1. **Quantum Coherence in Photosynthesis:** *Engel et al. (2007) demonstrated evidence of long-lived quantum coherence in the Fenna-Matthews-Olson complex of green sulfur bacteria.*
2. **Radical Pair Mechanism in Avian Magnetoreception:** *Ritz et al. (2000) proposed that cryptochrome proteins in bird retinas enable geomagnetic sensing through quantum entanglement.*
3. **Quantum Tunneling in Enzymes:** *Klinman and Kohen (2013) discussed proton tunneling as a contributor to enzymatic rate enhancements.*
4. **Olfaction via Quantum Tunneling:** T*urin (1996) introduced vibrational theory as an alternative to lock-and-key, later expanded with experimental support and debate.*
5. **Consciousness and Quantum Mechanics:** *Penrose and Hameroff (1996) formulated the Orchestrated Objective Reduction model, though it remains speculative and controversial.*