

Dissection of Cardiovascular Tissues from Large Animals

Tissues are chopped into segments <0.5cm and collected into 5ml of RNAlater or snap frozen according to protocol ROSLIN_SOP_Harvest of large animal tissues_20160413.

- 1. Take segment of pulmonary vein, close to left atrium (pulmonary vein)
- 2. Snip segment of left auricle from outer lobe (*left auricle*)
- 3. Open left atrium and take segment from inner region (left atrium
- 4. Dissect down from left auricle through left atrioventricular (mitral) valve and open the left ventricle
- 5. Take both mitral valve leaflets, avoiding septum and chordae (*left AV valve*)
- 6. Take all of left chordae tendonae, avoiding papillary muscle and valve leaflet (*left chordae*)
- 7. Take segment of left papillary muscle, avoiding chordae tendonae (*left papillary muscle*)
- 8. Take segment of left ventricle from free wall (*left ventricle*)
- 9. Take a segment from the middle of the ventricular septum (septum)
- 10. Dissect up through aortic valve and take all three leaflets, avoiding aortic and septal tissue (*left semilunar valve*)
- 11. Take a segment at the base of aorta from just above the valve (aorta base)
- 12. Dissect the ascending aorta and take a segment of the aortic arch from region of cranial arteries (*aorta arch*)
- 13. Take a segment of the cranial vena cava from close to the atrium (cranial vena cava)
- 14. Take a segment of the caudal vena cava from close to the atrium (caudal vena cava)
- 15. Snip a segment of the right auricle from outer lobe (right auricle)
- 16. Open the right right atrium and take a segment from inner region (right atrium)
- 17. Locate the region of atrioventricular node across from the coronary sinus and the opening of the caudal vena cava and take a sample (*AV node*)
- 18. Locate the region of sinoatrial node beneath the epicardium near the opening of the cranial vena cava and take a sample (*SA node*)
- 19. Dissect down from right auricle through right atrioventricular (tricuspid) valve and open the right ventricle

- 20. Take the whole of the right trabecula septomarginalis spanning the right ventricle
- 21. Take all three tricuspid valve leaflets, avoiding septum and chordae (right AV valve)
- 22. Take all of the right chordae tendonae, avoiding papillary muscle and valve leaflet (*right chordae*)
- 23. Open right ventricle and take segment of right papillary muscle, avoiding chordae tendonae (*right papillary muscle*)
- 24. Dissect up through pulmonary valve and take all three leaflets, avoiding pulmonary artery and septal tissue (*right semilunar valve*)
- 25. Take a sample of the pulmonary artery from above the pulmonary valve (*pulmonary artery*)
- 26. Take a sample of the thoracic aorta above the diaphragm (thoracic aorta)
- 27. Take a samaple of the abdominal aorta just below the diaphragm (*abdominal aorta head*)
- 28. Take a sample of the abdominal aorta at the level of the renal arteries (*abdominal aorta mid*)
- 29. Take a sample of the abdominal aorta just above the bifurcation (*abdominal aorta leg end*)