



ARL

Thomas Mulkern

Technology Transfer and Outreach Office - Mechanisms

U.S. Army Research Laboratory



Incubation Center That Revolves Around Govt Labs, Academia, Small Business, and Industry Collaboration

- Partners Include (foreign and domestic):
 - Academia
 - Industry, Small Business
 - Government, Military
- Research Efforts Align with both Partner Research Interests and ARL S&T Campaigns



Benefit to Partners: Open Campus Provides **ACCESS to ARL Staff, ARL Facilities and Army Challenges**



Master CRADA

- Multiple projects possible under CRADA
 - Legal component
 - IP protected
 - Technical Component
 - Joint Work Statements (JWS)
- Share Data, Facilities, Equipment
- In-kind Contributions
- Multiple campuses / divisions
 - Reduced staffing time

CRADA
between
U.S. ARMY RESEARCH LABORATORY
and
(COLLABORATOR)
ARL CRADA# (XX-XX)

	COLLABORATOR	US ARMY RESEARCH LABORATORY
ACRONYM:	COLLABORATOR	ARL
LEGAL POC:	Name Title/Office Phone Email	Name Title/Office Phone Email
PROGRAM MANAGER:	Name Title/Office Phone Email	Name Title/Office Phone Email
SIGNATORY:	Name Title Organization Phone Email	Name Title Organization Phone Email
MAILING ADDRESS:	Organization Division Address City, State ZIP	Organization Division Address City, State ZIP



CRADAs Support the Open Campus Ecosystem
Enable Robust Exchange of Personnel, Data and Facilities



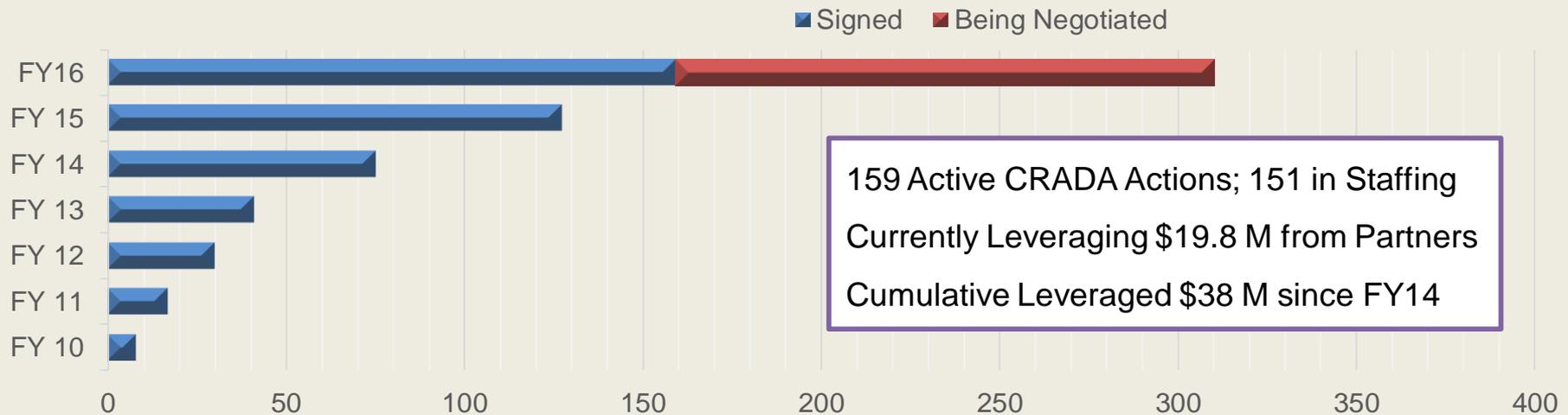
Active CRADA Collaborators: 89

- 33 Academia, 56 Industry

In-Process CRADA Collaborators: 79

- 41 Academia, 38 Industry

CRADA Actions (Cumulative)

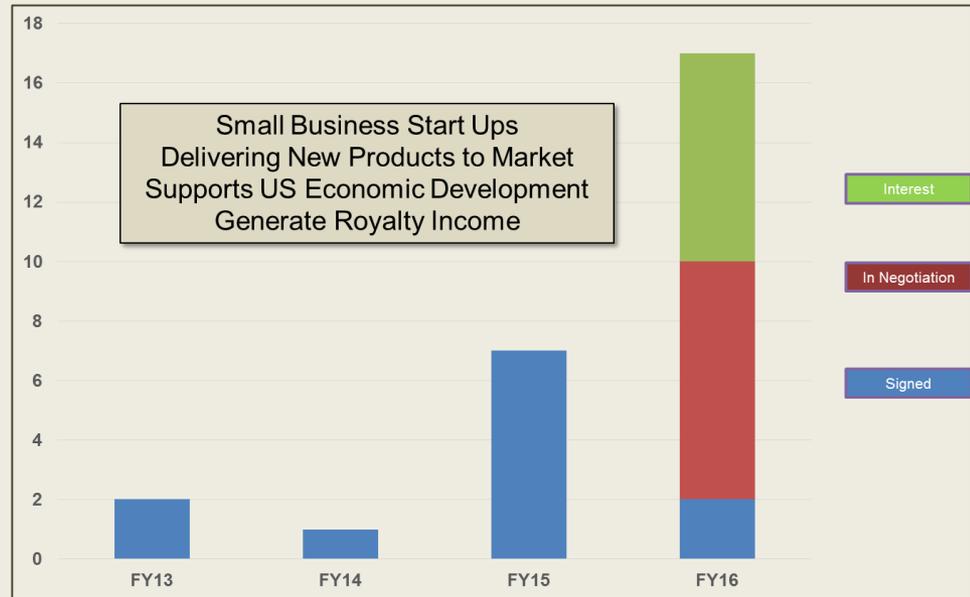




Partnership Intermediaries



MBA Programs





Exchange Staff

- Government
- Industry
- Faculty
- Post Docs
- Recruit

Leverage Facilities

- In House Labs
- Enhanced Use Lease
- Equipment

Share Data

- Joint Proposals
- Reports
- Joint Publications

Intellectual Property

- Joint IP Generated
- Protect IP
- License IP

Characterization and Modeling of Energy Scatter in a Metallic Powder Bed

DARPA

Joint Proposal

UTEP PENNSTATE ARL

Martukantz et al., J. Laser App, 2007

UNIVERSITY OF MASSACHUSETTS
AMHERST 1863

Carbon nanotube thread
Textile-integrated antenna

Flexible antenna on patterned high-magnetic permeability substrate

GPS Navigation Satellites
Hostile Jamming Signal(s)
100 W GPS Jammer

Wearable Anti-jam GPS Antenna Array
CRPA Control Board (e.g. NovAtel/GA/T-AE)

Wearable anti-jam GPS antennas for dismounted soldier



The screenshot shows a web browser window displaying the ARL Open Campus Open House 2015 website. The page title is "Collaboration Opportunities". Below the title, there is a paragraph explaining ARL's Open Campus business model and a call to action to browse opportunities and select areas of interest. A search bar and a dropdown menu for "Assessment and Analysis" are visible. The main content area features six cards, each representing a different collaboration opportunity with a title, description, and Principal Investigator's name.

Collaboration Opportunities

ARL's Open Campus business model fosters entrepreneurial engagement and supports collaboration between ARL, academia, government, industry, and small business, both nationally and globally, to help find solutions to some of the nation's most pressing defense and security issues.

Browse our collaboration opportunities below and select one or more areas of interest.

Then tell us about yourself and your own ideas on the [My Selections](#) page.

Browse by campaign area:
Assessment and Analysis

Search:

- Assessment and Analysis
- Collaboration Mechanisms
- Computational Sciences
- Human Sciences
- Information Sciences
- Material Research
- Sciences for Lethality and Protection
- Sciences for Maneuver

#AA02	#AA03	#AA04	#AA05	#AA06
Applying Survivability Analysis to Body Armor Decisions	Remote Sensing of Physiological Signatures	Methodologies for Aviation Systems V/L Analyses	Understanding Military Relevant Injury Mechanisms	Computed Tomography Analysis for Ballistic Research Applications
<i>Principal Investigator</i> Rebecca Vanamburg	<i>Principal Investigator</i> Cameron Good	<i>Principal Investigator</i> Marianne Kunkel	<i>Principal Investigator</i> Dr. Karin Rafiels	<i>Principal Investigator</i> Nitin Moholkar

http://www.arl.army.mil



U.S. ARMY
RDECOM



Questions

Visit Us During Poster Session



CORNELL UNIVERSITY

DREXEL UNIVERSITY

GEORGIA INSTITUTE OF TECHNOLOGY

JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

LEHIGH UNIVERSITY

MICHIGAN TECHNOLOGICAL UNIVERSITY

MISSISSIPPI STATE UNIVERSITY

TRIAD OF EUROPEAN UNIVERSITY

PENNSYLVANIA STATE UNIVERSITY

SOUTHWEST RESEARCH INSTITUTE

STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

STATE UNIVERSITY OF NEW YORK AT BUFFALO

TEXAS A&M ENGINEERING EXPERIMENT STATION (TEES)

THE CURATORS OF THE UNIVERSITY OF MISSOURI ON BEHALF OF
 MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

THE UNIVERSITY OF MASSACHUSETTS AMHERST

THE UNIVERSITY OF MASSACHUSETTS DARTMOUTH

THE UNIVERSITY OF MASSACHUSETTS LOWELL (UMASS)

THE UNIVERSITY OF TEXAS SYSTEM

UNIVERSITY OF CENTRAL FLORIDA

UNIVERSITY OF CONNECTICUT

UNIVERSITY OF DELAWARE

UNIVERSITY OF DENVER & DREXEL UNIVERSITY

UNIVERSITY OF KANSAS

UNIVERSITY OF MARYLAND

UNIVERSITY OF MARYLAND BALTIMORE COUNTY

UNIVERSITY OF NORTH TEXAS

UNIVERSITY OF NOTRE DAME

UNIVERSITY OF SOUTH HAMPTON UK

UNIVERSITY OF SOUTHERN CALIFORNIA

UNIVERSITY OF UTAH

UNIVERSITY OF VIRGINIA

VIRGINIA COMMONWEALTH UNIVERSITY



3D SYSTEMS CORPORATION

3M

ACELLENT TECHNOLOGIES

AGILE DEFENSE, LLC.

ALBANY ENGINEERING COMPOSITES INC

ALCOA DEFENSE, INC.

ALLIANT TECHSYSTEMS INC., ADVANCED
WEAPONS (ATK)ALLIANT TECHSYSTEMS OPERATIONS LLC,
GASL OPERATIONS

ALLIED MINDS

ARETÉ ASSOCIATES

ARTIS

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BAE SYSTEMS LAND & ARMAMENTS L.P.
(BAE SYSTEMS)

BASF CORPORATION

BOEING COMPANY

CBRITE INCORPORATED

COASTAL ENVIRONMENTAL SYSTEMS (CES)

COMMONWEALTH CENTER FOR ADVANCE
LOGISTICS SYSTEMSCOMMONWEALTH CENTER FOR ADVANCE
MANUFACTURING

CONSOLIDATED RESOURCE IMAGING

COORSTeK VISTA

CORPORATION FOR NATIONAL RESEARCH
INITIATIVES

DRS RSTA, INC. & EPIR TECHNOLOGIES

E. I. DUPONT DE NEMOURS & CO. INC

ENSCO, INC.

ETREMA PRODUCTS INC. (EPI)

FEDERAL CARTRIDGE

GO XTUDIO

HEXATECH

HONEYWELL SAFETY PRODUCTS

INTEGRATA SECURITY, LLC

KURT J. LESKER, CO.

L3 COMMUNICATIONS

LIFEBATT

LOCKHEED MARTIN

LOGOS TECHNOLOGIES LL(LOGOS)

NEW HORIZON FOUNDATION

NFL UA GE

NOVUSONIC CORPORATION

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PDES, INC.

PPG INDUSTRIES, INC.

ROCKWELL COLLINS

SCIENCE APPLICATIONS INTERNATIONAL
CORPORATIONSIMMONDS PRECISION PRODUCTS, INC
(UTAS)

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SORAA

SPECTROLAB INC.

STAIB INSTRUMENTS

STEP AFRIKA

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TEXELTEK

TRIJICON, INC.