LABORATORY 6: Order CHIROPTERA (bats)
Know the taxonomic terms in bold type. For laboratory, be able to identify the key characteristics present in the available specimens. Other characters will be useful to know for lecture.

Characteristics
1. forelimb modified for flight
2. sternum usually keeled
3. hindlimbs relatively small, knee directed outward and backward

I. Suborder Megachiroptera--"flying foxes"

1. Family Pteropodidae--Old World fruit bats [fig. 15-13]
   A. Australian, Oriental, Ethiopian, Middle East, some Oceanic islands
   B. postorbital process well-developed
   C. use vision for orientation (large eyes)
   D. pinna simple (no tragus), no nose or facial ornaments
   E. What is the usual diet of members of this family?
      Note the structure of the relatively simple cheek teeth. What is the function of the longitudinal furrow?

II. Suborder Microchiroptera
A. echolocation
B. pinna often complex, tragus or antitragus present
C. nose or facial ornaments often present
D. second digit of wing without claw, completely enclosed in wing membrane

Suborder Microchiroptera
Families in Texas
1. Family Phyllostomidae--leaf-nosed bats, vampire bats
   a. conspicuous nose leaf usually present on muzzle
   b. Incisors not widely separated
   c. Tragus not prominent
   d. Examine the cast of the Desmodus skull and compare its dentition with that of other bats. How is the dentition adapted to its diet?
2. Family *Vespertilionidae*--evening bats, or common bats
   A. tragus prominent
   B. tail extends to margin of uropatagium
   C. upper incisors widely separated

3. Family *Molossidae*--free-tailed bats
   a. 1st and 5th digit of feet with fringe of stiff bristles
   b. Tragus small to absent
   c. tail extends well beyond margin of uropatagium (tail membrane)