Tail Nick
Mouse and Rat

The veins located bilaterally on the lateral aspect (sides) of the animal's tail are useful for collecting **small volumes of blood**. Alternatively, the artery on the ventral side of a rat's tail can be used in the same manner.
The principal function of these veins is for thermoregulation. They dilate when the rodent's body temperature rises in order to dissipate heat. Application of heat to the whole animal or locally to the tail can be used to cause vasodilatation and ease vascular access. Dilate the tail vessels by placing the tail in warm water (37oC), never exceeding 40 - 44oC range, or under a heat lamp (25-30 cm away from a 60W bulb). The animal's body temperature should never exceed 104oF (40oC) for over 5 minutes. **Animals must be constantly monitored for signs of distress during heat exposure.** The animal should be restrained so that its tail is accessible. Commercial restrainers are available for this purpose. A 22-28G needle is used. The needle is inserted perpendicularly to the vessel in a quick puncture-type motion. The free flowing drops of blood can be collected using a microhematocrit tube or can be dropped directly into a collection tube. Do not "milk" the tail.