1. Flowering time in *Eschscholzia californica.*
   1. Normal pattern of flower opening and closing in SF populations
      1. Flowers start to close at 15:30 (variable)
         1. Flowers closed by 16:00 (variable)
      2. Flowers start to open at 11:00 (variable)
   2. Is there a genetic basis to flower opening and closing times?
      1. Variation in opening and closing times across populations
         1. Coastal populations are more humid than inland so cost of opening is lower.
         2. Document opening and closing time for each population.
   3. Is there phenotypic plasticity in flowering opening and closing times?
      1. Variation in opening and closing times across wetness gradient
         1. In wet environments, flowers are open longer than in dry environments.
         2. Maintain plants in different amounts of soil moisture
   4. How much light does E. californica need to open or close?
      1. Vary length of day/night (white/red/blue)
         1. 18hL:6hD
         2. 12hL:12hD
         3. 6hL:18hD
   5. Cost through female fitness hypothesis: Are there fitness effects of floral closing on seed weight or seed number?
   6. Cost through male fitness hypothesis: Is there pollen loss to flowers when kept open?
      1. Count available pollen in artificially open versus closed flowers.
         1. Count before and then after?
   7. Cost through damage hypothesis: Is there damage to flowers that stay open?
   8. Cost through disease hypothesis: Is there more disease in flowers open at night?
      1. Count bacteria and fungi landing on petal surface
      2. Examine flowers for disease