UAB Small Animal Microsurgical Core FAQ

What procedures can be done by the core?

The primary purpose of the core is to provide surgical services for small rodents, primarily mice, but the core surgeons can also perform procedures on rats, hamsters, and in special circumstances, other species. For a list of procedures, as well as other services offered by the UAB-UCSD O’Brien Center for Acute Kidney Injury Research, visit [http://www.obrienaki.org](http://www.obrienaki.org). Click on “Cores” and then click on “Core Usage Request Form”. This form lists the most common procedures and also gives you the opportunity to request specific services. It should be noted that the services of the core are not limited to those listed on the form. Contact the core director for new procedures or other procedures not listed.

I know what procedure I need, the core offers it, and I have a schedule date. What else do I need?

1. Your experiment must have approval by Institutional Animal Care and Use Committee (IACUC) before the core can do any procedures. If they are part of the normal core repertoire, you can cite the core animal protocol (just ask the core director for the number) in your own protocol so you won’t have to provide fine details, but you will have to have a detailed description of your experimental design. You must supply the core with your approval number.
2. The core will require a detailed description of the experimental design if groups of animals are to be done.
3. An account number that is consistent with the IACUC protocol.

When can my procedures be done?

The specific date a procedure or set of procedures is done will depend on the complexity of the protocol and the availability of the relevant core surgeons. The core is in high demand, so it is best to schedule as soon as possible. Many investigators need surgeries performed at specific times relative to some other treatment or condition so “moving dates around” is often difficult or impossible.

We need a procedure that the core does not appear to offer. Can you do it?

Usually, yes, but it depends on the complexity of the procedure, the resources necessary to do it, and the development time required to establish a reliable protocol. Ask the core director.

Can the core teach us procedures so we can do it ourselves?

Part of the core mandate is to provide training for investigators. Surgeons can work with one or more personnel one-on-one to teach any core procedure. Training is listed as an available core service on the website. The cost of training will depend on the protocol and the level of expertise of the student-surgeon.

We can do the procedure ourselves, but we don’t have the facility. Can we use a core workstation?.

Yes. The core has workstations equipped with an anesthesia apparatus and, if necessary, a microscope for a nominal hourly cost-recovery fee. Users are expected to provide their own surgical instruments. The core will supply anesthetic and analgesic drugs. Please note that the user must have an approved IACUC protocol.

We just decided to do an experiment and we want to do the surgery in (two days, next week etc). Is that possible?

Maybe, but don’t count on it. It depends on the complexity of the protocol and the resources required. Simple things like tail vein injections can often be accommodated. Highly complex procedures are not usually possible to schedule on short notice. However, ask anyway. People occasionally cancel.
How are the core cost-recovery charges handled?
For investigators on the UAB campus, the account is deducted directly via the user-supplied account number using the FBS system at the beginning of the next month. No intervention by the investigator is required. For investigators elsewhere, an invoice will be sent directly to the investigator who will be responsible for arranging payment from their home institution.

What if the animal dies after surgery? Do I still pay cost-recovery charges for that procedure?
It depends on the procedure and the circumstances. Many protocols are inherently very difficult and have a baseline failure rate. For example, about 10-20% of mouse orthotopic kidney transplants will fail for unknown reasons. The core incurs costs for each procedure, so such failures should be considered part of the overall cost of doing an experiment (Note that the failure rate should be factored into the experimental design as well). However, occasionally procedures will fail because of preventable errors on the part of the surgeon or some other problem. Generally, investigators do not pay for such failures. If the investigator feels that charges are not appropriate, she should feel free to contact the core director.

Please note that the core heavily subsidizes each procedure. For most procedures, especially complex ones like transplants, the cost recovery charges are well below cost for academic researchers.

Will the core do surgeries on larger animals, like rabbits and larger?
No. That requires facilities that the core does not have available.

Will core surgeons visit my lab and do a procedure there?
For the same reasons that physicians do not make house calls, the answer is usually no because it is an inefficient way to deliver services. However, isolated procedures can be done, as decided by the core director on a case by case basis, but the investigator must bear the cost of the extra surgeon time to do it.

I plan on using the core often, and it has become a necessary part of my research. Can I just pay part of a surgeon’s salary?
Yes. In such cases, the investigator becomes a preferred core user. Cost-recovery charges are one-half the normal rate (to pay for materials and indirect laboratory costs). If the time utilization of the surgeon exceeds the percent effort paid by the investigator, then core charges for procedures beyond that point revert to the normal rate. The percent effort that an investigator will need will depend on the procedure and how many are done per month.

According to the vet, the health status of my animals is not optimal. The pathology report says they are infected with some pathogen (or) I study an animal pathogen. Can the core do protocols for us?
The core has an isolated surgical suite for this scenario, so it is possible with approval from the ARP veterinarians. Animals can be housed and receive treatment in this facility for limited periods of time. Bear in mind that one OR suite, while being used for this purpose, cannot be used for anything else. So it is more expensive.