**BIOL 112 Lab Questions – 15 – Animal Osmoregulation and Excretion**

1. Dissect out the excretory system of your rat. If you have demolished your rat, work with a team member. If you have demolished your rat, discuss how you could have made a better dissection.
2. Make cross sections and longitudinal sections of the kidneys and examine under the dissecting microscope.
3. Examine kidney tissue under the dissecting microscope. Can you see nephrons? If not, why not?
4. Can you see the collecting ducts? Blood vessels? Sketch and describe.
5. Try to make a thin section of kidney tissue to examine under the compound microscope.
6. Compare the mammalian excretory system to osmoregulation and excretory systems in other types of animals.
7. Summarize this exercise and discuss whether it helped you to understand mechanisms that regulate water balance, solute balance and excretion in different groups of animals.