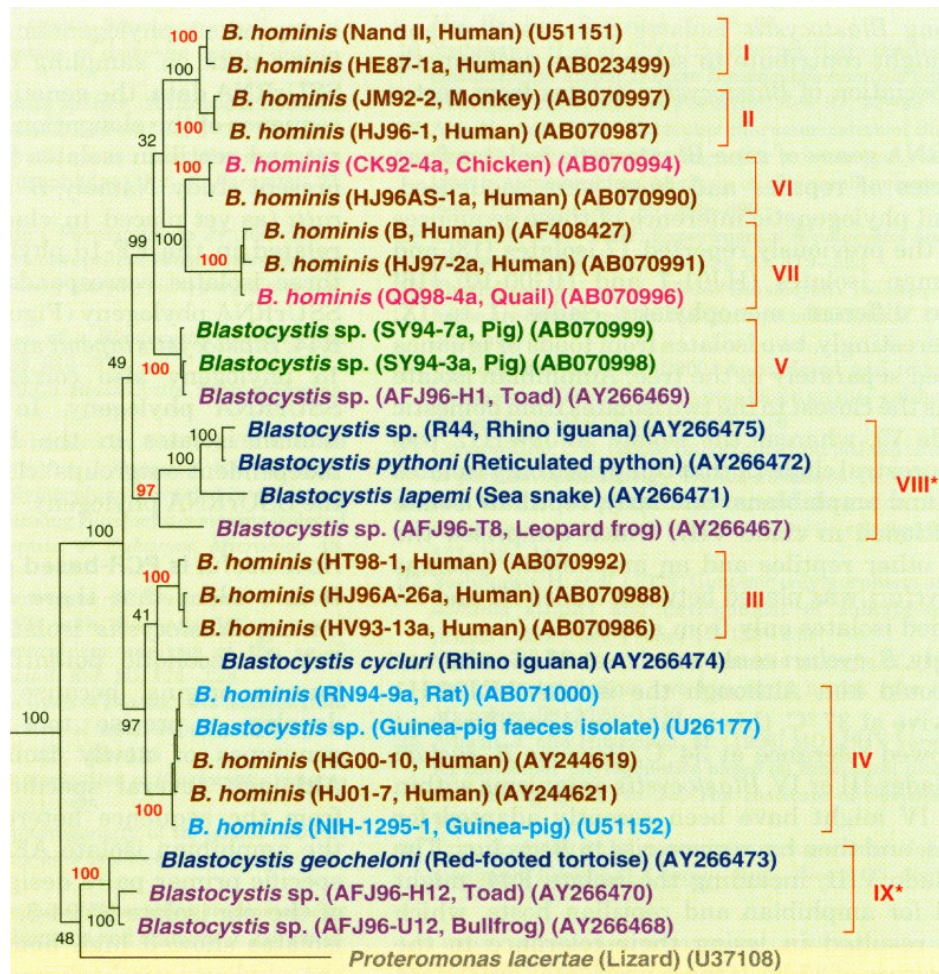


# Biology and molecular phylogeny of protist *Blastocystis*

Hisao YOSHIKAWA [Biological Sciences Course]



Phylogenetic tree inferred with 18S rRNA gene sequences of *Blastocystis* isolates with *Proteromonas lacertae*.

A protist *Blastocystis* had been identified from humans in 1912. Even this microbe is anaerobic, this organism has mitochondria-like organelle and has been identified from a variety animals such as mammals, birds, reptiles, amphibians, and rarely in insects. Therefore, it has been argued whether human isolates are same or different from other mammalian or avian isolates. In our laboratory, we have been isolated this microbes from a variety animals and inferred their phylogenetic positions based on the 18S rRNA gene sequences. Furthermore, since phylogenetically closed isolates had been isolated from both humans and domestic animals, we investigate whether this organism can transmit between human and domestic animals.

Keywords : Classification, molecular phylogeny, genetic diversity