Communities of Interest and Guiding Visions

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Communities of Interest

Communities of Interest (COIs)

- Advanced Electronics
- Air Platforms
- Autonomy
- Biomedical (ASBREM)
- Counter-IED
- Counter-WMD
- Cyber Security
- Electronic Warfare / Electronic Protection
- Energy & Power Technology
- Engineered Resilient Systems
- Ground & Sea Platforms
- Human Systems
- Command, Control, * Comms, Computers, and Intelligence (C4I)
- Materials & Manufacturing Processes
- Sensors & Processing
- Space
- Weapons Technologies

* Command, Control, Comms, Computers, and Intelligence (C4I)

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Communities of Interest

- Drive S&T portfolio management
- Develop a common picture of international S&T engagement in their area
- Better understands and documents the "successes" produced by the DoD S&T enterprise
- Develop cross-Component research roadmaps
- Interact with Industry and Academia to develop research roadmaps
GUIDING VISIONS
Individualized Training for Accelerating Expertise Development

**Goal:** Digital technologies that replicate the very best instructors’ techniques

Individual instruction has significant benefits…but presently is cost prohibitive

Need to ‘bottle’ this instructor’s expertise

**Benefits:** Reduce performance variability and quickly prepare to outperform adversaries

Performance Distribution

![Image](6x132 to 392x303)

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Autonomous Patient Life Support During Evacuation

Maintenance of *mobile* forward surgical capability on a large scale is logistically difficult to support.

Alternative Approach

Infuse principals of autonomy into control of medical life support devices

- Attended care in manned vehicles
- Unattended care in unmanned vehicles

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Restoration of Natural Movement

Challenge: A whole-body solution that will allow humans to use prosthetic devices as naturally as their own limbs
Questions?