Alternate Funding Opportunities

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The Bernard M. Gordon Center for Subsurface Sensing & Imaging Systems (Gordon-CenSSIS)

- National Science Foundation Engineering Research Center
- 10-year grant funded in 2000, ~$39 Million
- Headquartered at Northeastern
- *Paying industrial membership a requirement*

**Gordon-CenSSIS Vision: Diverse Problems, Similar Solutions**

- **Subcellular Biology**
  - 100 nm – 100 µm

- **Tissues & Organs**
  - 10 µm – 10 cm

- **Underground Diagnosis**
  - 1 cm – 100 m

- **Underwater Exploration**
  - 10 cm – 1 km
The ALERT Mission Directly Contributes to the Ability of DHS to Protect the Homeland

**Mission**
- Conduct Cutting Edge Research to Counter Explosives Threats
- Transition Innovative Technology to the Field
- Collaborate with End Users
- Identify Technology Gaps
- Prepare Students and Practitioners for the DHS Workforce

**Stakeholders**
- DHS S&T
- TSA
- First Responders
- National Labs
- Small Companies
- Large System Houses
- National Guard/DoD
- Academia
- FEMA

**Research**

**Transition**

**Outreach**

**Education**
Multi-Theme Conferences Held Quarterly
Engage Industry

Research to Reality (R2R) Conference
- Transition Theme
- Held Annually in October
- Technologies from Different Points of View
- ~ 400 Attendees
  Students, Researchers, Industry, Gov’t

ASPIRE (Annual Student Pipeline to Industry Roundtable Event)
- Held Annually in the Spring
- Presentations by Industry and Students
- Networking between Industry Members
- ~ 80 Attendees

FEMA Research to Resilience
- Held September 2012
- Research Demonstrations
- ~ 120 Attendees
  Researchers, Industry, Gov’t
Pathways to Alternate Funding Sources

Gordon-CenSSIS → ALERT → Other BAAs

JAII

MASSACHUSETTS TECHNOLOGY COLLABORATIVE
A Key Element of the ALERT Transition Strategy: Government, Industry & National Lab Links
Taking Industrial Collaboration to the Next Level

<table>
<thead>
<tr>
<th>Large Companies</th>
<th>Small Companies</th>
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<tbody>
<tr>
<td>Raytheon</td>
<td>PHOTO DIAGNOSTIC Systems</td>
</tr>
<tr>
<td>AS&amp;E</td>
<td>EOS PHOTONICS Quantum Metrology &amp; Applications</td>
</tr>
<tr>
<td>SIEMENS</td>
<td>IDSS Integrate Defense &amp; Security Solutions</td>
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<tr>
<td>analogic</td>
<td>EMI Tech Inc Nanotechnology Research &amp; Development</td>
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- Many successful joint proposals
  - As prime & sub
  - ALERT searches for opportunities
  - Multiple agencies: DHS, NSF, DARPA, etc.
- Raytheon, Bubble, CenSSIS won 3 proposals with a total of $400M awarded

Dual-tier system allows for multifaceted collaboration and technology transition
MA Industrial Collaboration with ALERT Facilitated the Environment for Effective Transition

- John Adams Innovation Institute (JAlI)
- $1.6 Million (2009 – Present)
- Supports work on transition projects
- 1:1 Industrial matching resources required
- ALERT identifies its transition partners
Massachusetts State Funding Enables ALERT to Build Effective Bridges for Transition

Portal and Standoff Bulk Screening Technologies

- Lockheed Martin
- HXI
- AS&E

Trace Detection Technologies

- Block Engineering
- EMI Tech Inc.
- AGILTRON

Video and Perimeter Surveillance

- Raytheon

Advanced Materials Testing

- Textron Systems

- Siemens

- Massachusetts Technology Collaborative
To Forge A Close Collaboration, Industry Must Have “Skin in the Game”

- Frequent Engagement a must
  - Meetings – Industry-centric
  - Phone calls
  - Inclusion in decision making process

- Joint funding opportunities

- Eases Technology Transition

- Creating value-add is a win-win-win for all parties