Biological Neural Networks & Hybrid Systems

Organoid Intelligence

- Lab-grown brain tissue
- Real biological neurons
- Learning and adaptation

Brain-Computer Interfaces

- Neural signal recording
- Bidirectional communication
- Neuralink, BrainGate

Hybrid Bio-AI Systems

- Biological neurons + silicon
- Wetware-software integration
- Novel computing paradigms

Ethical Considerations

- Consciousness questions
- Research regulations
- Long-term implications

🔬 Bio-Digital Fusion

Hybrid biological-artificial neural systems represent the frontier of AI research, potentially achieving human-like learning efficiency and adaptability for medical applications.