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RESEARCH ROUNDTABLE

LOCKHEED MARTIN



Workforce 2030

Impact of Convergence on Innovation

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Converged Life



Infusion of Convergence via STEM Education is critical

In the Talent Wars, Convergence is King



Transforming Engineering, Physical Science and Interdisciplinary Research

Convergence: Mission Critical Innovation

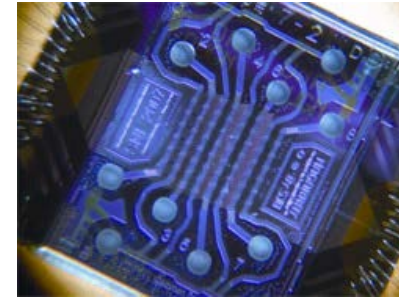
- Mass Collaboration
- Rapid pathogen detection
- Geospatial visualization and data fusion
- Open source epidemiological models
- Personalized Medicine and the EHR of the Future by linking *Clinical Care and Biomedical Research*



Innovation in Adaptive Science requires Convergence



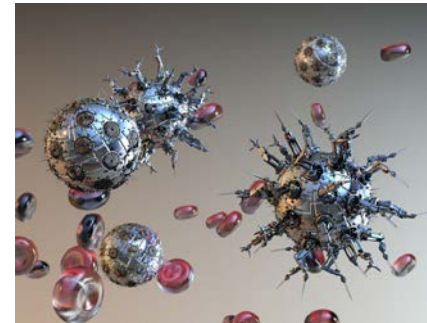
Robo-morphics



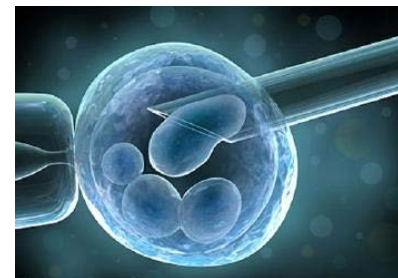
Nano sensors / fabrics

complex in that they are dynamic networks of interactions, adaptive; in that the individual and collective behavior mutate and self-organize

Neurotechnology



Biomimicry



Synthetic Biology

Workforce 2030

Quantum Biologist

Neuromorphic Architect

Nano-Medic

Microfluidics Designer



Critical STEM / STEAM skills

- *Collaborative orientation*
- *Learning agility*
- *Cultural acumen*
- *Digitally Proficient*

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Disclaimer: the views expressed in this presentation are the author's alone, and do not necessarily represent the official view of any component or institution with which he is affiliated

