

The Challenge: Repairing the Human Body

We are the "they," working as bioengineers to

- Reprogram cells
- Grow neural networks
- Direct evolution





12 Weeks of Biology and Engineering!

Cell High **Tissue Biomaterials** Quantum Growth, Morphogenesis, **Throughput** Information Organization Migration, **Biologic Data Stem Cells** Adhesion, Genetic Cellular Host Regulation Mechanics, **Engineering Integration Dynamics Transport**

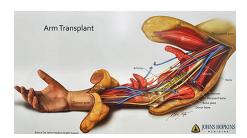


Tools for Damaged / Dysfunctional Organ

Medicine



Transplantation



Cell/Tissue Engineering





Artificial Organ

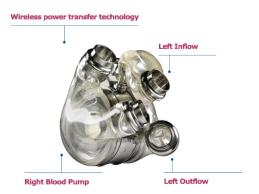


Figure adapted from Cell and Tissue Eng 2012

commons.wikimedia.org

www.hopkinsmedicine.org http://www.abiomed.com/products/heart-replacement/

http://en.wikipedia.org/wiki@acanti_mouse





Thank you!

