



Ted and Karyn Hume

# Center for National Security and Technology

Jeffrey H. Reed, Interim Director  
Willis G. Worcester Professor  
[reedjh@vt.edu](mailto:reedjh@vt.edu) (540) 231 2972

*A Research  
Center of:*



ICTAS

INSTITUTE *for* CRITICAL TECHNOLOGY  
*and* APPLIED SCIENCE *at* Virginia Tech



VirginiaTech  
*Invent the Future*

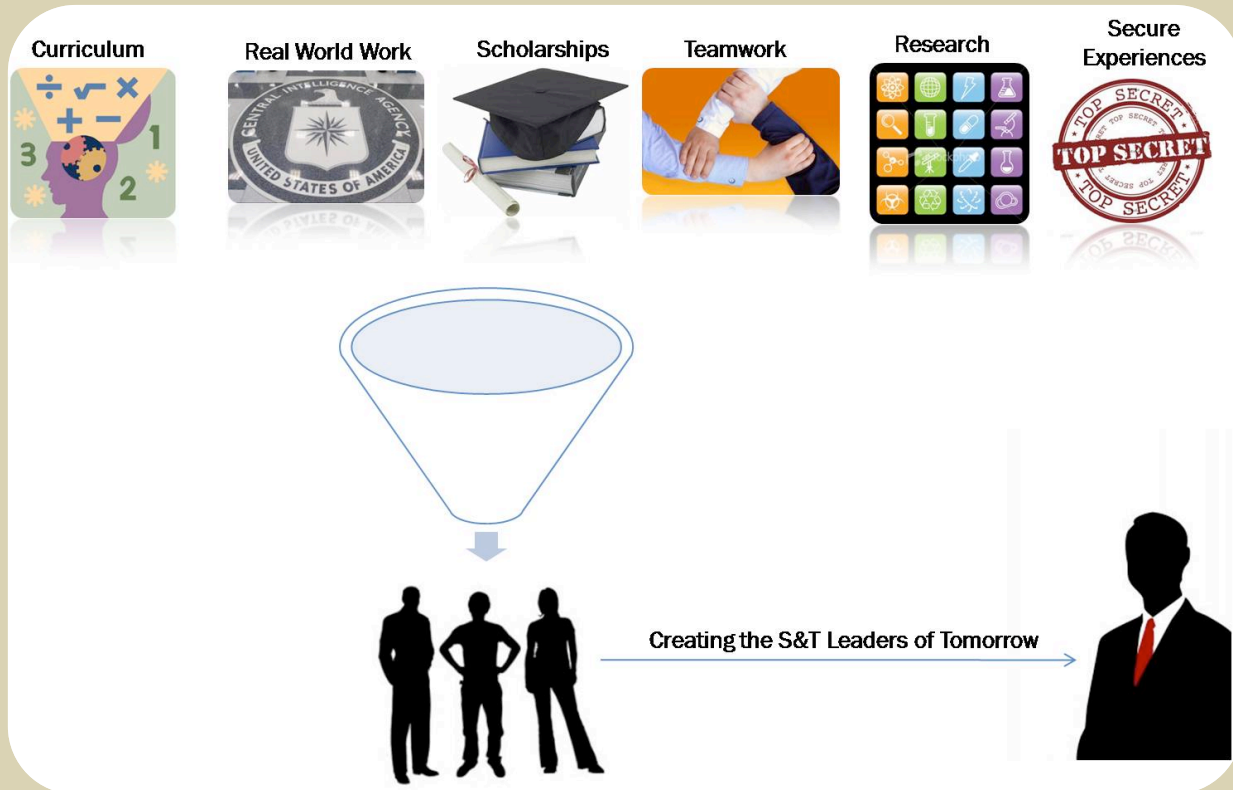
# Addressing the Need

- **Critical** need for US Citizens with advanced degrees in Science and Technology across the Intelligence Community and National Security spectrum
- Ted and Karyn Hume Center for National Security and Technology developed to directly address this need

# Vision - Mission

- Vision
  - To create a capability and framework that provides a sustainable pipeline of science and technology leaders for the Intelligence Community.
- Mission
  - Increase awareness of the mission of National Security and engage students and faculty
  - Combine technical expertise with mentoring, real-world research experience, and a business sense of the Intelligence Community to create graduates with leadership potential
  - Foster relationships between universities and the Intelligence Community to meet the priority research needs of National Security

# Student Focused



- *“Students who intern in National Security invariably accept full time positions with the Intelligence Community due to the excitement and meaningful impact of their work... we want this research center to be student-centric with an emphasis on scholarships, fellowships and leadership development.”*

**Dr. Jeffrey H. Reed**

# Holistic Development

Commitment  
to  
Mission

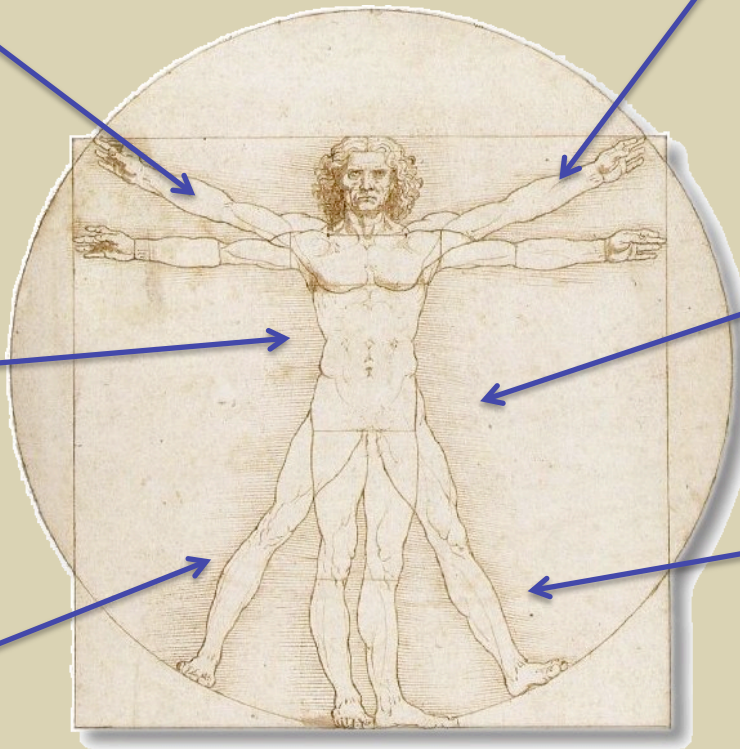
Niche Skills  
+  
Breadth

Secure  
Experiences

Mentoring

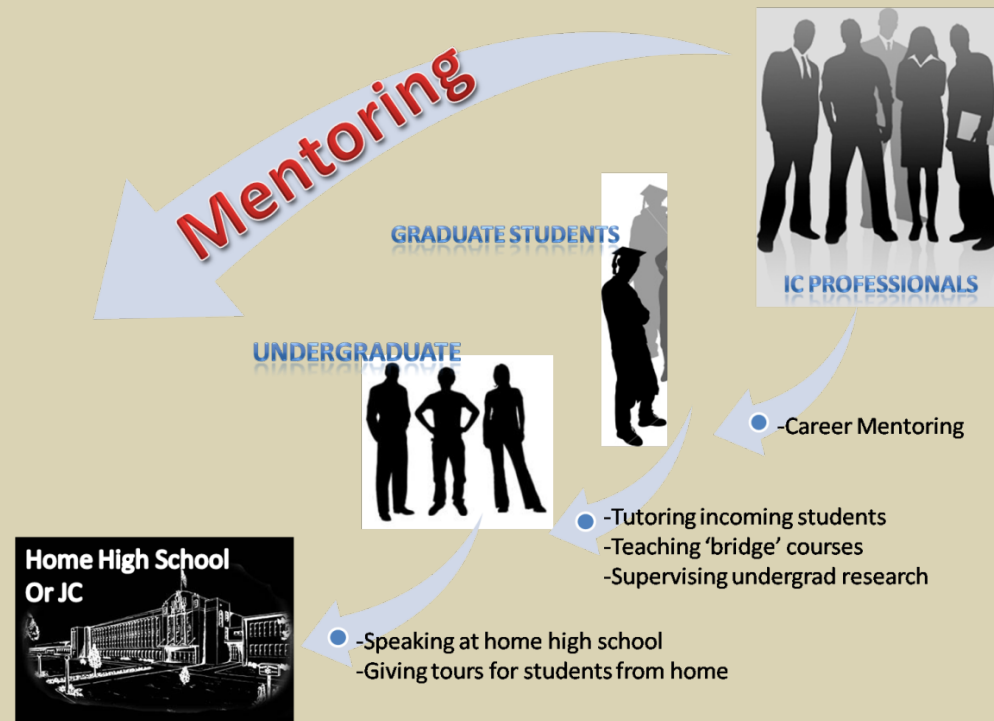
IC Business  
Sense

Conflict /  
Negotiation  
Resolution



## Making Future Leaders

# Developing the Pipeline



- Must develop a sustainable pipeline of US citizens entering STEM
  - Junior Colleges, High School, Middle School
- Need based scholarships will help us find those problem solvers who might never have considered the IC as a career

# Codename: MacGyver Center

- Every good IC /DoD project has a codename
- We want to create technically elite graduates who can problem solve, think critically, and Commit to the Mission



# Our Starting Position

- Endowment by Ted and Karyn Hume for student fellowships
- Tenured faculty slot to be filled by permanent director
- New NSA certified secure facilities (20,000 sq. ft.) and clearances going forward
- Awarded Intelligence Community Center for Academic Excellence (IC-CAE) with Howard University -- 50+ student participants
- Strong organized alumni base in intel community VT-IDEA
- Executive Masters Degree in Information Assurance starting 2011
- Initial classified contract in the works
- In discussions with IC on teaching and outreach projects
- Agent in Residence for Fall 2010
- Advisory Board Meeting in preparation



# Strategy

- Key Issue: Define what makes us unique
  - Technical strengths
  - Relationships
- Potential Targeted Technical Areas
  - Embedded devices and/or modern wireless security
  - Cognition for collection and management of data
  - Open source software tools
  - Interdisciplinary open source Ops Centers
  - Others?
- Relationships
  - Extremely strong educational ties with IC
  - Build through faculty/student/post-doc internships
  - Build through alumni

# What We Need

- Close Government/ Industry Participation
  - Student research projects
  - Mentors and speakers
  - Additional security clearance sponsorship for faculty and students
  - Internship opportunities for students
  - Baseline support for infrastructure
- Additional Fellowships