


 Specimen Collection

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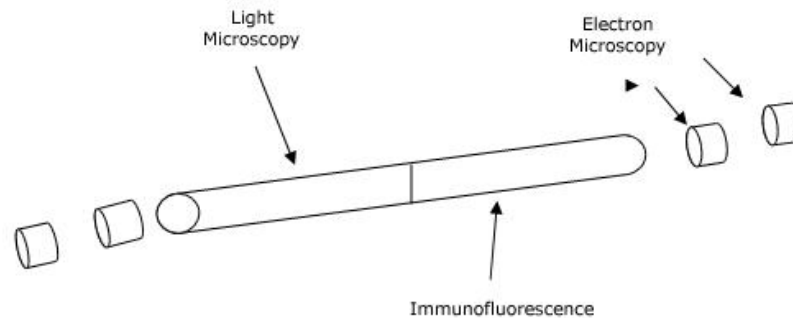
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Instructions for Submitting Renal Biopsy Specimens for Immunofluorescence, Electron Microscopy and Light Microscopy

### TO SEND A SPECIMEN FOR CONSULTATION

#### General

Our method of cutting a Tru-cut needle biopsy is diagrammed below. We first examine the core with a Lighted Magnifier (3.5X) to identify the cortex & medulla ends. The cortex is reddish tan & dotted with red glomeruli. The medulla end tends to be paler & lacks the red spots indicating the presence of glomeruli. We cut two or three cubes off each end of the needle biopsy core (preferably at least 2mm in length) for electron microscopy. The remaining core is then cut crosswise; one piece for light microscopy & the other piece for immunofluorescence. A pathologist or technician should be present at the biopsy procedure so these steps can be performed immediately. The tissue for individual studies should then be handled as follows:



#### Immunofluorescence (IF)

1. Place portion of biopsy for IF studies into vial of Zeus.
2. Label vial with patient's name, physician's name, & time & date of biopsy.
3. Important: Deliver specimen to Stanford within five days (five days is the maximum holding time for Zeus).

#### Electron Microscopy (EM)

Cut portion of biopsy for ultrastructural examination into 1.0mm cubes & place immediately into Glutaraldehyde. (Note: No more than ten 1.0mm cubes per each 15ml of fixative.)

1. Keep the specimen in the dark at 4°C until ready to mail.

2. For transport, place vial of tissue into a secondary container (sealed zip-lock plastic bag is acceptable) with biohazard label & enough absorbent material to capture all liquid in event of spill, then place entire package into a box.

#### Light Microscopy(LM)

1. Preferred biopsy fixative for LM is 10% buffered Formalin. Place portion of biopsy for LM into Formalin.
2. For transport, place tightly covered vial of tissue into a secondary container (sealed zip-lock plastic bag is acceptable) with biohazard label & enough absorbent material to capture all liquid in event of spill. Place entire package in box with EM sample to be mailed/shipped.

#### Shipping and Miscellaneous

1. The solutions listed above and kits can be supplied by the EM Lab at Stanford Hospital & Clinics. Call (650) 725-5196, M-F, 8:00 AM to 5:00 PM.
2. Glutaraldehyde and Formalin are hazardous chemicals and should be handled with gloves; avoid contact with eyes and mucous membranes. If reagents come in contact with sensitive areas, wash with copious amounts of water.
3. [To send a specimen for consultation](#)