Key for Homework 14

1. Why was the chimney swift (*Chaetura pelagica*) used in this study? It is the closest living relative to the hummingbird, so it provides a good test of whether any particular genetic changes are unique to hummingbirds.

2. What do the notations T1R1-T1R3 and T1R2-T1R3 mean? These refer to receptors that are heterodimers, i.e., they are composed of two different polypeptide chains (either T1R1 and T1R3 or T1R2 and T1R3).

3. What specific molecules does a "normal" (non-hummingbird) umami receptor bind best? Amino acids like alanine and serine, according to Figure 3.

4. List one question about this paper that you want ask your classmates or your instructor.  Answers will vary.