or analysis is complete to get the data/images. The Core will not be responsible for any lost data.
	8. The isoflurane vaporizer is dedicated to this Core and CANNOT be used for any other purposes.
	9. If the animal dies or if data cannot be acquitted, the time spent will be subtracted from the total cost. Likewise, studies may take longer than projected, which could lead to increased costs.
	10. If the Dongle is lost, the PI will be charged $4,750.00 to cover the cost for replacement.
	11. The University of Pittsburgh Rodent Ultrasonography Core AND the funding source for the instrument (NIH 1S10OD023684-01A1; [**S10 OD023684/OD/NIH HHS/United States**](https://www.ncbi.nlm.nih.gov/pubmed/30822408) Advanced High Resolution Rodent Ultrasound Imaging System) MUST be cited in all publications arising from use of the Vevo3100 and the Core Manager must be notified of any such publications. (*Required by the NIH for future Instrument Grant applications to track use of prior S10 grant awarded instrument funds*)

I agree to follow the terms and conditions as described above in this application.

I understand the terms and fees for the services, and I agree to pay the invoices from the University of Pittsburgh School of medicine Ultrasonography Core for the services I have requested.

*P.I. Signature*  *Date*

P.I Name

Billing contact person: Phone Number:

Billing contact e-mail: