



# U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMY RESEARCH LABORATORY

**Educational Outreach Opportunities and Programs**

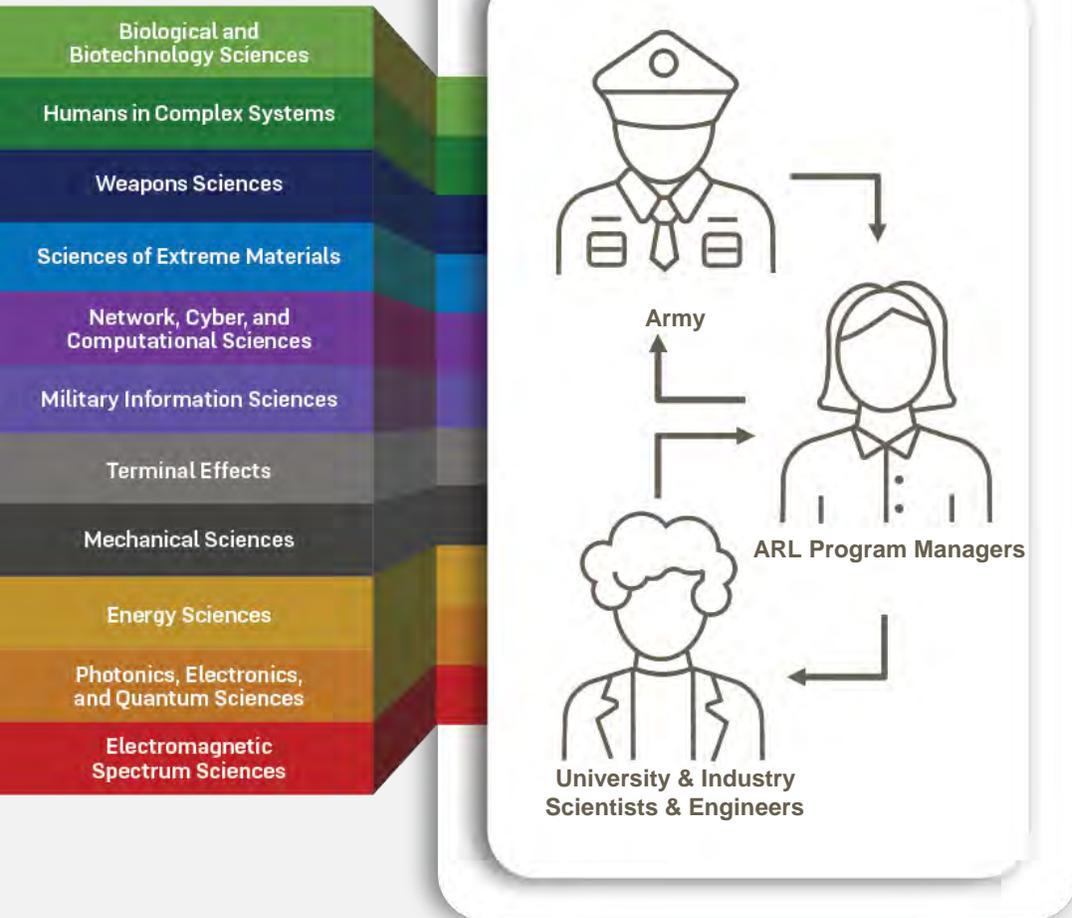
**02 OCT 2023**

DEVCOM ARL | MS. IVORY CHANEY, EDUCATIONAL OUTREACH PROGRAM MANAGER

# HOW WE GROW



# ARO CONNECTS THE ARMY TO EXTRAMURAL RESEARCH



## ARO is the Army's primary face to the Academic Scientific Community.

Program Managers are **subject matter experts** who **have funding authority**.

They play an *active* role in creating and directing new science by brokering relationships and collaborations, guided by Army science and technology strategy.

## ARO capitalizes on the intellectual capital of industry and academic institutions around the world.

Program Managers broker relationships between the Army and these institutions to build a scientific *network*—not a pipeline. **The intention is to facilitate scientific breakthroughs**, which then lead to game-changing future technology.

These networks extend to support the training, education, and recruitment of the next scientific generation—effectively using Science to shape the future of the Army.

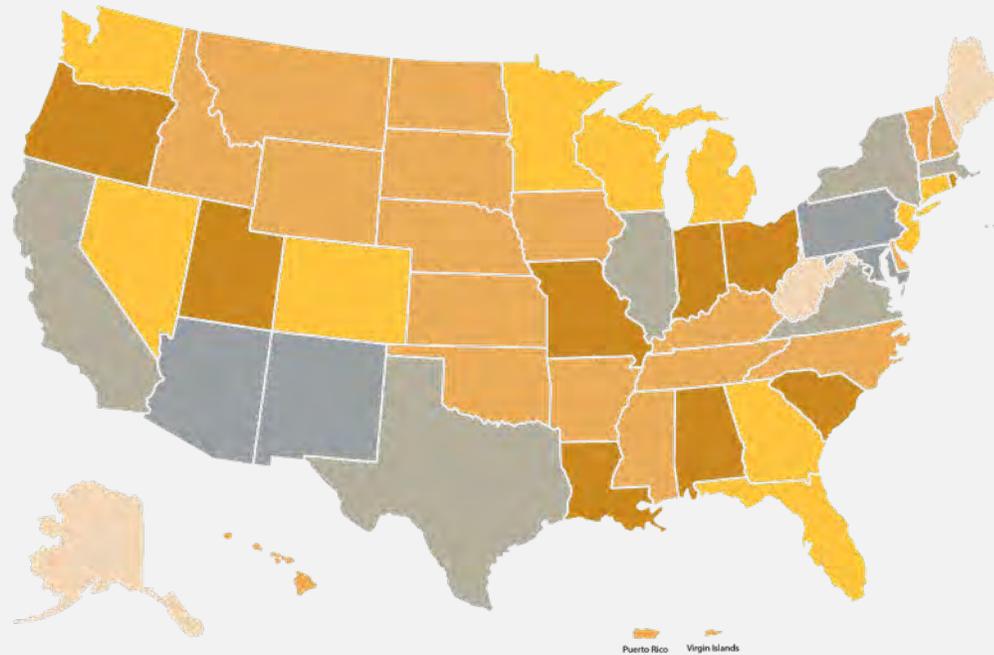
# FUNDING SCIENCE AROUND THE WORLD



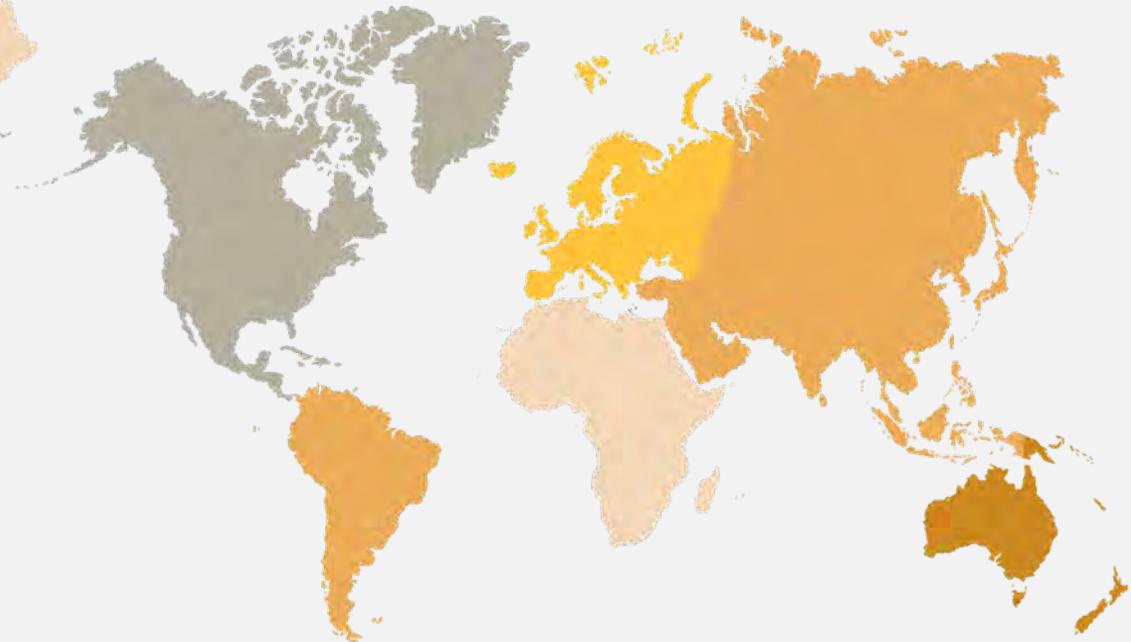
Total/cumulative award amounts for ARO-managed agreements active in FY21



Total/Cumulative Funding for FY21 Active Agreements by State



Total/Cumulative Funding for FY21 Active Agreements by Continent



**ARO Research Activities**

**322**

Institutes of Higher Learning  
(CONUS and OCONUS)

**1192**

Individual Investigators

**43**

States

**32**

Countries

**381,120 sq ft\***

Leveraged University Laboratory Space  
= 20 Story Building

# DEVCOM - ARL PORTFOLIO OF OUTREACH PROGRAMS



## ARL Programs

Summer Student Experience Program (SSEP)

Summer Researcher Program

*Student Orientation; Summer Student Professional Development Series; Summer Student Week; Summer Student Symposium*

ARL/USMA Technical Symposium

ROTC Summer Program

USMA AIAD Summer Program

ORAU Research Associateship Program (RAP)

National Research Council (NRC)

Educational Partnership Agreements (EPAs)



## Army Educational Outreach Program

Undergraduate Apprenticeship Program

Graduate - Postdoctoral Fellowship

High School Apprenticeship Program

Gains in the Education of Mathematics & Science (GEMS)

Junior Sciences and Humanities Symposium (JSHS)

eCYBERMISSION



## Army/Customer Programs

National Defense Science and Engineering Graduate (NDSEG) Fellowship

Science, Mathematics and Research for Transformation (SMART)

Pathways Internship Program

Pathways Recent Graduate Program

STEM Student Employment Program

Army Civilian Training,

*\*Managed by HR*

Education and Development Systems (ACTEDS)

HBCU/MI Design Competition

DoD Summer Internship Program

HBCU/MI Centers of Excellence

Spelman AI/ML Initiative

DTRA Faculty Fellow Research Team Program

# ARL SUMMER PROGRAM OFFERINGS



## High School Apprenticeship Program

Matches practicing DoD scientists with talented high school students creating a direct mentor-student relationship that provides students with training that is unparalleled at most high schools. The program fosters desire in its participants to pursue further training and careers in STEM. This program is open to students meeting all the following requirements:

- Enrolled in the 10th, 11th, or 12th grade
- 16 years old at time of apprenticeship
- U.S. Citizens or Permanent legal resident

**Duration:** The program is primarily designed for summer, commuter experiences; however, work study and year-round experiences are also available.

**Resources:** Students receive an educational stipend.

**Application:** <https://www.usaeop.com>

**Application Deadline:** February 28th

## Summer Student Experience Program

Provides opportunities for select scientists, engineers and students (Bachelor degree through pre-PhD level) to engage in their choice of research problems that are compatible with or contribute to ARL research efforts. SSE is open to students meeting all the following requirements:

- Enrolled student or non-PhD recent graduates in Science, Technology, Engineering, or Mathematics (STEM) majors
- U.S. Citizens, Permanent Resident, and Foreign Nationals

**Duration:** May through September

**Resources:** ARL can offer a stipend, health insurance stipend supplement, relocation allowance and travel allowance.

**Application:**

<https://orau.org/arlfellowship/applicants/how-to-apply-summer-student-experience.htm>

**Application Deadline:** February 28th

## Army/Customer Programs

The ROTC Program is a summer enrichment program for ROTC college students in STEM related disciplines.

The Internship programs are leader development initiatives and a catalyst to help develop, retain, and ultimately commission quality ROTC Cadets as Second Lieutenants. All Cadets participating in these programs are volunteers and should be treated as junior staff officers.

**Duration:** Program runs 28 days during July through August. Students work 40 hours a week.

**Resources:** ROTC students are eligible to receive cadet pay based on academic and military rank. Transportation and housing resources are provided by cadet command.

Interested cadets should apply through their Brigade.

**Application Deadline:** December 1st

# ARL SUMMER PROGRAM OFFERINGS



## Undergraduate Apprenticeship Program

Matches practicing DoD scientists with talented undergraduate students creating a direct mentor-student relationship, providing participants with training that is unparalleled at most colleges. This program is open to students meeting all the following requirements:

- Enrolled undergraduate students or recent graduates (within past six months)
- Science, Technology, Engineering, or Mathematics (STEM) majors
- U.S. Citizens or Permanent Residents

**Duration:** The program is primarily designed for summer, commuter experiences; however, work study and year-round experiences are also available.

**Resources:** Students receive an educational stipend.

**Application:** <https://www.usaeop.com>

## Post-College/Faculty/Senior Programs

### ARL Fellowship Program

Provides opportunities for select scientists, engineers and students (Bachelor degree through pre-PhD level) to engage in their choice of research problems that are compatible with or contribute to ARL research efforts.

ARL Fellowships are managed through two cooperative agreements:

**ORAU:** [www.orau.org/arl/fellowship](http://www.orau.org/arl/fellowship)

**NRC:**

<https://sites.nationalacademies.org/PGA/Fellowships/ARL/index.htm>

**Duration:** The program operates year round to provide the Directorates maximum flexibility and ranges from a number of weeks to a year. Renewal option is available for most Fellows up to a maximum of three years.

**Resources:** Depending on the type of Fellowship and the needs of a specific Fellow, ARL can offer a stipend, health insurance stipend supplement, relocation allowance and travel allowance.

### Oakridge Associate Universities (ORAU)

**Postdoctoral:** less than 5 years post-PhD

**Senior Fellow:** More than 5 years post-PhD

**Short Term Fellow:** A Postdoc or Senior Fellow at ARL for up to 20 weeks

**Journeyman Fellow:** A non-PhD (BA/BS or working on graduate degree)

**Summer Student Experience:** A summer student or non-PhD post-graduate

### National Research Council (NRC)

**Postdoctoral Fellow:** less than 5 years post-PhD

**Senior Fellow:** More than 5 years post-PhD

**Short Term Fellow:** A Postdoc or Senior Fellow at ARL for up to 20 weeks

**Davies Fellow:** Teaches at USMA and conducts research at ARL

**ARL Distinguished Fellow:** up to 5 years post-PhD

- Three year program managed by ARL Fellows
- Awardees selected by ARL Fellows
- Awardees will select their technical research problem

