Human Systems CoI

NDIA Human Systems Conference

Dr. Patrick Mason
Chair, OUSD(R&E) Human Systems CoI

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Human Systems CoI Vision

VISION

Develop and deliver technologies to enable, sustain, enhance, and quantify human performance

ENHANCE

ENABLE

SUSTAIN

Subareas

- **Personalized Assessment, Education, and Training**: Right Person, Right Job, and Right Team at the Right Time

- **System Interfaces and Cognitive Processes**: Effective, Natural Human-Machine Teaming

- **Protection, Sustainment, & Warfighter Performance**: Ensuring Warfighter Safety and Survivability

Human Systems CoI - Active Membership

STEERING COMMITTEE

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Ms. Lisa Sanders (SOCOM)*
CDR. Wilfred Wells (OUSD)
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Dr. Thomas Davis (Army)
Dr. Jay Goodwin (Army)
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Dr. Rich Hoffman (Army)
Ms. Rachel Weatherless (Army)
Dr. Jessie Chen (Army)
Dr. Glenn Gunzelmann (AF)
Dr. Mike LaFiandra (Navy)
Ms. Karen Gregorczyk (Army)
CDR Brennan Cox (SOCOM)

Personalized Assessment, Education, and Training

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Dr. Ben Files (Army)
Dr. Greg Ruark (Army)
Dr. Anne Sinatra (Army)
Dr. Ben Goldberg (Army)
Dr. Kimberly Pollard (Army)
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Dr. Rich Hoffman (Army)
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Dr. Melissa Walwanis (Navy)
Dr. Jennifer Winner (AF)
Dr. Natalie Steinhauser (Navy)
Mr. Siddharth Maini (Navy)
Ms. Melissa Garmoe (AF)
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Dr. Christopher Meyers (AF)
Mr. Thomas Rice (AF)
Dr. Christopher Stevens (AF)
Dr. Kendy Vierling (Navy)
Dr. Tiffany Jastrzembski Myers (AF)

Systems Interfaces and Cognitive Processes

Dr. Mark Draper (AF)
Dr. Laurie Fenstermacher (AF)
Dr. Jeff Palumbo (AF)
Mr. Ed Davis (AF)
Mr. Eric Hansen (AF)
Dr. Tom McKenna (Navy)
Dr. Jeff Morrison (Navy)
Dr. Rebecca Goolsby (Navy)
Dr. Katherine Cox (Army)
Dr. Caroline Mahoney (Army)
Dr. Jeff Hansberger (Army)
Dr. Edward Palazzolo (Army)
Dr. Lisa Troyer (Army)
Dr. Dale Russell (Navy)
Dr. Tammy Chelette (AF)
Dr. Vince Schmidt (AF)
Mr. Siddharth Maini (Navy)
Dr. Dave Scribner (Army)
Dr. Jessica Jones (Navy)
Dr. Chris Brill (AF)
Dr. Griffin Romigh (AF)
Dr. Aaron Rowen (Navy)
Dr. Dan Zelik (AF)
Dr. Joe Lyons (AF)
Dr. Gloria Calhoun (AF)
Dr. Amber Solomon (Army)
Dr. Deirdre Mahle (AF)
Dr. Eric Vorm (Navy)

Protection, Sustainment, and Warfighter Performance

Dr. Logan Williams (AF)
Dr. Peter Squire (Navy)
Ms. Karen Gregorczyk (Army)
Dr. Mike LaFiandra (Navy)
CDR Brennan Cox (SOCOM)
Dr. John Ramsay (Army)
LCDR Garrett Morgan (Navy)
Dr. Karl Van Orden (Navy)
Dr. Sandra Chapman (Navy)
Dr. Seth Faith (AF)
Dr. Brian Williams (Navy)
Dr. Karen Kelly (Navy)
Dr. Joel Bixler (AF)
Dr. Casey Pirnstill (AF)
Dr. Alex Kniffin (Navy)
Dr. Keith King (Navy)
Dr. Tim Bentley (Navy)
Dr. Jeff Schiffman (Army)
Dr. Erin Stomberg (Army)
Dr. Jason Foley (AF)

Human Systems CoI Taxonomy/Mission

Sub-Areas	Mission	Current Thrusts
Personalized Assessment, Education, and Training	***Right Person, Right Job, and Right Team at the Right Time*** A readiness ecosystem to identify and develop knowledge, skills, competencies, and experiences to be mission ready for the 21st century operating environment	**Personnel Selection and Assignment** **Instructional/Training Design, Assessment, and Readiness Monitoring** **Advanced Learning Technologies**
System Interfaces and Cognitive Processes	***Effective, Natural Human-Machine Teaming*** Warfighters teamed with agents and machines through intuitive, individualized, and adaptive interactions	**Understanding Human/Cognitive Processing** **Human-Machine Interaction and Aiding** **System-Level Interfaces and Teaming**
Protection, Sustainment, and Warfighter Performance	***Ensuring Warfighter Safety and Survivability*** Enable superiority of Warfighters by understanding and overcoming operational stressors and providing protection from threats in their environment	**Sensing, Monitoring, and Assessment** **Enhancement Technologies and Techniques**

Transition Pathways

- Insertion of the technology into a DoD program (either a new start program or a program improvement plan)
- Software implemented on existing system
- Follow-on technology maturation program
- Transitioned to industry (defense or commercial)
- Transitioned to other Government Agency
- Fielding a new capability

CoI-Industry Touchpoints

- Defense Innovation Unit (DIU) visit – San Francisco, Oct 2024
- DEVCOM Soldier Center/MIT-LL/ The Engine – Boston, April 2025
- IITSEC
- MHSRS
- NDIA Human Systems Conference
- HSCoI Quarterly Newsletter
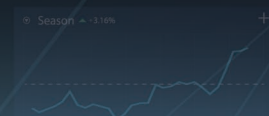   - Kstilling@sainc.com

- Opportunity for Industry and Federal Government to collaborate on research and development (R&D)

- Opportunity to leverage resources (e.g., people, laboratories)

- Provide "input" during writing of Requirements

- Better develop story of warfighting capabilities that Human Systems R&D delivers to DoD

- Better track flow of development of technology across industry, academia, and government; be able to tell full story of capability development from start to finish (e.g., Intel Inside)

- Feedback on value gained from participation in CoI and NDIA HS Division interactions is welcomed, as are suggestions on what could make interactions more valuable

BACKUP

Open Human Systems BAAs

- Continuing Human Enabling, Enhancing, Restoring, and Sustainment (CHEERS)
- Airman Readiness Medical Research (ARMR)
  (Hybrid BAA – FA8650-20-S-6008)
- Adv Dev for Enhanced Performance Tech (ADEPT)
  (ARA With Calls – FA8650-20-S-6009)
- Adv Dev of Enhanced Operator Capabilities (ADEOC)
  (Hybrid ARA – FA8650-21-S-6005)
- Research Methods and Technologies for Blended Live and Synthetic Personalized Learning, Modeling and Assessment Open Broad Agency Announcement (FA8650-20-S-6099)
- Projects in Support of Naval Aviation Integrated Warfighting Capability
- Projects in Support of Naval Aviation - Human Systems N00421-24-S-0001