

# Hand-Held Microtome Instructions



*“a world of learning”*

## **Step 1**

Place the paraffin in a small beaker and place the beaker in a warm water bath. Do not allow the water surrounding the beaker to boil. Do not allow the paraffin to boil. Warm until the paraffin is just melted.

## **Step 2**

While the paraffin is melting, trim a piece of the specimen to be sectioned (if necessary) so that it fits easily in the stem cavity of the microtome.

## **Step 3**

Pour the melted paraffin into the stem cavity of the microtome. While the wax is still melted, insert the specimen to be sectioned into the paraffin. Allow the paraffin to harden.

## **Step 4**

Rotate the microtome knob clockwise to raise the paraffin plug with embedded specimen. Holding the microtome blade at an approximately 15° angle to the microtome face, make an initial cut (away from you) to “square” the specimen. Discard this section.

## **Step 5**

Advance the paraffin plug slightly and use the microtome blade to cut a thin section. Use forceps to transfer the section from the microtome to a container. The section can now be examined directly by removing the excess paraffin and making a wet mount, or it can be stained.