Protocol for Outside Muscle Biopsy Specimens Referred to the Department of Pathology at Saint Louis University School of Medicine

1. Notify the Histology Laboratory in the Department of Pathology at Saint Louis University School of Medicine BEFORE the muscle biopsy is sent to the laboratory. Call (314) 977-7874 to notify the laboratory that a muscle biopsy specimen will be coming to the laboratory.

2. Wrap the fresh muscle specimen in normal saline-moistened gauze, and place it in a specimen container labeled with the patient’s name, birth date, biopsy site, time biopsy was obtained, and any other identifying information. Place the container in another larger container on wet ice. **DO NOT** expose the specimen to any formalin liquid or fumes, as that destroys enzymes necessary for the histochemical reactions used for diagnosis. **DO NOT** float the specimen in normal saline.

3. The specimen must be accompanied by an “Authorization and Information Sheet for Muscle and Sural Nerve Biopsies” (Appendix) including information on the patient’s clinical history, insurance information sheet, copy of the referring hospital’s requisition, and if possible copies of the patient’s clinical history from the medical record.

4. Send the specimen to the Histology Laboratory at Saint Louis University School of Medicine, Department of Pathology, Schwitalla Hall Room 464, 1402 S. Grand Blvd., St. Louis, MO 63104 to arrive no longer than 1 to 2 hours after the specimen is obtained.

5. Normal working hours for the receipt of a muscle biopsy specimen are from 8:00 a.m. to 3:00 p.m., Monday through Friday. Acceptance of any specimen arriving before or after this time must be authorized by the Histology Laboratory supervisor or the pathologist. Call (314) 977-7874.

All Specimens Should Be Sent To:
Histology Laboratory
Department of Pathology
Saint Louis University School of Medicine
Schwitalla Hall Room 464
1402 S. Grand Blvd.
St. Louis, MO 63104
Phone (314) 977-7874, Fax (314) 977-7898
Technique for Muscle Biopsy (for Referring Surgeons and Pathologists)

For proper evaluation of the muscle biopsy, the surgical technique used in obtaining the biopsy is very important. The biopsy should be obtained from the belly of the muscle. A biopsy of an affected but not an end-stage muscle is ideal. Biopsy the muscle specifically designated by the neurologist if possible. A muscle biopsy should be about 2 cm long and about 1 cm in diameter, generally shaped like a cylinder. The biopsy cylinder should be carefully dissected free from the adjacent muscle, fat and fascia. Avoid sites of tendinous attachment.

A special muscle clamp or a tongue depressor can be used if desired to maintain the muscle orientation. For the tongue depressor, a suture should be placed at either end of the cylinder of the muscle to be removed and the sutures tied immediately before the final incisions to remove the sample. The biopsy can be tied to a wooden tongue depressor with the suture, so that the resting length of the muscle \textit{in situ} is retained. Neither a muscle clamp nor tongue depressor is necessary for pathology.

The specimen should be wrapped in gauze moistened with normal saline and sent to the laboratory within one hour. \textbf{DO NOT} immerse the specimen in saline or water and \textbf{DO NOT} expose the muscle tissue to formalin liquid or fumes, as this destroys the enzymes necessary for the histochemical reactions.

A completed “Authorization and Information Sheet for Muscle and Sural Nerve Biopsies” (Appendix) must accompany the specimen. The clinical data should be provided by the clinician ordering the biopsy.

\textbf{Transportation:} Call the Histology Laboratory at Saint Louis University School of Medicine Department of Pathology at (314) 977-7874 before sending the specimen. The specimen should be sent to the Histology Laboratory at Saint Louis University School of Medicine Department of Pathology on wet ice, wrapped in normal saline-soaked gauze as soon as possible, ideally within one hour of resection. Along with the specimen, an “Authorization and Information Sheet for Muscle and Sural Nerve Biopsies” (Appendix) should be attached.

For any questions, call the Histology Laboratory at (314) 977-7874.