Closed-Loop Systems Today

In the Body

In the ICU

In the OR
Closed-Loop Systems Tomorrow

Adding patient sensing and actuation: Smart Rehabilitation

Adding context: Smart diabetes management

Adding people: Smart decision-support for high-value pathways
Some Issues For This Panel

• Challenges around data and models:
  – Biology vs. phenomenology
  – Data overload
  – Individualization and adaptation

• Challenges around implementation:
  – Ergonomics/interaction in human contexts
  – Risk assessment in the action loop
  – Verification: Security/privacy/safety

• Challenges around regulation:
  – What is safe/secure/reliable?