Oral Dosing in Rats

Oral dosing is typically done by gastric gavage in rats. Gavage requires manual restraint of a conscious animal in order to pass a feeding needle down the esophagus to deliver a drug into the stomach. This methodology although effective, imposes stress on the animal even when it has been pre-conditioned to the technique. In addition to causing stress, the potential for error such as accidental entry into the trachea and esophageal injury exists and is not uncommon. Personnel assigned with this task may find this procedure to be stressful and often require significant training to become competent. An alternative to gastric gavage is syringe feeding. This dosing technique has been identified as a reliable alternative and offers a delivery approach with no stress to the animal or the handler. Rats can easily be trained to voluntarily drink from a syringe while remaining in their cage. This technique removes the potential for accidental dosing of the lungs or trauma to the oral cavity. A 1 ml syringe allows for controlled delivery with no spillage and accurate volume consumption. Researchers are encouraged to consider this refined technique in their experiments when oral administration is required.

Please do not hesitate to contact Veterinary Services for further information. Training can be provided for those who choose to adopt this approach. The contact information is as follow:

Veterinary Services: veterinaryservices@umanitoba.ca
Animal User Training Program: autp@ad.umanitoba.ca

New Wet Lab

Stereotactic surgery is a common experimental procedure performed in designated surgical suites and sometimes labs. The need to develop a standard on how to perform stereotactic surgery using aseptic technique was recognized and a formal training session developed. This workshop will offer participants the opportunity to learn the following:

1. Proper preparation of supplies, patient and surgeon.
2. Proper instrumentation and suturing skills.
3. How to correctly position the animal in the stereotactic apparatus.
4. How to maintain a sterile field using the sterile tip approach.
5. Proper post-operative care.

Personnel interested in attending this Aseptic Stereotactic Surgery Wet Lab can inquire by sending an e-mail to: autp@ad.umanitoba.ca.