1. **Reproductive Altruism and Task Specialization:**
   * Introduce reproductive altruism as a concept where individuals forego personal reproduction for the collective benefit.
   * Discuss the evolutionary implications and its occurrence across various taxa, emphasizing its convergent evolution (Waddington, 1953; West-Eberhard, 1987; Linksvayer and Wade, 2005).
   * interrelation between reproductive altruism and task specialization in eusocial societies.??
2. **Eusociality: A Reproductive Framework:**
   * general framework of eusociality and the various factors that contribute to its emergence.
   * Discuss the benefits of reproductive specialization and division of labor within a eusocial structure.
   * Provide a brief overview of eusociality in wasps (Hunt, 2012; Jones and Robinson, 2018).
3. **The Ovarian Groundplan Hypothesis:**
   * Introduce the ovarian groundplan hypothesis as a theoretical framework explaining the origins of reproductive altruism and task specialization.
   * how this hypothesis posits the existence of pre-determined reproductive roles within a colony.
   * role of genetic predispositions and ovarian development in shaping the division of labor and reproductive strategies within eusocial communities.
   * understanding of ovarian groundplan hypothesis by incorporating insights from various studies (Hunt, 2021; Kennedy and Radford, 2020; Kreider and Penn, n.d.).