



Science, Mathematics, and Research for Transformation (SMART) Opportunity Day

25 April 2017

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SCIENCE, MATHEMATICS
& RESEARCH FOR
TRANSFORMATION

PART OF THE NATIONAL DEFENSE
EDUCATION PROGRAM

Agenda

0900-0915: Opening Remarks and Introductions

0915-1015: Technical Briefing and Expectations

1015-1030: Break

1030-1130: Cooperative Agreements Briefing

1130-1230: Lunch in ARL Cafe

1230-1400: Q&A Panel

Remarks

- **Dr. Jagadeesh Pamulapati, Director, Defense Laboratories Office, Office of the Deputy Assistant Secretary of Defense (Research)**



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SMART Program Overview

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Agenda

- **Points of Contact**
- **SMART Overview**
- **SMART Program Status**
- **SMART Organization**
- **SMART Funding**
- **Expectations**

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Points of Contact

- **Office of the Assistant Secretary of Defense (Research and Engineering) (ASD(R&E))**
 - **Ms. Christina Deckard, SMART Program Manager**
 - **Mr. Tylar Temple, SMART Deputy Program Manager, Cooperative Agreement Manager (CAM)**
- **Army Contracting Command – Research Triangle Park (ACC-RTP)**
 - **Ms. Vonetta McNeal, Branch Chief**
 - **Ms. Jessica Wilkerson, Agreements Officer**



SMART Scholarship-for-Service

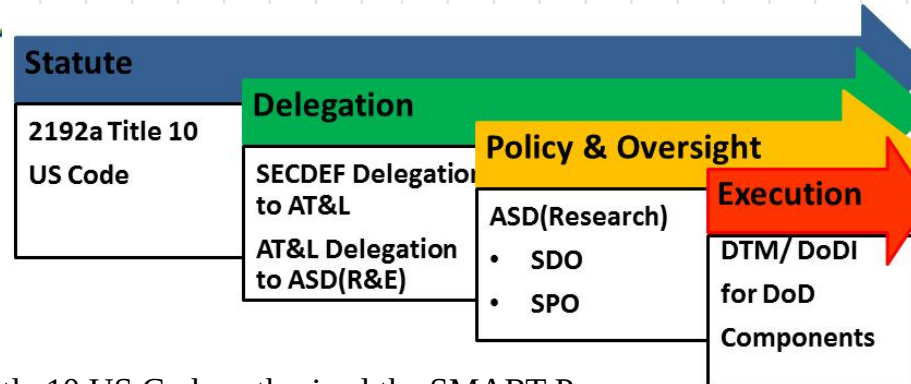


The Science, Mathematics, and Research for Transformation (SMART) program is a scholarship-for-service program for Science, Technology, Engineering, and Mathematics (STEM) disciplines critical to national security functions (2192a of Title 10 US Code).

- SMART's primary function is placing graduates in DoD facilities in order to improve the flow of new highly skilled technical labor into the DoD and to enhance the technical skills of the workforce already in place
- The SMART Program incentivizes students to pursue degrees in STEM fields by offering unique opportunities of research via internships and post graduation employment
- From 2006-2016, SMART has awarded 2021 scholarships to 1970 individuals, 2016 – SMART awarded 239 awards
- SMART offers scholarships to undergraduate, masters, and doctoral students (13% awards made to current DoD employees)
- Awards can be made during any phase of the scholar's education and vary in length from a minimum of 1 year to a maximum of 5 years
- The service commitment is 1 year of DoD employment for each academic year of SMART funding



Codifying SMART



- **Statute**
 - 2192a of Title 10 US Code authorized the SMART Program
 - 2006 officially authorized by Congress
 - Only official policy document
- **Delegation**
 - Deputy Secretary of Defense Memorandum, “Delegation of Authority Relating to Support of Science, Technology, Mathematics and Engineering Education,” June 25, 2010
 - Acting Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)) Memorandum, “Science, Technology, Mathematics, and Engineering Education Delegation of Authority to Director, Defense Research and Engineering (DDR&E),” October 12, 2010
- **Policy and Oversight**
 - ASD(Research)
 - STEM Development Office – Program Element
 - SMART Program Office – Policy and Execution with Components
- **Execution**
 - DoD Components
 - DTM
 - DoD Instruction 1025.09 (published 27 Oct 2016)

SMART Definitions

- **Recruitment** – scholar who is not a DoD employee at time of award
- **Retention** – a scholar who is a DoD employee at time of award
- **Sponsoring Facility (SF)** – the DoD facility which the scholar will fulfill their respective service commitment
- **Services** – the US Air Force, Army, and Navy
- **Other DoD Agencies** – other DoD SFs that do not fall under the Departments of the Air Force, Army, and Navy



SMART Eligibility and Benefits



Eligibility Requirements

- U.S citizen (NDAA FY16 expands to TTCP country applicants)
- 18 years of age or older
- Minimum cumulative GPA of 3.0 (on a 4.0 scale)
- Pursuing degree in one of 19 approved STEM disciplines
- Can accept both recruitment (new) and retention (current DoD employees) as scholars
- Ability to obtain/maintain a security clearance (minimum Secret)
- Ability to complete 8-12 week summer internships
- Willing to accept post-graduation employment with DoD (NDAA FY15 expanded option for non-DoD positions)

Participant Benefits

- Full tuition and fees (up to five years) for AA (very rare), BS, MS, and PhD degrees at any accredited college or university in the U.S.
- Annual stipend from \$25,000 to \$38,000
- Summer internships (8-12 weeks)
- Book and health insurance allowances
- Experienced Mentor at a DoD Facility
- Post-graduation employment

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SMART Disciplines



- Aeronautical/Aerospace and Astronautical Engineering
- Biosciences
- Chemical Engineering
- Chemistry
- Civil Engineering
- Cognitive, Neural, and Behavioral Sciences
- Computer and Computational Sciences/Computer Engineering
- Electrical Engineering
- Geosciences
- Industrial and Systems Engineering
- Information Sciences
- Materials Science and Engineering
- Mathematics
- Mechanical Engineering
- Naval Architecture and Ocean Engineering
- Nuclear Engineering
- Oceanography
- Operations Research
- Physics

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SMART Scholarship Facilities



159 DoD facilities in 39 states participating since 2006:

- DoD Laboratory Sites: 52
- DoD Intelligence Community Sites: 5
- DoD Medical Facilities: 3
- DoD Army Corps of Engineer Sites: 31
- DoD Test & Evaluation Center Sites: 11
- DoD Other Mission Support Sites: 48



SMART Award Timeline

PRE- AWARD/AWARD

APPLICATION

Aug-Dec: SMART online Application Open

EVALUATION

Jan: Ranking of Applications by Evaluation Panel thru online portal

SELECTION

Feb-Mar: Final Applicant List Available online for DoD Facility Selection

AWARDS

Apr: Selected New Awardees Notified and Accept or Decline Award

SITE VISIT

May-Jul: New Awardees Visit DOD Facility. Opt Out Option

SECURITY

Jul: Begin Processing New Awardees

AUG

SEP

OCT

NOV

DEC

JAN

FEB

MAR

APR

MAY

JUN

JUL

ACADEMIC PURSUIT

Aug-June: New Awardee Cohort begins Academic Pursuit
Continuing Awardee Cohorts continue Academic Pursuit
Monthly Award Stipends Paid Monthly

INTERNSHIP

May-Jul: Multi-year awardees intern at DOD Facility

ACADEMIC PURSUIT

SECURITY

Continual As Required:
Continued Processing of Awardee Clearances

GRADUATION/HIRING

Continual As Required:
Process for Hiring upon Awardee Graduation

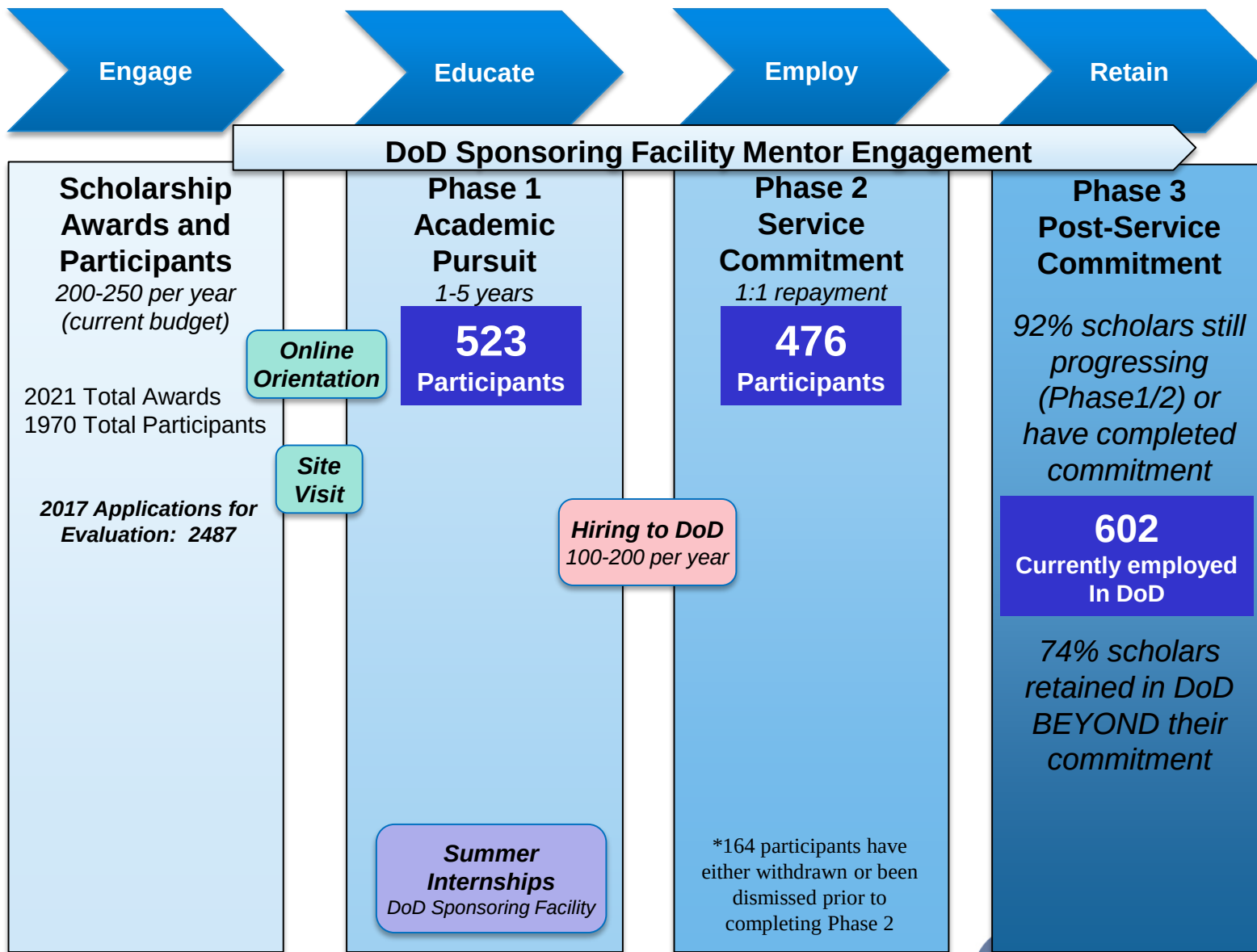
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SMART Scholarship Lifecycle Facts

*as of 02 December 2016



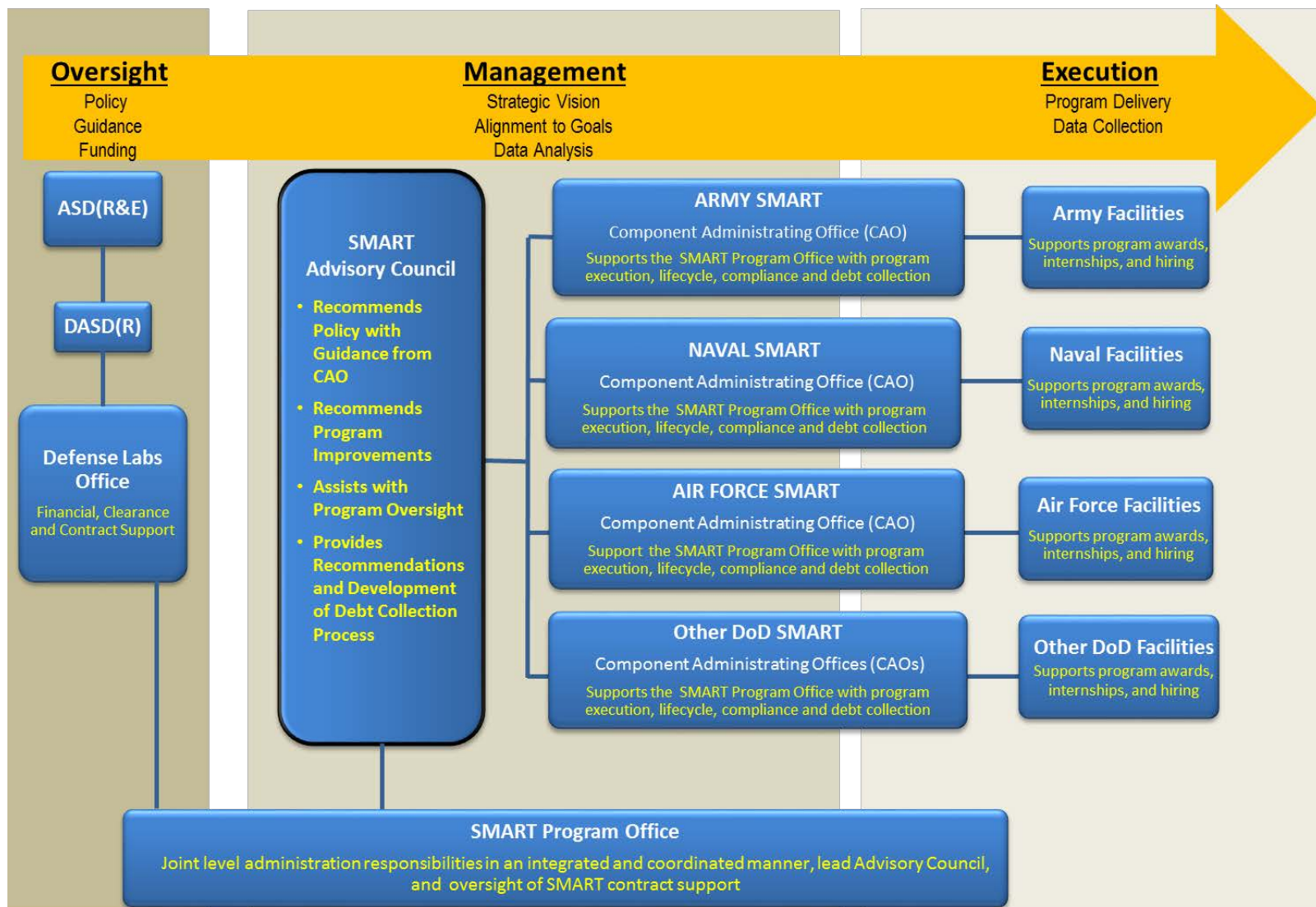
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SMART Organization



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SMART Funding

Estimated funding totals for the Period of Performance

- **Year 1** **Up to \$ 30,000,000**
 - **Year 2** **Up to \$ 42,000,000**
 - **Year 3** **Up to \$ 51,000,000**
 - **Year 4** **Up to \$ 56,000,000**
 - **Year 5** **Up to \$ 56,000,000**
 - **Total: Up to \$236,375,000***
-
- ***The total amount includes a not to exceed (NTE) amount of \$200,000 per year for travel and Marketing/Outreach shall remain a NTE amount of \$75,000 per year. In addition, stipends and tuition account for approximately 90% of the cost per year.**

4 Fundamental Elements

1. **Cooperatively, with the SMART Program Office, assist in the administration of the program to include, but not limited to, the application cycle, monitoring and interaction with students during academic pursuit, monitoring of scholars upon graduation, hiring tracking, web site development and maintenance, and individual Service SMART program facilitation**
2. **In close collaboration with the SMART Program, develop and maintain a SMART Information Management System that will track, update, and maintain all SMART Program data.**
3. **Develop and implement an annual marketing and outreach plan, in conjunction with the SMART Program, that supports colleges and universities on behalf of the SMART Program**
4. **Assist the SMART Program with payment of participants tuition, stipends, and other expenses on behalf of the Government**

Fundamental Element 1

- **Cooperatively, with the SMART Program Office, assist in the administration of the program to include, but not limited to, the application cycle, monitoring and interaction with students during academic pursuit, monitoring of scholars upon graduation, hiring tracking, web site development and maintenance, and individual Service SMART program facilitation**
 - **Collaborate with each military service, other DoD agencies, and OSD**
 - **Assist with public inquiries and scholar questions**
 - **Process change requests for scholars**
 - **Website**
 - **Public face for SMART Program information**
 - **Updated based on new legislation, regulations, policies, and participating DoD facilities**

Fundamental Element 1 (cont'd)

- **Application and Awards**
 - Must handle application, panel for evaluation, selection by the SFs, and awards
 - Collaboratively develop and produce an orientation for new awardees for the SMART program
 - Generate award documents in conjunction with the Government to ensure accuracy and validity
- **Phase 1 (Academic Pursuit)**
 - Monitor and track academic progress
 - GPA tracking to ensure compliance with the program
 - Hiring tracking to include projected graduation/hiring dates and changes in hiring or graduation dates
- **Phase 2 (Service Commitment)**
 - Service commitment monitoring
 - Tracking reports of scholars and SFs (i.e. annual reports)
- **Phase 3 (Post-Service Commitment Monitoring)**
 - Tracking and monitoring of scholars during post-service commitment

Fundamental Element 1 (cont'd)

- **Debt collection**
 - **Prepare and create debt packages in conjunction with the Government**
 - **Provide historical information to include communications with scholars for packages**
 - **Develop a system with the Government, to track and monitor the status of past students who are in a debt collection status**

Fundamental Element 2

- **In close collaboration with the SMART Program, develop and maintain a SMART Information Management System that will track, update, and maintain all SMART Program data**
 - **Searchable, editable, easy to use database**
 - **Houses all scholar data to include but not limited to, names, addresses, schools/grades/and other participant academic information, demographic data, financial data, internship data, site visit data, service commitment data, post-service commitment data, debt collection data, etc.**
 - **Houses program documentation to include but not limited to, handbook, policy documents, application and award documents, etc.**
 - **User friendly, web based front end**
 - **Must be developed in close collaboration with the CAM and Government using a recognized software development strategy**
 - **Will contain personally identifiable information (PII)**

Fundamental Element 3

- **Develop and implement an annual marketing and outreach plan, in conjunction with the SMART Program, that supports colleges and universities on behalf of the SMART Program**
 - **Develop an annual outreach and marketing plan on behalf of the SMART program**
 - **Should include historically underserved/and underrepresented populations, universities or colleges with existing DoD agreements, and others**
 - **Strategy for attendance of conferences or career fairs should be properly staffed and developed in conjunction with the Government**
 - **Tools to collect attendee information electronically to send SMART program information such as, name, email, phone number, STEM discipline, etc.**
 - **Goal is to continually increase the level of talent and number of applicants**

Fundamental Element 4

- **Assist the SMART Program with payment of participants tuition, stipends, and other expenses on behalf of the Government**
 - **Jointly develop a process to pay academic tuition for all students**
 - **Jointly develop a process pay stipends, book allowances, and other payments to scholars who are not DoD employees**
 - **Provides Government with disbursements and monthly financial reporting**
 - **Provides the scholars with IRS forms for tax purposes**

Expectations

- **Close collaboration with the CAM and Government on all fundamental elements of the cooperative agreement**
- **Firm understanding of software development principles and lifecycle**
- **Firm understanding of a cooperative agreement**
- **Excellent communication with public regarding SMART information to include the application cycle, awards, and programmatic information**
- **Promotion of this highly prestigious program to students across the country pursuing STEM degrees**
- **Increase awareness for students to be potentially awarded the unique opportunity to perform internships and gain employment at DoD labs**