

Joanna Wykrzykowska

Pancreas and Pancreatic Lymph Node Dissection in type 2 diabetic mice:

1. Put the mouse in supine position and open the abdominal cavity with mid-abdominal vertical incision and horizontal two cuts under the diaphragm.
2. Move the bowels gently down and towards the left of the mouse until you see the fixed “green” transverse colon.
3. Free the pancreas from the transverse colon.
4. Move to the spleen and pull it up. Free the attachments to the greater curvature of the stomach. Leave the pancreas attached to the spleen (you will use it later as a handle).
5. Move to the mouse’s right and pick up the duodenum gently with curved tweezers. Free the pancreas from the duodenum and jejunum making a “window” except for the portion where duodenum meets the stomach.
6. Cut the portion of the duodenum where the pancreas is still attached from the stomach and the rest of the bowel.
7. Pick up the spleen and duodenum ends of the spleen (tail and head respectively) and pull up gently. You should be able to visualize the lymph nodes in diabetic mice midway between spleen and duodenum, where the vascular supply is rich. They appear as white shiny balloons.
8. Free the pancreas from the hepatic vein and other attachments and cut down to the bottom taking some of the mesentery.
9. Place the pancreas in a petri dish reconstructing the “in situ” anatomy. Place under the dissection microscope. Dissect out the pancreatic lymph nodes by gently pulling apart the tissue with blunt forceps near the entry of the splenic vein and closer to the duodenum.