

Lewis-Burke Associates, LLC June 1, 2017

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#### Today's talk

- Current funding landscape
- Engaging with program officers
  - –Preparing for meetings
  - -What to expect and how to follow up
- Introduction to agencies:
  - -U.S. Department of Agriculture (USDA)
  - -National Science Foundation (NSF)
  - -National Institutes of Health (NIH)
  - -U.S. Department of State: USAID
  - –Department of Defense (DoD)
  - –Department of Energy (DOE)
  - -National Endowment for the Humanities (NEH)



## Final FY 2017 Appropriations

Agency	FY 2016 Enacted Funding	FY 2017 Funding	FY 2017 vs FY 2016 Enacted	FY 2018 Budget Blueprint	Blueprint vs. FY 2017 Enacted
NIH	\$32.08	\$34.08	+6.2%	\$25.9	-24%
NSF	\$7.46	\$7.47	+0.1%	\$6.65	-11%
DOD Basic Research	\$2.31	\$2.28	-1.4%	\$2.23	-2.1%
USDA:NIFA	\$1.32	\$1.36	+2.75	\$1.26	-8%
DOE Science	\$5.35	\$5.39	+3.5%	\$4.45	-17.5%
NEH	\$0.148	\$0.150	+1.3%	0	-100%

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## Engaging with Program Officers

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#### Benefits of Meeting with Federal Agencies

- Relationship-building opportunity
- Receive first-hand information about research funding opportunities
  - -Be on both "send" and "receive"
- •Learn of non-funding ways to engage with the agency, such as serving on review panels or advisory councils

Lewis-Burke can help identify specific meeting targets based on research and objectives

#### Prior to the meeting

- Review the programs of the officials with whom you will be meeting and other relevant funding opportunities at their agencies.
  - -As you review program descriptions and past solicitations, note places of potential fit to your areas of interest so you can ask specific questions.
- Prepare a one-page description of your research that may be left behind with the program staff, or sent ahead if that has been requested.
  - –Including your contact information
  - -Research descriptions should be consistent with areas of interest of the targeted agency program staff.
- Speak to more senior investigators who are funded by the federal agencies at which you will be meeting about their experiences and insight into the agencies and programs.
- Prepare questions to ask in the meetings.



## On the day of the meeting

- Appropriate dress: business attire.
- Bring:
  - Business cards
  - -Copies of your research descriptions.
- Be prepared to:
  - -Give a short introduction (5 minutes) about you and your work.
  - -Talk succinctly and clearly about your current and future research interests.
  - –Ask questions.
  - -Take notes.
  - -LISTEN to their answers.
  - -Thank them for meeting with you.

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#### Example questions to ask in meetings

- What are the areas of interest of your program?
- What are the emerging areas of interest at the agency in your area?
- What are the mechanisms to seek funding at your agency and in your program? Are there targeted solicitations? Are you open to unsolicited proposals? Is there a recommended approach?
- What common mistakes do individuals make with your program and how can I avoid those?
- How can I better prepare to submit proposals? At what point in the process is it appropriate to discuss specific project ideas with agency personnel/program staff? What kind of feedback can I expect?
- What are the success rates, and what helps with resubmittals?
- Are there opportunities to serve as a reviewer or on advisory committees?
- Are there researchers whose work you would suggest I look into or that I collaborate with?
- Are there workshops or events you would suggest I participate in or help organize?
- Are there program officers at this or other agencies you recommend I contact?



## Meeting follow-up

- Upon returning to campus, submit appropriate thank you emails to each of the meeting participants.
  - -These emails should display an appreciation for the meeting, a quick reference to or summary of the issues discussed, any follow-up actions or conversations agreed to, and supplemental information if applicable.
- As you initiate contact with various agency officials, it is crucial that you maintain open lines of communication, especially if these contacts have displayed a willingness to accept unsolicited research proposals or provide unofficial advice.
- Federal program officials can be key advisors and sources of information throughout the challenging grant application process.



# United States Department of Agriculture (USDA)

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## U.S. Department of Agriculture (USDA)

- The National Institute of Food and Agriculture (NIFA) is the extramural research arm of USDA that supports university and industry researchers across the U.S.
  - -The broad research categories are determined set for the agency by the Farm Bill (most recently reauthorized in 2014).....discussions and field hearings have already started on 2018 Farm Bill
- NIFA functions in three main areas:
  - -Research: Extramural programs
  - -Education: Fellowships for pre- and postdoctoral students
  - -Extension: Also known as capacity funds; managed through USDA's 'special relationship' with land-grant universities



#### NIFA/AFRI

- NIFA's primary competitive extramural research program is the Agriculture and Food Research Initiative (AFRI): \$375 M in FY 2017; PBR \$350 M: bipartisan support for AG research
- Solicitations are offered once a year, usually in January
  - FY 2017 RFAs are open
- Core research within AFRI is funded through the Foundational Program, which funds research in six priority areas, which have about \$130 million for the program in FY 2016:
  - -Plant health and production and plant products
  - -Animal health and production and animal products
  - -Food safety, nutrition, and health
  - -Renewable energy, natural resources, and environment
  - Agriculture systems and technology
  - -Agriculture economics and rural communities

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#### NIFA/AFRI

- In addition to the Foundational Program, there are five major challenge areas for the AFRI program:
  - –Food Safety
  - -Climate Variability and Change (RFA expected this month)
  - –Food Security
  - -Water for Food Production Systems
  - -Childhood Obesity Prevention (RFA expected this month)
  - -Sustainable Bioenergy
    - Renamed the program this year: Sustainable Bioenergy and Bioproducts
- NIFA also funds fellowships for undergraduates, predoctoral, and postdoctoral students through the Education and Literacy Initiative
- Looking ahead: Tactical Sciences; Nutrition Program Re-vamp; LEWIS-BURKE

## Engaging with NIFA

- Very receptive to meetings/phone calls/email communication
- Unlike other agencies, NIFA program staff are able to communicate with applicants throughout the application and grant-making process
- You can find contact information for relevant program staff listed online, as well as specific program leads associated with each program in the RFA.
- Most program priority areas have standard awards, Coordinated Agricultural Projects (CAPs), and Food and Agricultural Science Enhancement (FASE) grants



## National Science Foundation (NSF)

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#### NSF Overview

- 6 Research Directorates organized by science and engineering disciplines:
  - -Biological Sciences (BIO)
  - -Computer and Information Science and Engineering (CISE)
  - –Engineering (ENG)
  - -Geosciences (GEO)
  - -Mathematical and Physical Sciences (MPS)
  - -Social, Behavioral, and Economic Sciences (SBE)
- Education and Human Resources (EHR) directorate focuses on STEM teaching, learning, and workforce development
- FY 17 Omnibus: flat funding: \$7.472B, slight increase of \$9M
- Policy issues continue:
  - -Continued congressional pressure to defend individual grants and facilities management
  - -Leadership changes still in progress at the AD level (ENG, GEO, MPS, EHR): new GEO AD Bill Easterling
  - -Joan Ferrini-Mundy, former EHR AD, now Acting Chief Operating Officer
  - -Agency-wide emphasis on STEM education, training, and workforce development & 10 Big Ideas

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#### Environmental Research

- Basic environmental research continues to be supported by NSF: if other agencies (EPA, USDA etc.) experience cuts will look to NSF because of flexibility
  - -Use interagency collaborations with NIFA to fund more applied/agricultural sciences
- 10 Big Ideas: of relevance.....
  - -Navigating the Arctic
  - -Rules of Life Predicting Phenotype
  - -Harnessing Data for 21st Century and Engineering
  - -Growing Convergence Research
- Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS) program: SYSTEMS
  - -USDA is contributing \$5 million, out of a total \$50 million
  - -Program competed until 2020
- NSF's Risk and Resilience Initiative: FY 2017 Prediction and Resilience against Extreme Events (PREEVENTS) broad definition of natural hazards and resilience (includes drought)
- <u>NSF-USDA</u> **Plant-Biotic Interactions (PBI) Program**: basic plant processes and plant-biotic interactions for translational research benefitting agriculture: \$6 million for 20 projects; FY 17 \$8.5 million available

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#### Social Sciences

- SBE important component of many NSF cross-cutting programs
- Increasing concerns within SBE around reproducibility
- **Behavioral and Cognitive Sciences** (BCS) Division is concerned with geography, archeology, anthropology,
- Social and Economic Sciences (SES) Division focused on sociology, economics, technology impacts on society,
- Cross cutting
  - Dynamics of Coupled Natural and Human Systems (CNH)



#### Education and Human Resources

- Joan Ferrini-Mundy, former EHR AD, now Acting Chief Operating Officer
- Research on STEM teaching and learning across audiences and settings (preK-12, undergraduate, adult, informal, formal, etc.)
- Major focus on broadening participation
- Evaluation is essential
- Concern with scaling potential and impact
  - -Awards at all sizes from smaller pilots to large scale efforts
- Additional focus on workforce development
  - -Graduate Research Fellowships
  - -NSF Research Traineeships
  - -Broadening Participation programs to support workforce development at minority serving institutions
- Follow Common Guidelines for Education Research and Development: <a href="http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf">http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf</a>

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#### Recommendations for CAREER

- CAREER awards: research proposed should be expansive enough to build a career on very narrow research aims will not be competitive.
- Strategy and expectations vary by division; important to speak to program director before applying
- Expectations related to education components also differ by division.
  - -Some divisions like to see more focused education projects
  - -Others want to see efforts that check a number of boxes, the education component has to be integrated with the research proposed and for some divisions (broadening participation, undergraduate research, etc.)
  - -Department chair's letter of support is helpful to show how education efforts would be of value to the department and its students.
- Think carefully about when to apply as you only get a few chances.
  - -First CAREER proposals often rejected because of presentation. Pay attention to details.
  - -Don't submit at the very beginning of your career
  - -Don't wait so long that you can't use your second and third tries.
  - -The odds of obtaining a CAREER go up on the second try, so it's important not to get discouraged.



## Engaging with NSF

- Research the program/solicitation
- Engage with your sponsored research office on campus they know NSF rules
- Contacting NSF:
  - Email first rather than phone and be specific
  - Provide details of the program/solicitation/award number that you want to discuss
  - Any attachments summarizing your research should be no more than 1-2 pages and should be tailored to that program officer
  - It's OK to follow up with program officers, but don't overdo it
  - Always be courteous get feedback if their response is disappointing



## National Institutes of Health (NIH)

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#### National Institutes of Health (NIH)

- Funded at \$34.1 billion in FY 2017; PBR would provide \$26.9B (overall cut of \$7.2B or 21%)
- Largest biomedical research agency in the world
- Comprised of 27 institutes and centers (ICs), often focusing on a particular disease or part of the body
- No leadership changes (for now)
  - -Francis Collins held over as Director; Secretary Price has stated his support for NIH and increased funding for biomedical research
- Trump Administration: proposing a 24% cut to NIH budget, looking at F&A costs as a way to "save" money
- Congress: passed 21st Century Cures Act in December 2016
  - –Still strong support for NIH with \$2 billion boost in FY 2017, CR provided \$352 million for targeted initiatives through *Cures*
  - -Continued support for priority, cross-cutting areas from the previous Administration:
    - BRAIN Initiative, Precision Medicine Initiative, Antimicrobial Resistance, Alzheimer's Disease, Cancer Moonshot



#### Current issues and trends at NIH

#### Award trends:

- -NIGMS MIRA (R35) program will support people rather than projects to allow flexibility in pursuing research avenues; NCI, NINDS, NHLBI, NIDCR launched their versions and other ICs exploring
- -Collaborative funding mechanisms enhance program officers' input on projects (U awards)
- -Special consideration for first-time applicants continues; new concerns over achieving second grants
- -Select pay across ICs enables program leaders to fund proposals above payline that meet priorities and unmet needs or to support new investigators
- -Capping grants at three RO1 per PI using the Grant Support Index (GSI)
- NIH structure and policies:
  - -Internal review of peer review process to increase innovative projects and improve diversity of grantees
  - -Ongoing efforts to enhance reproducibility of pre-clinical research Advisory Committee to the Director Working Group launched recently

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#### NSF vs. NIH

- NSF is concerned with health of disciplines it supports and advancing fundamental science
- NSF is more heavily focused on teaching, student mentoring, broadening participation, and broader impacts every proposal must address broader impacts
- NSF peer review is organized by program directors on an ad hoc basis no standing panels; NIH has regular standing study sections that meet three times a year
- NSF program directors have more flexibility in determining program directions and funding decisions proposal pressure and peer review are still main drivers; NIH applications largely go through the Center for Scientific Review
- NSF CAREER program to support early career researchers embedded in every division (you can talk to any program director about this program)

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## Engaging with NIH

- Identify the program officer associated with the solicitation/program
- Engage with your sponsored research office on campus for insight on NIH processes
- Contacting NIH:
  - Email first rather than phone: summarize your research aims and how it fits into program officer's portfolio or solicitation
  - Any attachments summarizing your research should be no more than 1-2 pages
  - -Always be courteous and seek specific feedback
  - -Contact sponsored research or Lewis-Burke if getting no response from program officer
- Review the list of peer review panels and members on the Center for Scientific Review website
- Seek insight from program officer on peer review panels most appropriate to review proposal
- Suggest preferred panel on cover letter accompanying proposal



## United States Department of State

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#### U.S. Department of State

- Education and Cultural Exchange programs at Dept. of State received \$634.1 million for FY 2017 (7.3 percent above FY 2016); PBR would cut \$19.9B or 34.6% and align with "America First"
  - -Would eliminate funding for Global Climate Change Initiative
- Bureau of Educational and Cultural Affairs (ECA) promotes diplomacy between the U.S. and other countries through "through academic, cultural, sports, and professional exchanges, as well as public-private partnerships"
- ECA encourages broadening participation on U.S. side
- ECA Programs
  - Focus on specific country / countries
  - Address key policy goals e.g. climate change, good governance, women and girls leadership, and technology advancement
  - Many programs organized by world region "branches"

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## Department of Energy (DOE)

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## Department of Energy (DOE)

- The Department of Energy (DOE) has 3 core missions:
  - Science and Energy (basic and applied research)
  - Nuclear Security
  - Environmental Management
- Budget blueprint would cut \$900M from Office of Science, eliminate ARPA-E, and reduce or eliminate applied energy programs, cutting another \$2 billion
- Stark contrast to FY 2017 congressional appropriations which increased funding for all programs
- Secretary Perry acknowledges importance of R&D investment and has identified 3 major priorities: maintaining the nuclear weapons stockpile, cybersecurity, and high performance computing
- Secretary Perry has also highlighted the need to maintain a strong network of national laboratories and he favors an all of the above energy strategy
- Focus of the R&D portfolio is on early stage research and high risk projects where there is no industry investment
- New research opportunities in subsurface science, advanced reactor technologies, CO2 utilization technologies, technologies for oil and gas recovery, lightweight materials, materials in extreme environments, quantum materials, sensors, and computing
- Most program officers, as well as the Associate Directors and Deputies of the different offices, are expected to stay
- Dan Brouillette nominated as Deputy Secretary (currently at USAA, Ford, DOE Ass. Sec. for Congressional Affairs)



## Engaging with DOE

- Office of Science
  - Basic, fundamental research for energy and national security missions in 6 major program areas (materials research, advanced computing, biosciences and climate change, nuclear physics, particle physics, and fusion and plasma sciences)
  - Targeted funding opportunity announcements (FOAs) (e.g., \$12 million for plant feedstock genomics for bioenergy, awards of \$200k-\$400k for 3 years)
  - Financial Assistance Program—open year round for all research areas, innovative ideas outside of targeted funding solicitations
  - Early Career Research Program—usually 52 early career scientists and researchers selected each year in the 6 major Office of Science disciplines, July 2017 new competition
    - at least \$150k per year over five years and must be within 10 years of having received a Ph.D. and untenured assistant or associate professors on tenure track
  - Program managers very accessible and discussions with program managers before submitting applications increase chance of success
  - Other signature funding mechanisms: Energy Frontier Research Centers, Energy Innovation Hubs, computational sciences
- Applied energy programs—Renewables, energy efficiency, fossil, nuclear, grid
  - Each applied energy program has yearly FOAs for early-stage, innovative technologies (e.g., BENEFIT, NEUP, university-cybersecurity consortium, solid oxide fuel cell innovative concepts)
  - Larger-scale signature funding mechanisms: Energy Innovation Hubs, consortiums, traineeships, Clean Energy Manufacturing Institutes
- SBIR/STTR
- National lab partnerships—DOE national labs subcontract \$500 million to universities, mainly in direct PI-to-PI collaborations



# Department of Defense (DOD) Research Enterprise and Defense Health Priorities

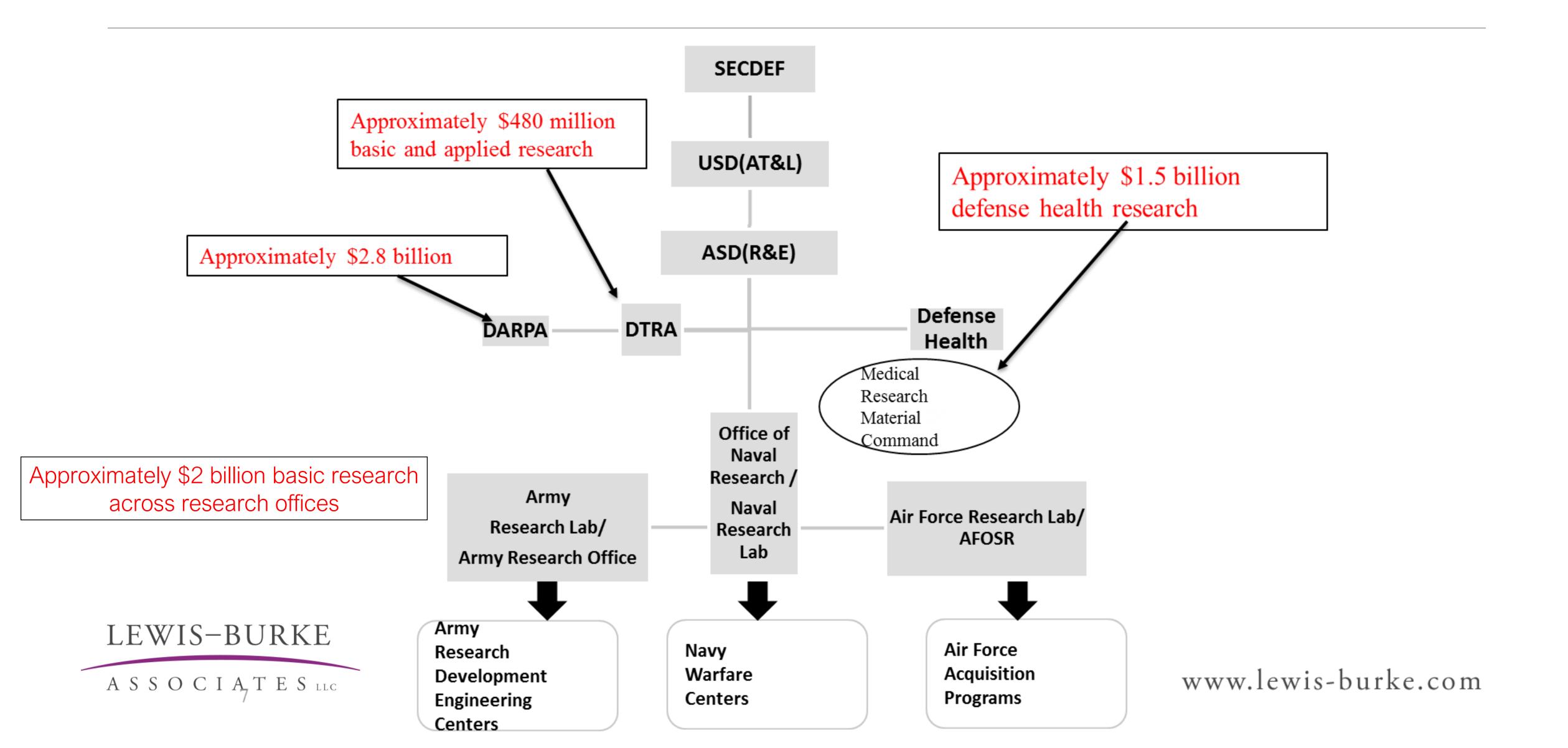
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#### DOD Overview

- FY 2017 omnibus budget: RDTE: \$72.3 billion; S&T Total: \$14.01 billion, includes \$15 billion for immediate warfighting needs and readiness
- Office of basic research includes:
  - Army Research Office (ARO)
  - Office of Naval Research (ONR)
  - Air Force Office of Scientific Research (AFOSR)
  - Defense-wide basic research
- Other DOD branches include:
  - Defense Advanced Research Projects Agency (DARPA)
  - Defense Threat Reduction Agency (DTRA)
  - DOD Health
- Trump's budget Blueprint would:
  - Provide an additional \$52 billion for DOD in FY 2018
  - 2017 NDAA included language directing DOD to establish a Manufacturing Engineering Education Grant Program

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#### DOD Organization



## Signature DOD Funding Mechanisms

- Standard grants and contracts
  - Broad Agency Announcements
  - -Special program announcements (e.g. Minerva, Multi-disciplinary University Research Initiative (MURI), Young Investigator Programs)
  - -Also summer faculty research opportunities
- Cooperative Research Agreement (CRA)
- Cooperative Technology Agreement (CTA)
- Center of Excellence (COE)
- Indefinite Delivery Indefinite Quantity (IDIQ) contracts
- SBIR/STTR



#### DOD Funding Mechanisms, cont'd

- Broad Agency Announcements (BAAs) are competitive solicitations for basic and applied research proposals
- Multidisciplinary University Research Initiative (MURI) program supports research conducted by teams of investigators that intersect more than one traditional science and engineering discipline in order to accelerate research progress
- Vannevar Bush Faculty Fellowship (formerly NSSEFF) provides extensive, long-term financial support to distinguished university faculty and staff scientists and engineers to conduct unclassified, basic research on topics of interest to DoD
- Minerva Research Initiative initiated by former Secretary Gates in 2008, "seeks to build deeper understanding of the social, cultural, and political dynamics that shape regions of strategic interest around the world."
- Young Investigator Programs (YIP) or DARPA Young Faculty Award awards range in size from \$50k \$170k per year

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# Steps to Effectively Engage DOD

- Meet program managers, laboratory subject matter experts, invite government researchers to give Department seminars
  - Even formal opportunities, e.g. DARPA Discover DSO Days
- Attend conferences
  - E.g. Annual Military Health System Research Symposium <a href="http://mhsrs.com/">http://mhsrs.com/</a>
  - Office of Naval Research Expo, July 20-21, 2017: <a href="https://www.onr.navy.mil/Conference-Event-ONR/2017-naval-expo.aspx">https://www.onr.navy.mil/Conference-Event-ONR/2017-naval-expo.aspx</a>
  - Annual Air Force leadership meeting (Every Sept): <a href="https://www.afa.org/airspacecyber/home">https://www.afa.org/airspacecyber/home</a>
  - AFOSR young investigator event (October 24-27): <a href="https://community.apan.org/wg/afosr/w/researchareas/19426/2017-young-investigator-research-program-yip-meeting/">https://community.apan.org/wg/afosr/w/researchareas/19426/2017-young-investigator-research-program-yip-meeting/</a>
- Review program websites, BAAs, and past solicitations to find relevant programs
- Submit white paper ahead of application to assess fit to program, get feedback, and potentially shape future solicitations
- Have more than one idea to propose
- Be prepared to adapt your research to meet program managers' goals
- Other considerations:
  - Fellowships
  - Postdoc Support (most if not all have support for rotations or funded support)
  - Equipment (DURIP)
  - Seed grants (flexibility)
  - -Small Business (different type of funding) LEWIS-BURKE



#### DOD - Medical/Health Research

- DOD Health Research Priorities: approximately \$1-1.5 billion invested
- Priorities include:
  - Mental health/PTSD
  - Traumatic Brain Injury
  - Enhancing warfighter performance
  - Infectious disease
  - Casualty care
  - Chemical and biological warfare defense
- Also involved in multi-agency priorities, including:
  - -Global Health Security Agenda (biosurvelliance, antimicrobial resistance, and infectious disease research and response)
  - Big Data: data sharing standards, software tools, enhanced training, centers of excellence
  - BRAIN: targeted investment to accelerate development of neurotechnologies
  - Alzheimer's and aging: new investments in research and care to address looming in patients and costs

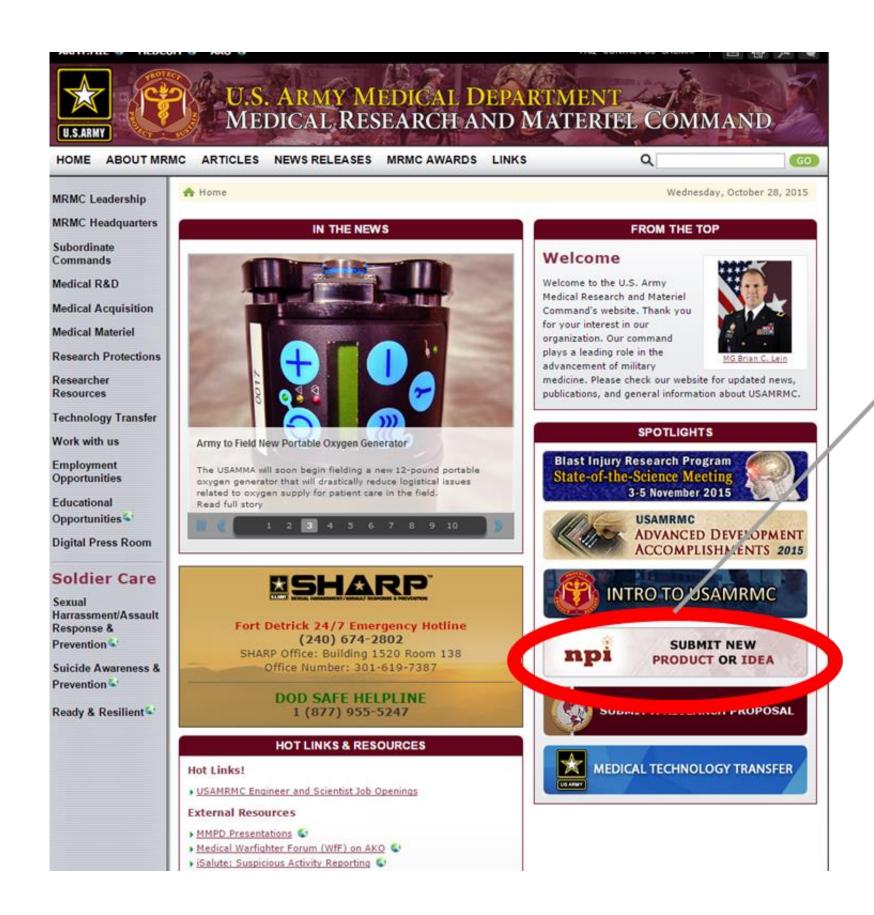
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# U.S. Army Medical Research and Materiel Command (USAMRMC)

- Headquartered at Ft. Detrick, Maryland (collaborations listed below)
- Supports priority research disciplines (~\$150 million):
  - -Military Infectious Diseases (~\$36m)
    - Walter Reed Army Institute of Research
    - •U.S. Army Medical Research Institute of Infectious Diseases
  - -Combat Casualty Care (~\$27 m)
    - •U.S. Army Institute of Surgical Research
    - Walter Reed Army Institute of Research
  - -Military Operational Medicine (~\$57m)
    - U.S. Army Research Institute of Environmental Medicine
    - U.S. Army Aeromedical Research Laboratory
    - Walter Reed Army Institute of Research
  - -Clinical and Rehabilitative Medicine Research Program (~\$18m) LEWIS-BURKE



#### USAMRMC: New Products and Ideas Portal



Web interface to the research and industrial community for feedback on new ideas.

#### Helpful hints

- Use a white paper for cutting and pasting relevant sections into the submission forms
- Once your submission occurs it will be routed to the appropriate MRMC directorate and you should get feedback in ~ 30 days
- Have issues with the website call at 301.619.1880.

Separate portal for Psych/TBI: <a href="http://www.dcoe.mil/ConceptSubmissionProgram.aspx">http://www.dcoe.mil/ConceptSubmissionProgram.aspx</a>



## CDMRP – Current Topics/Opportunities

FY 2017 \$822.9 million, \$30 million < than FY 2016 level :: Bolded items reflect increases or new topics from FY 16

- Peer-Review Medical (\$300 m)
- Traumatic Brain Injury and Psychological health (\$125 m)
- Breast Cancer (\$120 m)
- Prostate Cancer (\$90 m)
- Peer-Review Cancer (\$60 m)
- Joint Warfighter Medical (\$50 m)
- Peer-Review Orthopedic (\$30 m)
- Spinal Cord (\$30 m)
- Gulf War Illness (\$20 m)
- Ovarian Cancer (\$20 m)
- Neurotoxin Exposure Treatment Parkinson's (\$16 m)
- Alzheimer (\$15 m)
- Neurofibromatosis Research (\$15 m)
- Vision (**\$15 m**)
- HIV/AIDS program increase (\$12.9 m)
- Lung Cancer Research (\$12 m)
- Reconstructive Transplant (\$12 m)

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- Trauma Clinical (\$10 m)
- Hearing Restoration (\$10 m)
- Kidney Cancer (\$10 m)
- Orthotics and Prosthetics (\$10 m)
- Global HIV/AIDS prevention (\$8 m)
- Military Burn (\$8 m)
- Epilepsy (\$7.5 m)
- Amyotrophic Lateral Sclerosis (\$7.5 m)
- Autism Research (\$7.5 m)
- Tuberous Sclerosis (\$6 m)
- Multiple Sclerosis (\$6 m)
- Tick-borne disease research (\$5 m)
- Lupus (\$5 m) Moved from PRMRP
- Alcohol and Substance Abuse (\$4 m)
- Bone Marrow Failure (\$3 m)
- Duchenne Muscular Dystrophy (\$3.2 m)

# Peer Reviewed Medical Research Program (PRMRP)

- Acute Lung Injury
- Antimicrobial Resistance
- Arthritis\*
- Burn Pit Exposure\*
- Chronic Migraine and Post-Traumatic Headaches
- Congenital Heart Disease
- Constrictive Bronchiolitis
- Diabetes
- Diarrheal Diseases\*
- Dystonia
- Early Trauma Thermal Regulation\*
- Eating Disorders\*
- Emerging Infectious Diseases
- Epidermolysis Bullosa\*
- Focal Segmental Glomerulosclerosis
- Fragile X Syndrome
- Guillain-Barre syndrome\*
- Hepatitis B and C
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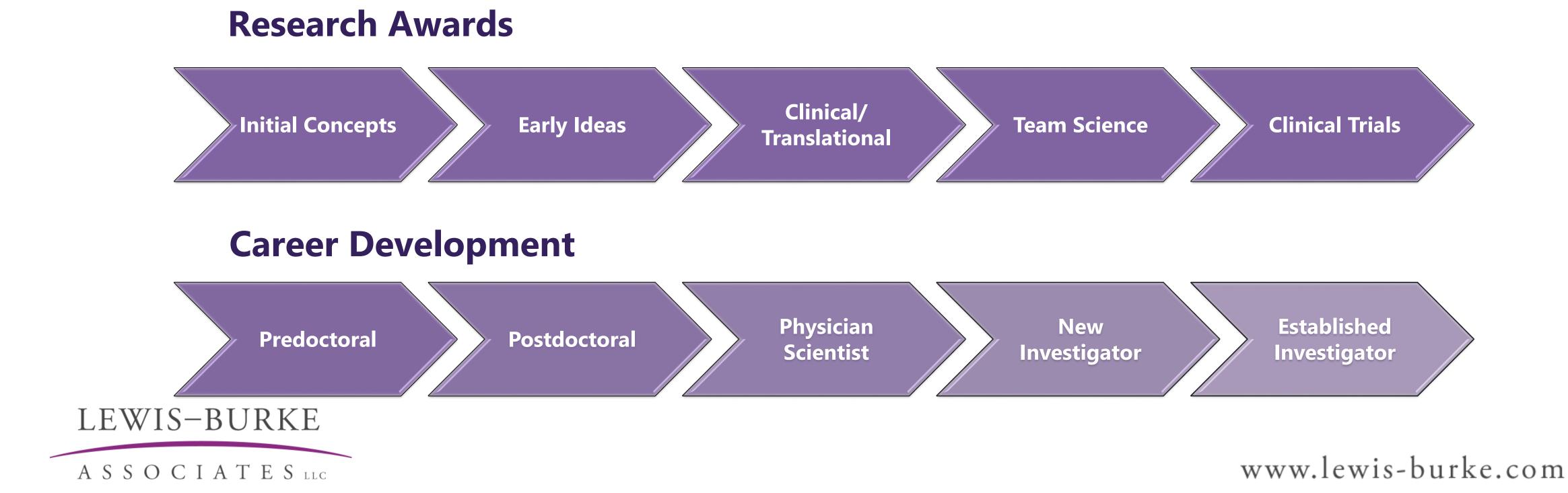
- Hereditary Angioedema
- Hydrocephalus
- Immunomonitoring of Intestinal Transplants\*
- Inflammatory Bowel Diseases
- Influenza
- Integrative Medicine
- Interstitial Cystitis
- Malaria
- Metals Toxicology
- Mitochondrial Disease
- Musculoskeletal Disorders\*
- Nanomaterials for Bone Regeneration
- Nonopioid Pain Management
- Pancreatitis
- Pathogen-Inactivated Dried Cryoprecipitate
- Polycystic Kidney Disease
- Post-Traumatic Osteoarthritis

- Pulmonary Fibrosis
- Respiratory Health
- Rett Syndrome
- Rheumatoid Arthritis
- Scleroderma
- Sleep Disorders
- Spinal Muscular Atrophy\*
- Sustained-release Drug Delivery\*
- Tinnitus
- Tuberculosis
- Vaccine Development for Infectious Disease
- Vascular Malformations
- Women's Heart Disease

\*Denotes new topic in FY 2017

#### CDMRP - continued

- Proposal windows vary throughout the year
- Pre-application required
- Highly competitive: Success rates average around 15% (range of 10-30 percent)
- Various research awards at all career stages:



#### CDMRP – Review Process

Two-tier review process: peer review for scientific merit and programmatic review to ensure the DOD mission and needs are met

#### **Peer Review**

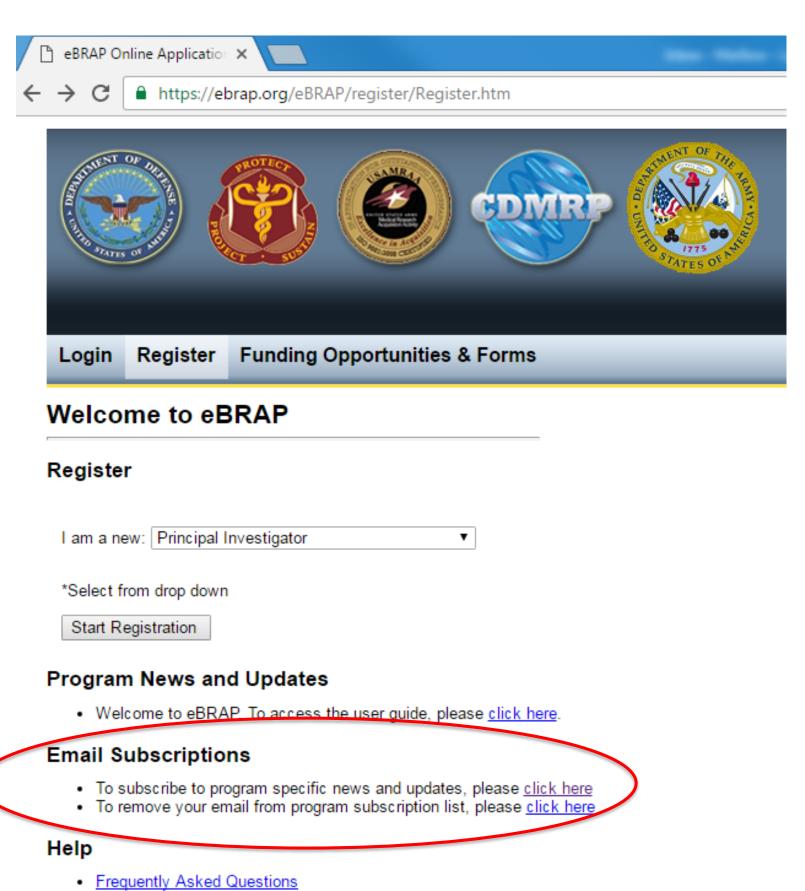
- Evaluate scientific merit
- Provide written critique and scores for criteria and overall merit
- Panels comprised of scientific and consumer reviewers
- No standing peer review panels
- No contact between reviewers and applicants

#### **Programmatic Review**

- Proposals with high scientific merit compared for programmatic review
- Evaluate relevance to mission and DOD
- Evaluate adherence to award mechanism's intent (ex. new idea v. clinical trial)
- Consider portfolio composition
- Provide recommendations for funding
- No pay line
- Funds obligated up front
- No continuation funding

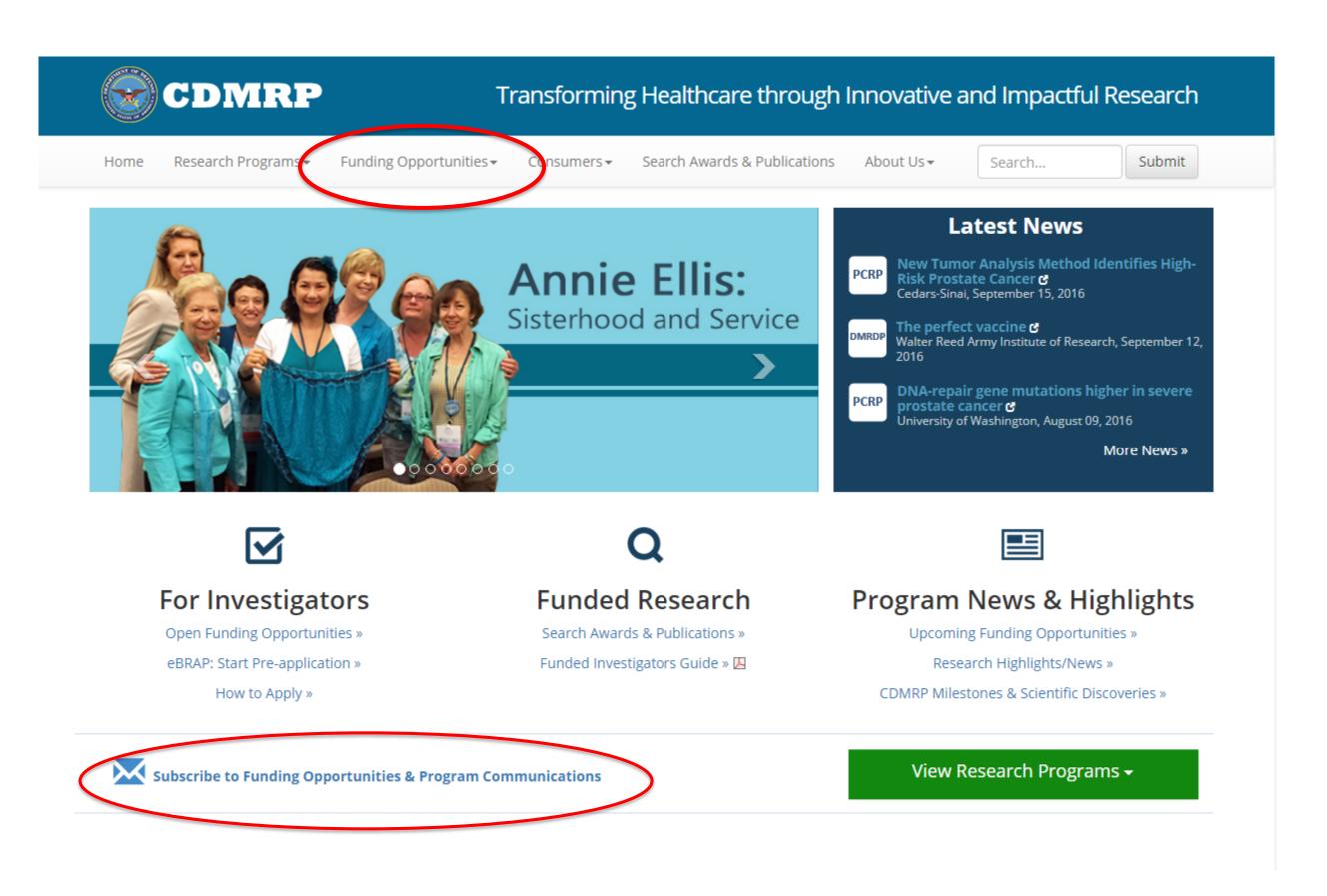
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#### FOA Resources



#### **Funding Opportunity Postings:**

- www.grants.gov
- FedBizOps <u>www.fbo.gov</u>
- www.eBRAP.org



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Commonly Made Mistakes

Contact the helpdesk/webmaster

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#### Defense Advanced Research Projects Agency (DARPA)

- DARPA funds high-risk, high-reward basic and applied biomedical research; game-changing R&D around future threats
- Seven technical offices: Adaptive Execution (AEO), **Biological Technologies (BTO), Defense Science (DSO)**, Information Innovation (I2O), Microsystems Technology (MTO), Strategic Technology (STO), and Tactical Technology (TTO)
- BTO, DSO support most of DARPA's biomedical and health technologies research
- Current Programs addressing
  - Prosthetics
  - Traumatic Brain Injury
  - Brain computer interface
  - Brain/Neuroscience
  - Chem-bio and infectious disease threats



### Defense Threat Reduction Agency (DTRA)

- Basic and applied research on bio/chemical/nuclear/information sciences geared towards countering weapons of mass destruction
- Chemical-Biological Research (~60 million)
  - -Non-medical: Nano, cognition, information science, bioscience
  - -Medical Biological Defense Transformational Medical Technologies Initiative: Diagnostic Technology, Vaccine, Therapeutic viral, toxin, bacterial
  - -Medical Chemical Defense Smallest Area: Respiratory, Cutaneous and Ocular, Neurological, Toxicology

#### Working with DTRA

- -Broad Agency Announcement (BAA): Science and Technology New Initiatives.
  - New way for researchers to engage DTRA program managers by submitting a quad chart and white paper narrative to gauge interest in an idea and receive informal feedback.
- -Annual BASIC RESEARCH TOPICS call for pre-application white papers
- -Multi-year BAA, specific topics change annually based on program manager interest little feedback



## Engaging DOD vs. NIH

- Start with the DOD challenge; NOT the research idea
- Program managers have broader authority and more flexibility
- Only some programs use peer review; more ad hoc, not always external
- Collaborations with DOD medical commands and centers are important to long-term success
- New managers often change program goals and direction
- Process to request DOD data from Military Health System
- Opportunities to engage locally/regionally



# National Endowment for the Humanities (NEH)

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#### NEH Overview

- NEH functions in three main areas:
  - -Research Programs
  - –Education Programs
  - -Federal/State Partnerships
- FY 2017 omnibus bill funds the National Endowment for the Humanities (NEH) at \$149.8 million each, a nearly \$2 million dollar increase from FY 2016
- NEH Chairman Bro Adams announced resignation; Margaret Plympton (deputy) is acting chair
- Anticipate will continue on with usual grant-making activities and current agency-wide initiatives
  - -Common Good Initiative supports humanities scholars and organizations to focus their attention to humanistic topics that resonate with Americans and society at large.
  - -Standing Together Initiative to promote an understanding of the experience of war



# Engaging with NEH

- Nearly 50 percent of the funding goes directly to support state humanities councils and the agency's administration, with most of the rest slated for grants, education and public programming
- NEH programs are organized through several divisions/offices, including: Division of Education Programs, Division of Preservation and Access, Division of Public Programs, Division of Research Programs, Office of Challenge Grants, Office of Digital Humanities, and State and Federal Partnerships Office.
- Over last few years, major changes to programs/opportunities across various NEH Divisions Challenge Grants (new opportunities Next Gen PhD, Creating Humanities Communities), Education Programs (Humanities Connections), Digital Humanities (new Advancement grants).
- Majority of NEH program solicitations are released on annual basis.
- NEH program managers are happy to speak and meet with interested researchers and educators regarding potential ideas.
- Additional funding opportunities are available through NEH-funded state humanities councils.

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# Questions?

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