Defense Established Program to Stimulate Competitive Research (DEPSCoR) Overview

Dr. Jennifer Becker
DEPSCoR Program Manager
Basic Research Office
University of South Dakota DEPSCoR Day

19 July 2022
Defense Established Program to Stimulate Competitive Research (DEPSCoR) Team

Dr. Bindu Nair
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Scientific Advisors
Institute for Defense Analyses (IDA)

Ms. Patricia Gorski
Grants Officer for Air Force Office of Scientific Research (AFOSR)
Defense Experimental Program to Stimulate Competitive Research (DEPSCoR) was created by Congress in FY91 DoD appropriation, and legislatively authorized in 1994.

Defense Established Program to Stimulate Competitive Research (DEPSCoR) was reauthorized in 2017.

Appropriations ($19M): FY22 Defense Appropriations Congressional supplement to the Basic Research Initiatives program line dedicated to DEPSCoR.
Program Goals

DEPSCoR Objectives as mandated by Congress:

1. **Enhance the capabilities** of institutions of higher education (IHE) in eligible State/Territories to develop, plan, and execute science and engineering (S&E) research that is relevant to the mission of the DoD and competitive under the peer-review systems used for awarding Federal research assistance.

2. **Increase the number of university researchers** in eligible States/Territories capable of performing S&E research responsive to the needs of the DoD.

3. **Increase the probability of long-term growth** in the **competitively awarded** financial assistance that IHE in eligible States/Territories receive from the Federal Government for S&E research.
DEPSCoR: Defense Established Program to Stimulate Competitive Research

**Program Goal**
To increase the number of university researchers and improve the capabilities of institutions of higher education in eligible jurisdictions to perform competitive basic research in science & engineering relevant to the DoD mission & reflect national security priorities.

**Key Components**
- Capacity Building
  - DEPSCoR Competition
- Research Collaboration
  - DEPSCoR Competition
- Outreach & Education
Congressionally-directed eligibility criteria: “States or territories that received less than 60% of 1/50\textsuperscript{th} of the total DoD S&E research obligations to U.S. IHE are eligible if a commitment to developing S&E research is demonstrated.”

*Eligible territories include Guam, Puerto Rico, and U.S. Virgin Islands*
Program Goal
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Key Components

Capacity Building
DEPSCoR Competition

Research Collaboration
DEPSCoR Competition

Outreach & Education
DEPSCoR Outreach Events

*Eligible territories include Guam, Puerto Rico, and U.S. Virgin Islands

University of South Dakota
TODAY

University of Rhode Island
Sep 2019

West Virginia University
Fall 2022

University of Arizona
Feb 2022

Louisiana State University
Feb 2020

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**Key Components**
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  - DEPSCoR Competition
- Research Collaboration
  - DEPSCoR Competition
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Research Collaboration DEPSCoR Competition

Integrate new researchers from DEPSCoR-eligible states/territories into the DoD Research Enterprise through mentoring

Program Structure:
- 2-person team from DEPSCoR-eligible States/Territories can apply
  - $200K/year (total cost) for three years
- FOA-AFRL-AFOSR-2022-0006
<table>
<thead>
<tr>
<th>Topic Number</th>
<th>SERVICE</th>
<th>TOPIC AREA</th>
<th>PROGRAM OFFICER</th>
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<tbody>
<tr>
<td>1</td>
<td>AFOSR</td>
<td>Unsteady Aerodynamics and Turbulent Flows</td>
<td>Dr. Gregg L. Abate</td>
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<tr>
<td>2</td>
<td>AFOSR</td>
<td>Condensed Matter Physics</td>
<td>Dr. Jiwei Lu</td>
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<tr>
<td>3</td>
<td>AFOSR</td>
<td>GHz – THz Electronics and Materials</td>
<td>Dr. Kenneth C. Goretta</td>
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<tr>
<td>4</td>
<td>ARO</td>
<td>Solid State Electronics and Electromagnetics</td>
<td>Dr. Joe Qiu</td>
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<tr>
<td>5</td>
<td>ARO</td>
<td>Electrochemistry</td>
<td>Dr. Hugh C. De Long</td>
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<tr>
<td>6</td>
<td>ARO</td>
<td>Mechanical Behavior of Materials</td>
<td>Dr. Dan Cole</td>
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<td>7</td>
<td>ARO</td>
<td>Synthesis and Processing of Materials</td>
<td>Dr. Michael P. Bakas</td>
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<td>8</td>
<td>ARO</td>
<td>Atomic and Molecular Physics (AMP)</td>
<td>Dr. Paul Baker</td>
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<tr>
<td>9</td>
<td>ONR</td>
<td>Ocean Seabed Characterization</td>
<td>Dr. Reginald Beach, Dr. Thomas Weber</td>
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<td>10</td>
<td>ONR</td>
<td>Sustained Adaptability</td>
<td>Dr. Meredith Hutchinson</td>
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<td>11</td>
<td>ONR</td>
<td>Biological Soft Solid Mechanics</td>
<td>Dr. Timothy Bentley</td>
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<td>12</td>
<td>ONR</td>
<td>Adjustable Wavelength and Pulse Duration Sources and/or Adaptive Optics for Ultra Short Pulse Lasers (USPL)</td>
<td>Dr. Quentin Saulter</td>
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<td>13</td>
<td>AFOSR/ONR</td>
<td>Mathematical Optimization</td>
<td>Dr. Warren Adams (AFOSR), Dr. David Phillips (ONR)</td>
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**Ways To Engage with tri-Service Program Officers**

- **Email preferred for most POs**
- **Phone (hit or miss due to travel)**

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<tr>
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<th>AFOSR</th>
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<th>ONR</th>
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Collaborative research grants

Strongly encouraged to flesh out proposal idea with a tri-Service Program Officer listed in the FOA

One white paper submission per Applicant

Collaborator may partner with more than one Applicant

Security clearance is not required to receive award

U.S. citizenship is not required

Approximately 25 proposals will be selected for funding
• Both Applicant and Collaborator must be tenured or tenure-track faculty members with appointments at an IHE in a DEPSCoR eligible State/Territory

• Applicant must be a full-time faculty member who has never served as a PI on a prior DoD-funded award

• Collaborator will collaborate on research AND provide mentorship to the Applicant. Collaborator must have served as a PI on a DoD-funded research award actively between 1 October 2015 and 30 September 2022.

• Each application (white paper) is permitted a single Applicant and a single Collaborator
**DEPSCoR – RC Applicant Eligibility**

**FY22 DEPSCoR Applicant Eligibility**

**Start**

- Is the Applicant faculty at an IHE* in a DEPSCoR state?
  - Yes
    - Is the Applicant in a tenured or tenure-track position?
      - Yes
        - Has the Applicant served as a Principal Investigator on a prior DoD directly funded research Prime award?
          - Yes
            - Does the Applicant’s choice for Collaborator meet all DEPSCoR eligibility requirements?
              - Yes
                - ELIGIBLE
              - No
                - Is there a qualifying letter from IHE* stating the Applicant will be considered for a tenured or tenure-track position?
                  - Yes
                    - NOT ELIGIBLE
                  - No
                    - Is the Applicant in a tenured or tenure-track position?
                      - Yes
                        - NOT ELIGIBLE
                      - No
                        - No
                          - NOT ELIGIBLE

**Start**

* Institution of Higher Education (IHE) must be in a DEPSCOR eligible State/Territory and with an advanced degree granting program in science, mathematics, and/or engineering
DEPSCoR – RC Collaborator Eligibility

Start

- Is the Collaborator faculty at an IHE* in a DEPSCoR state?
  - No
  - Yes
    - Is the Collaborator in a tenured or tenure-track position?
      - No
      - Yes
        - Has the Collaborator been funded on a DoD Prime research award?
          - No
          - Yes
            - Is award period of performance between 1Oct2015 and 30Sept2022?
              - No
              - Yes
                - Is award granted directly to the Collaborator from the DoD?
                  - No
                  - Yes
                    - Is the Collaborator listed as PI directly on the award documentation?
                      - No
                      - Yes
                        - Is the Collaborator listed as PI directly on the award documentation as a Co-PI, Sub-PI, Site Lead or designation other than PI?
                          - No
                          - Yes
                            - Can the Collaborator provide a Government POC that can confirm eligibility?
                              - No
                              - Yes
                                - ELIGIBLE

- Is there a qualifying Letter from IHE* stating the Collaborator will be considered for a tenured or tenure-track position?
  - No
  - Yes
    - Is award or Subaward granted directly to another PI or DoD contractor?
      - No
      - Yes
        - NOT ELIGIBLE
Establishing a Collaboration

Defense Technical Information Center - non-comprehensive repository of government-funded scientific, technical, and engineering information for the DoD.

https://discover.dtic.mil/products-services/

Connect and Collaborate - site where prospective Applicants and Collaborators, seeking collaboration in this DEPSCoR opportunity can post their interest. https://dod-basicresearch.nvision.noblis.org/program/depscor

Discussing proposed research with the Program Officer could identify possible networking leads.
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Key Components
Capacity Building
DEPSCoR Competition

Research Collaboration
DEPSCoR Competition

Outreach & Education
Capacity Building DEPSCoR Competition

Support the strategic objectives of IHEs to achieve basic research excellence in areas of high relevance to the DoD

- Jumpstart capability development in the State/Territory through increased human, technical, and management resources
- Achieve excellence in a DoD-relevant research area through funding to support equipment, education, research, and other relevant activities

Program Structure:
- IHE’s executive office, such as Vice-President of Research, in DEPSCoR-eligible States/Territories can apply
  - $500K/year for 2 years
- FOA-AFRL-AFOSR-2022-0007
Applications must present the opportunities for enhanced academic research and development competitiveness and, if appropriate, industrial or economic competitiveness, for the State/Territory. A strategic plan to sustain the investment after the DEPSCoR award period of performance must be discussed.

Applications must identify basic research gaps currently at the IHE and the required capabilities that need to be developed at the applicant IHE to achieve full and competitive basic research capability in a DoD-relevant research area.

Applications must present a management plan for coordinating multiple thrusts working on a common basic research theme that will fill the research gaps and develop new basic research capabilities. These thrusts could include, but are not limited to, purchasing new equipment, supporting new hires, and support for graduate students and post-doctoral fellows. Adequate provision for substantive commitment by the IHE’s executive offices and appropriate administrative support is an important factor contributing to the success of this Capacity Building effort.
• Applicant institutions are limited to no more than one application under this FOA

• The proposal must be led by a member of the IHE’s executive staff such as the Vice-President for Research who will serve as the Team Lead

• Letters of Recommendation for Commitment / Endorsement are required at the FULL PROPOSAL stage only
Application Process

1. Online registration via RunGrants: https://dod-basicresearch.nvision.noblis.org/program/depscor

2. Whitepaper submission via RunGrants

3. Full proposal package submission via Grants.gov (by invitation only)
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<tr>
<th>Event</th>
<th>Date</th>
<th>Eastern Time</th>
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<tr>
<td>RunGrants website open for registration and submission</td>
<td>Wednesday 22 June 2022</td>
<td>9:00 AM</td>
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<td>(<a href="https://dod-basicresearch.nvision.noblis.org/program/depscor">https://dod-basicresearch.nvision.noblis.org/program/depscor</a>)</td>
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<tr>
<td>DEPSCoR Webinar</td>
<td>Wednesday 22 June 2022</td>
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<td>For details and registration, please visit</td>
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<td>(<a href="https://dod-basicresearch.nvision.noblis.org/program/depscor">https://dod-basicresearch.nvision.noblis.org/program/depscor</a>)</td>
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<td>Cut-off date for Q&amp;As with Program Officers</td>
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<td>White Paper and Supporting Documentation submission on RunGrants website</td>
<td>Monday 19 September 2022</td>
<td>NLT 11:59 PM</td>
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<td>Notification of White Paper Selection</td>
<td>Friday 2 December 2022</td>
<td>NLT 11:59 PM</td>
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<td>Full Proposal Submission (by invitation only) electronically on</td>
<td>Tuesday 21 February 2023</td>
<td>NLT 11:59 PM</td>
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<td>Notification of Selection for Award</td>
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Questions
Thank you

https://basicresearch.defense.gov/Pilots/DEPSCoR-Defense-Established-Program-to-Stimulate-Competitive-Research/