



Government | University | Industry  
RESEARCH ROUNDTABLE

LOCKHEED MARTIN

# Workforce 2030

## *Impact of Convergence on Innovation*



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June 3, 2014

# Converged Life



*Infusion of Convergence via STEM Education is critical*

# In the Talent Wars, Convergence is King



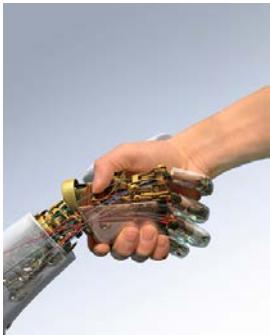
*Transforming Engineering, Physical Science and Interdisciplinary Research*

# 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*

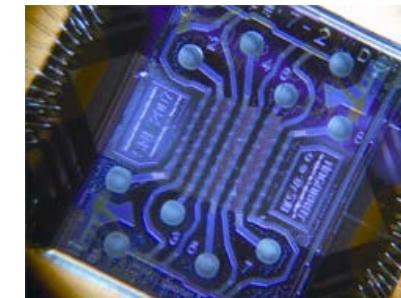


# Innovation in Adaptive Science requires Convergence

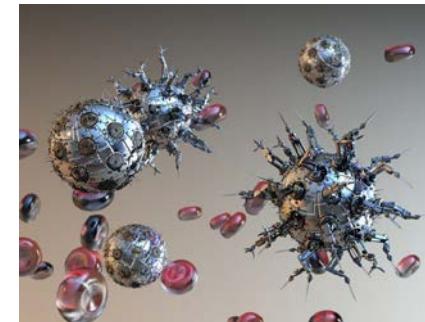


Robo-morphics

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



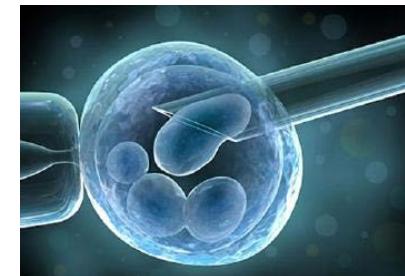
Nano sensors / fabrics



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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