HISTOPATHOLOGY SPECIMEN COLLECTION

I. SERVICES

Clinical Laboratories of Hawaii at Airport Trade Center provides a full range of pathology services for the handling of tissue specimens. Most tests are performed in house with a routine one-day turnaround time. Some specialized tests require sending material to outside reference laboratories. See procedure and table below for proper handling, collection, and submission of surgical pathology specimens.

II. PROCEDURES

1. Consider the need to notify the Airport Trade Center Laboratory at (808) 834-5128 in advance of any tests requiring special handling. (see below)

2. Use universal precautions in handling all tissue specimens.

3. Handle all fixative solutions (10% formalin and Saccomanno) with care, wearing appropriate protective gear (gloves and goggles/face shield)

4. Use as small a volume of fixative as feasible (at least 10 times the tissue volume) to lessen potential for hazardous spill. Note: Pre-made formalin filled containers and spill containment kits are available from the laboratory upon request.

5. Obtain tissue specimen by appropriate procedure. Avoid crushing or distorting tissue.

6. Determine the need for any specialized studies and handle as indicated below. (see table)

7. For multiple samples, label each container and request with the site and identifying label; e.g., (A) Left arm (B) Right big toe (C) Nose

8. Place specimen is sealable leak proof container labeled completely with the following information:
   a. Patients first and last name
   b. Referring physician’s name
   c. Date and time collected
   d. Specimen source or site
   e. Medical Record number or Date of Birth
9. Choose appropriate inpatient surgical request card or outpatient histopathology specimen requisition and fill in completely (if applicable).
   a. Patient’s first and last name
   b. Referring physician’s name
   c. Date and time collected
   d. Breast only: Time removed from patient & time placed in formalin
   e. Specimen source or site
   f. Medical Record number or Date of Birth
   g. Surgical Diagnosis or ICD Diagnosis
   h. Any special information (e.g. Orientation) or instructions (e.g. Special stains)
   i. Relevant history
   j. Hospital unit/room or patient’s address
   k. Billing information

10. For breast specimens, additional information is required to improve the accuracy and utility of predictive markers in breast cancer. Indicate on the histopathology requisition the time removed and time specimen placed in formalin.

11. Attach the inpatient surgical request card to the container with a rubber band or place the outpatient histopathology specimen requisition in the outer pocket of a biohazard plastic bag for transport to Pathology.

12. Deliver unfixed specimens immediately to the laboratory.

13. If cultures (bacterial, AFB, fungal or viral) are needed, DO NOT ADD FORMALIN to the sterile container. If possible, collect a separate specimen and use a CLH requisition for the culture order.

14. Request forms are dependant on the specimen and test order:

   **HISTOPATHOLOGY**                           **CYTOLOGY**
   Frozen section                           Body Fluids or Non-GYNs
   Tissue/biopsy                           GYNs/PAP smears
   Lymph node                             PAP/HPV Thin Prep

   **CLH REQUISITION**
   Needle aspirations, Brushings

   **GC/Chlamydia using ThinPrep collection**

15. An electronic copy of this procedure is posted to the CLH website.
<table>
<thead>
<tr>
<th>SPECIMEN</th>
<th>REQUEST</th>
<th>PROCEDURE</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue</td>
<td>Routine Microscopy</td>
<td>Fix in 10% Formalin</td>
<td>H&amp;E Stained Slide Review</td>
</tr>
<tr>
<td>Tissue</td>
<td>Frozen Section for Diagnosis and/or Margins</td>
<td>Notify pathology lab in advance, <strong>send fresh immediately</strong></td>
<td>Frozen section consultation</td>
</tr>
<tr>
<td>Tissue</td>
<td>Immunohistochemistry for tumor/tissue typing</td>
<td>Fix in 10% Formalin</td>
<td>Immunohistochemical stained slide review</td>
</tr>
<tr>
<td>Tissue</td>
<td>Electron microscopy for tumor/tissue typing</td>
<td>Notify pathology lab in advance, <strong>send fresh immediately</strong></td>
<td>Electron microscopic analysis Reference Laboratory</td>
</tr>
<tr>
<td>Tissue</td>
<td>Chromosomal Analysis</td>
<td>Notify pathology lab in advance, <strong>send fresh in a sterile container immediately</strong></td>
<td>Chromosome analysis Reference Laboratory</td>
</tr>
<tr>
<td>Tissue</td>
<td>Special stain for Organism or Cellular Product</td>
<td>Fix in 10% Formalin</td>
<td>Fungus-PAS/Silver Methenamine Stain AFB /Leprosy-AFB FITE stain</td>
</tr>
<tr>
<td>Breast biopsy</td>
<td>Hormone Receptor Analysis</td>
<td>Fix in 10% Formalin</td>
<td>Immunohistochemical analysis quantification</td>
</tr>
<tr>
<td></td>
<td>Prognostic/Predictive Marker Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone Marrow Biopsy</td>
<td>Routine Microscopy</td>
<td>Fix in 10% Formalin</td>
<td>H&amp;E Stained slide review</td>
</tr>
<tr>
<td>Kidney Biopsy</td>
<td>Electron Microscopy</td>
<td>Notify pathology lab in advance, <strong>send fresh immediately</strong></td>
<td>EM/Immunofluorescence Light Microscopy Special Stains</td>
</tr>
<tr>
<td></td>
<td>Immunofluorescence Light Microscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymph Node</td>
<td>R/O Lymphoma</td>
<td><strong>Send fresh immediately</strong></td>
<td>Special fixation Touch Preparations Flow Cytometry</td>
</tr>
<tr>
<td>Lymph Node</td>
<td>Culture for Infectious Disease/Microbiology</td>
<td>Notify pathology lab in advance, <strong>send fresh in sterile container immediately</strong></td>
<td>Culture</td>
</tr>
<tr>
<td>Skin Biopsy (mucosa, lung)</td>
<td>Immunofluorescence for immune mediated disease</td>
<td>Notify pathology lab in advance, <strong>send fresh immediately</strong></td>
<td>Special holding medium immunofluorescence Reference Laboratory</td>
</tr>
<tr>
<td>Skeletal Muscle Biopsy</td>
<td>Enzyme Histochemistry for disease typing</td>
<td>Notify pathology lab in advance, <strong>send fresh immediately</strong></td>
<td>Enzyme Histochemistry</td>
</tr>
</tbody>
</table>