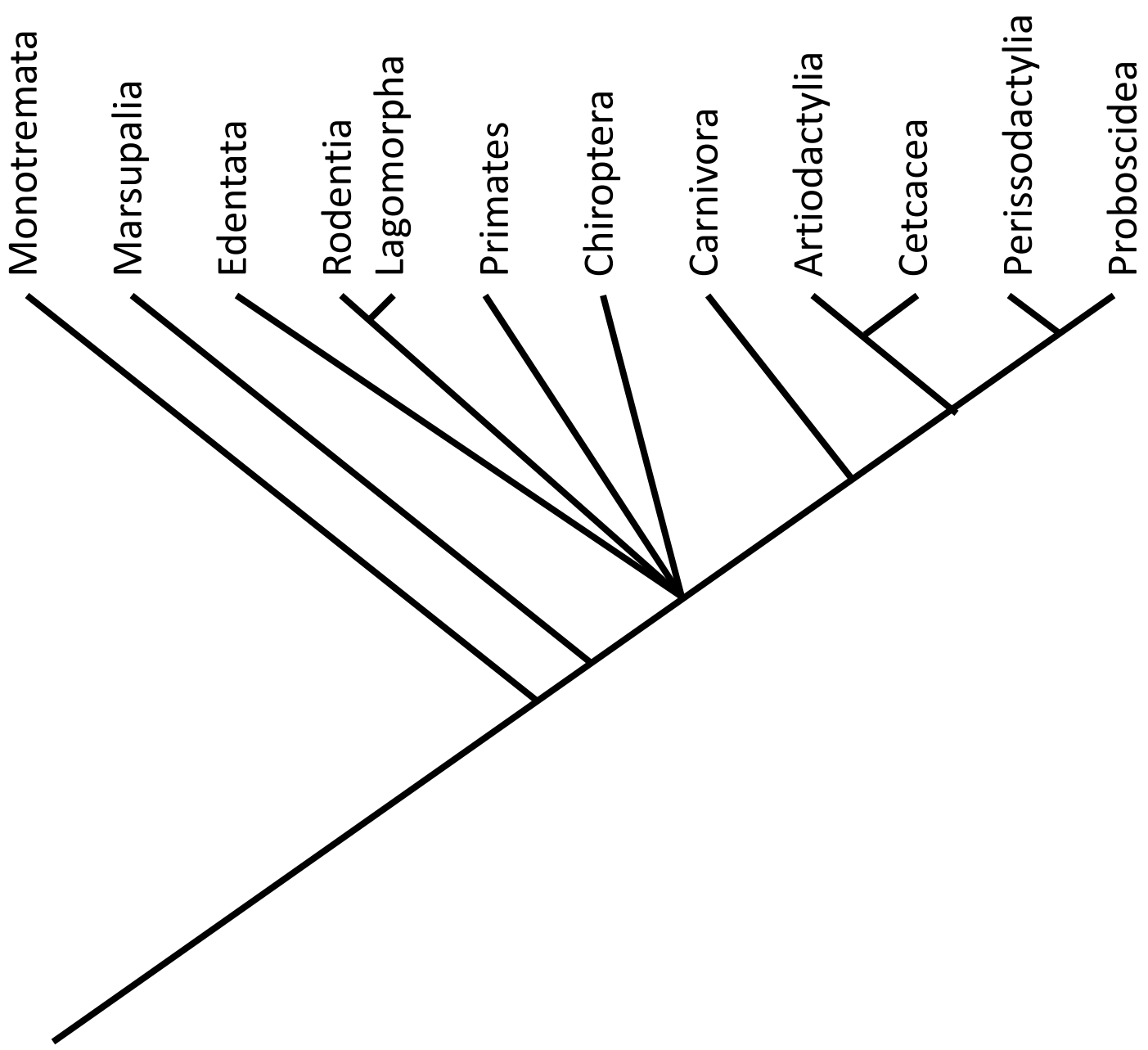


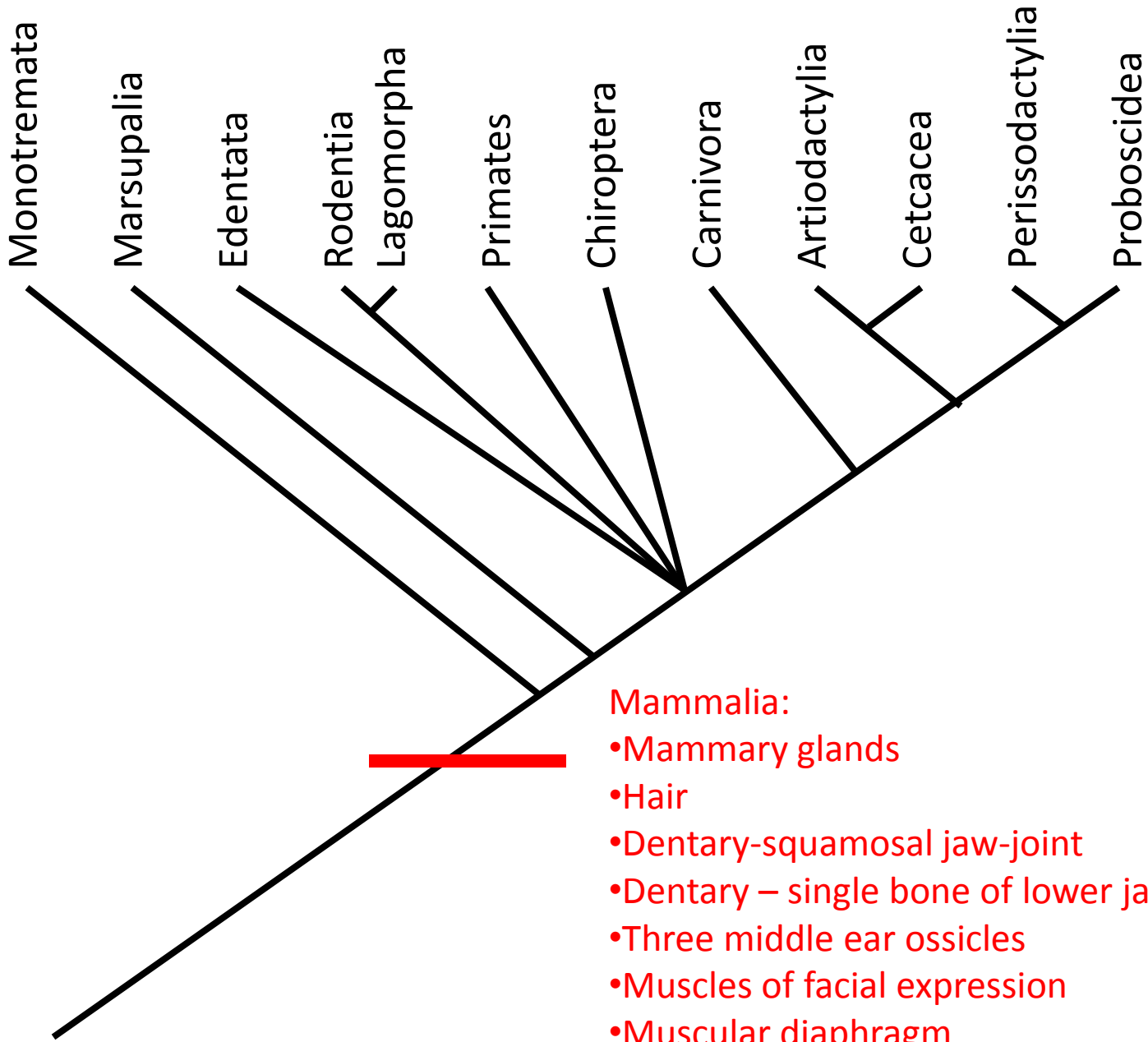


Stuart S. Sumida
Biology 342

(Over) Simplified Phylogeny of Mammalia

Just kidding.

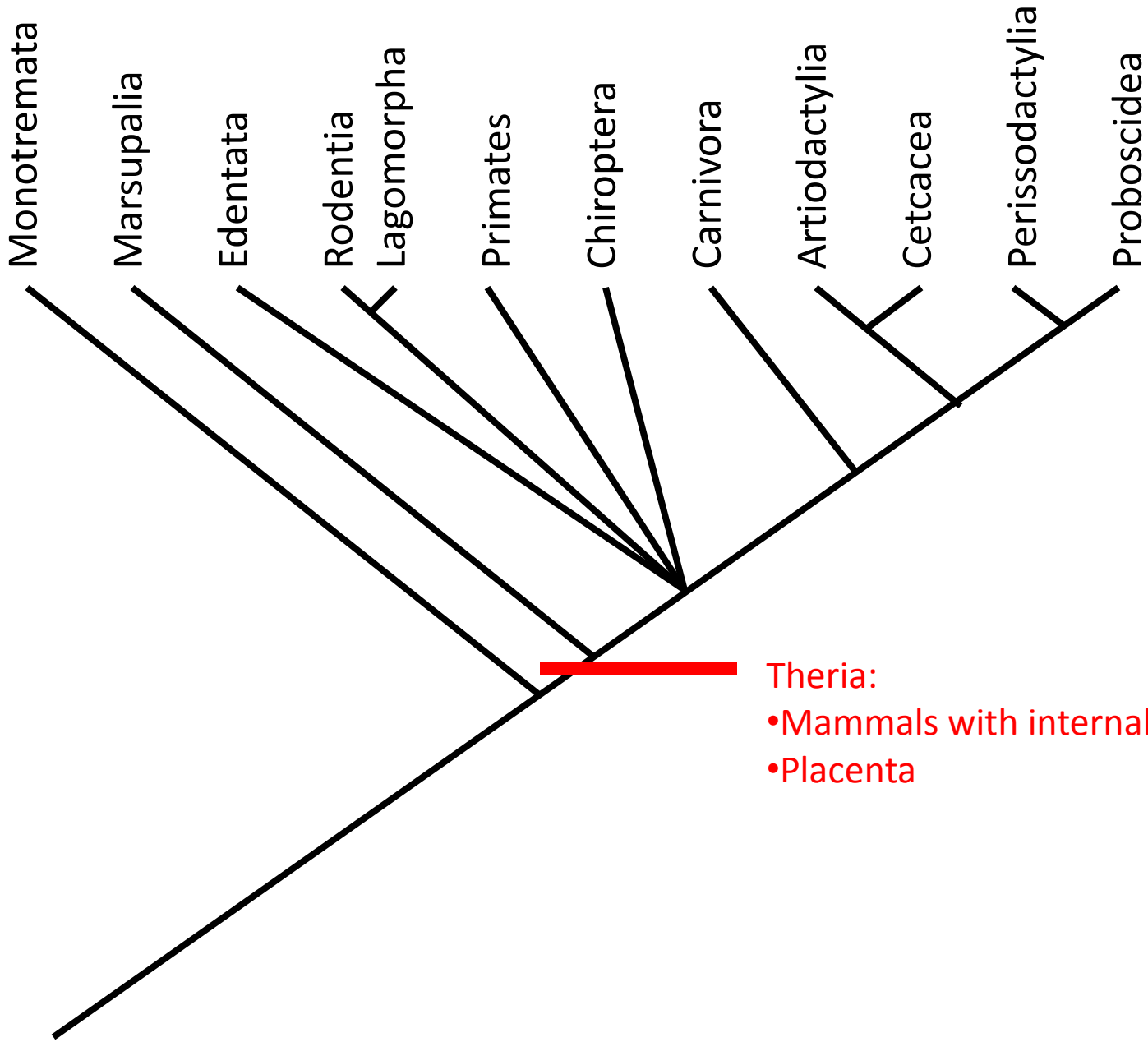




MONOTREMATA:

- Most basal of living mammals.
- Retain primitive amniote feature of laying eggs.
- Includes only a few relict living forms including duckbilled platypus and spiny anteater.





Theria:

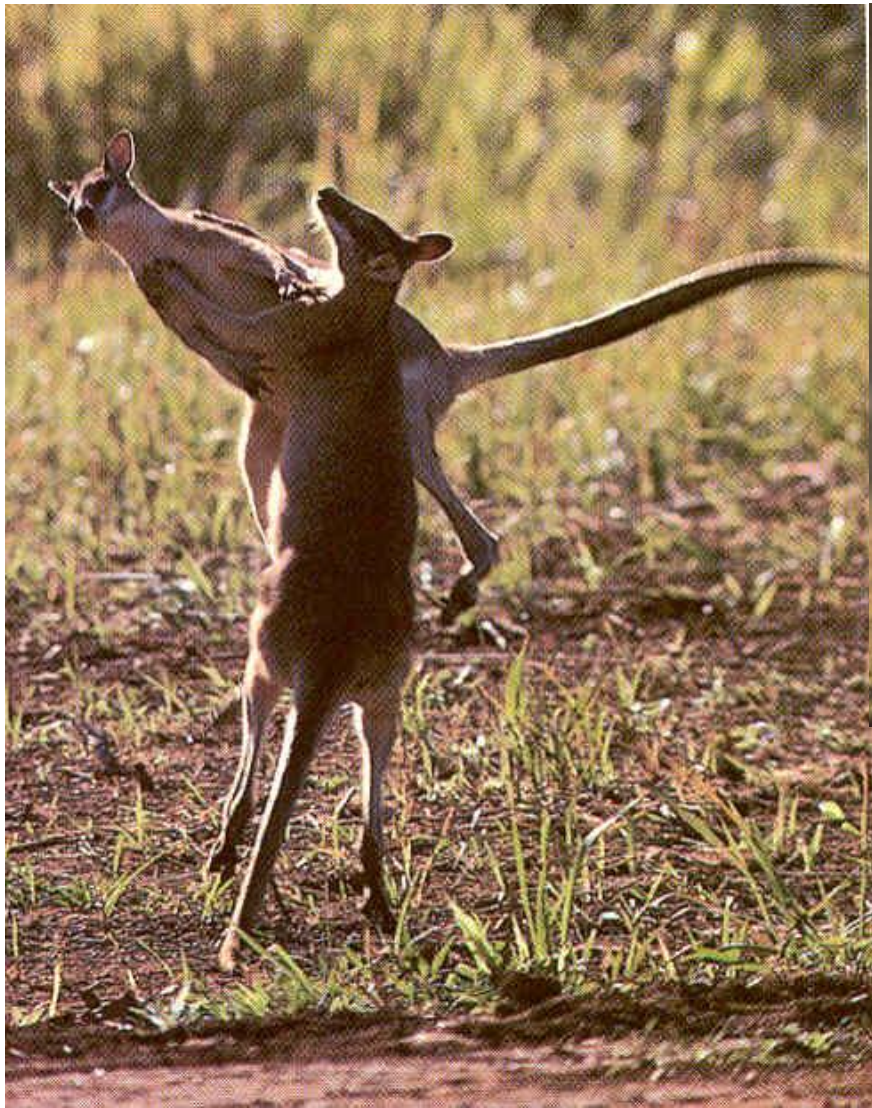
- Mammals with internal development
- Placenta

METATHERIA (Marsupalia):

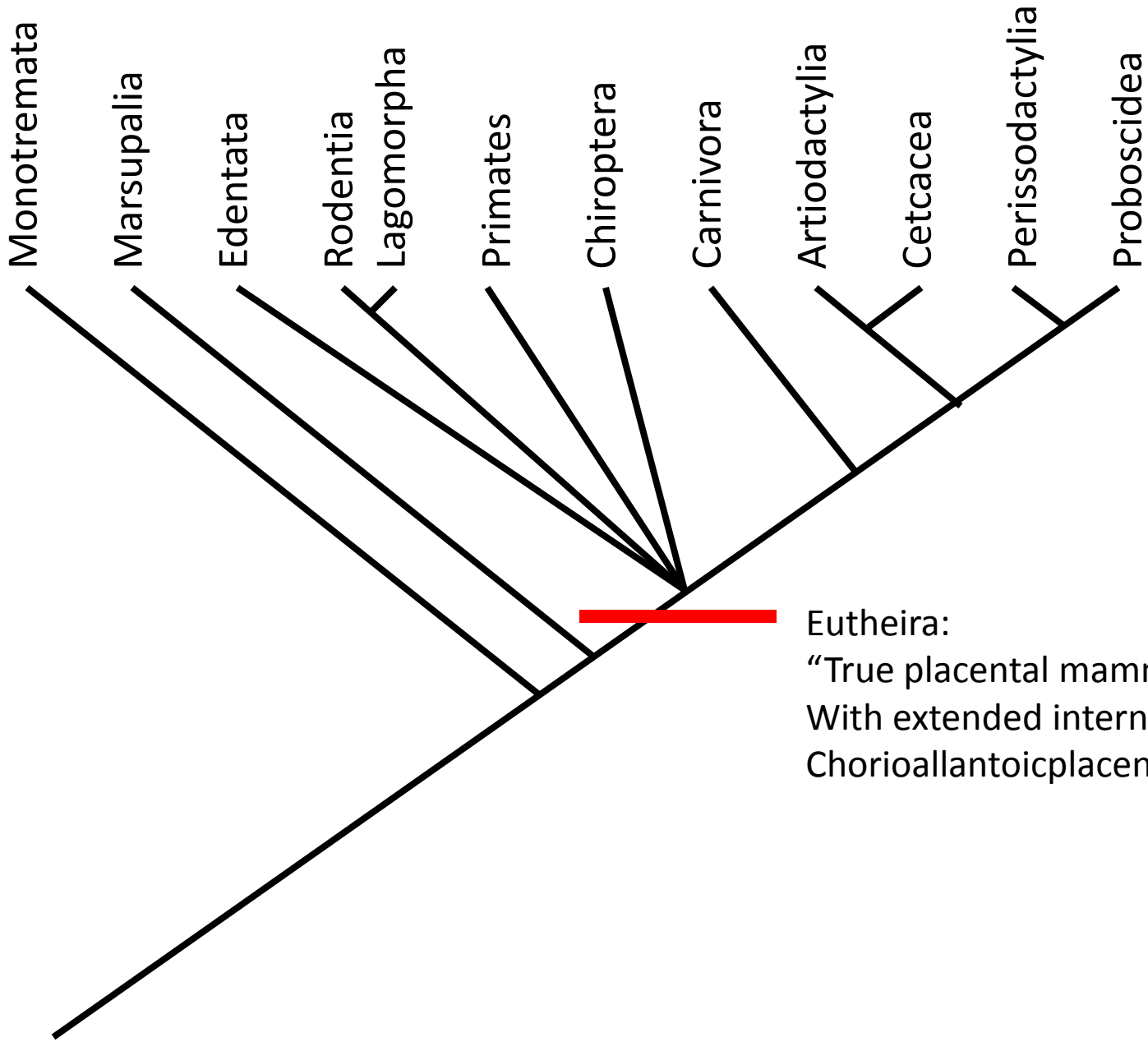
- The pouch mammals
- Choriovittiline (chorion + yolk sac) placenta
- Living forms have epipubic bones (the primitive placentals probably did as well.)
- Restricted primarily to Australi currently, though one form remains in North America (*Didelphis*; the Virginia opossum).







Kangaroos can be almost orthograde



Eutheria:

“True placental mammals”

With extended internal development

Chorioallantoicplacenta

Mammalian Highlights / Features of Note:

- Primates are a very early offshoot within Mammalia.
- The relationships of basal mammals are not terribly clear – as noted by the polychotomy between edentates, glires (rodents + lagomorphs), primates, and bats.
- Cetaceans are actually most closely related to artiodactyls (pigs actually)!
- Elephants and their kin are amongst the most derived of mammals

Many, many taxa are left out here.