



2011 SEAri Annual Research Summit

# Welcome and Introductions

Dr. Donna H. Rhodes

Dr. Adam M. Ross

**October 21, 2011**

**Cambridge, MA**

**Massachusetts Institute of Technology**

MIT ESD

Engineering Systems Division

# Systems Engineering Advancement Research Initiative (SEAri)

## SEAri Group Research Mission

***Advance the theories, methods, and effective practice of systems engineering applied to complex socio-technical systems through collaborative research***

2010/2011 Sponsors:

US Air Force, Singapore Defense Sciences & Technology Agency, DARPA, MIT Portugal Program, selected US Government Agencies

**292 Main Street**

**E38-575**

# SEAri Leadership and Affiliated Faculty

**Leadership**

- Dr. Donna Rhodes, Director and Principal Research Scientist
- Dr. Adam Ross, Lead Research Scientist

**Internal Advisory Board**

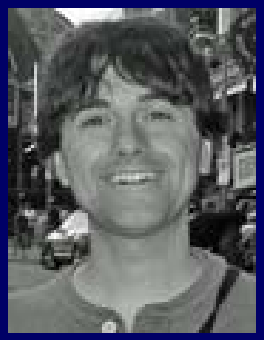
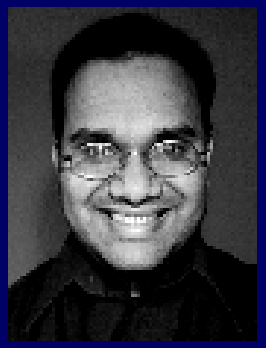
- Professor Daniel Hastings, Aero/Astro, ESD (Chair)
- Professor Debbie Nightingale, Aero/Astro, ESD, CTPID Director
- Mr. Pat Hale, SDM Program, ESD

**Affiliated Faculty**

Eight by declared interest and/or association with sponsored research

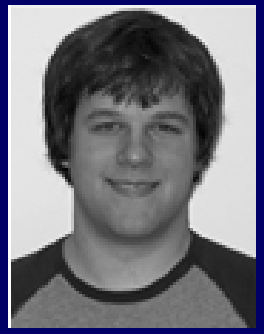
# Doctoral Research Assistants and Affiliated Students

- Brian Mekdeci, ESD PhD Candidate
- Nirav Shah, Aero/Astro PhD Candidate
- Paul Grogan, ESD PhD Student
- Matthew Frye, MechE PhD Candidate
- Henrique Gaspar, Visiting PhD Student, NTSU


# Graduate Research Assistants and Affiliated Students

- J. Clark Beesemyer, Aero/Astro SM Student
- Matthew Fitzgerald, Aero/Astro SM Student
- Dan Fulcoly, Aero/Astro SM Student
- Nicola Ricci, Aero/Astro SM Student
- Erik Stockham, Aero/Astro SM Student
- Amanda Rohrbach, TPP SM Student



# SEAri Alumni Invited Speakers

- Professor Zoe Szajnfarber, George Washington Univ.
- Dr. Andrew Rader, Com Dev, Mission Dev Group

# Introductions

Please share:

- Your name
- Your organization and position

- *Optionally – brief remarks on challenges and uncertainties your organization is facing*

***GOALS for SUMMIT***

Given the complexity and lifespan of modern systems and systems-of-systems, along with changing budgets, technologies, and missions, creating the right system capabilities for the right time is essential, not just during the design phase, but throughout full operational life.

Three complementary approaches to enable this imperative are ingenuity, innovation, and ilities-based

*Dialogue with colleagues on challenges and strategies for dealing with uncertainty.*