



U.S. Department of Veterans Affairs

Veterans Health Administration  
Office of Research & Development

# Department of Veterans Affairs Office of Research and Development: Priorities, Orthopedic Research, & PRORP Collaboration

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TO CARE FOR HIM WHO SHALL  
HAVE BORNE THE BATTLE AND  
FOR HIS WIDOW, AND HIS ORPHAN  
A. LINCOLN

**Discover knowledge from pre-clinical through health services research to create innovations that advance health care of Veterans and the nation**

**Have a robust program to develop VA clinician-scientists and health care leaders**

**Provide a lifetime of care for the Veteran**





# VETERANS HEALTH ADMINISTRATION (VHA)

- Largest integrated health care system in the nation
- 170 medical centers & 103 active research sites
- More than 1,200 sites of care nationwide
- Electronic Health Record and Health Informatics
- More than 322,000 full time health care professionals and support staff
- Over 9 million Veterans enrolled to receive care
- Largest single provider of graduate medical education
- Strong Academic Affiliate Network with ~15,000 medical faculty
- Supports unique intramural research program focused on Veterans' needs

**ORD Mission:** To discover knowledge and create innovations that advance the health and care of Veterans and the nation







## STRATEGIC PRIORITIES OF THE VHA OFFICE OF RESEARCH AND DEVELOPMENT (ORD)

- Increase Veterans' access to high-quality clinical trials
- Increase the substantial real-world impact of VA research
- Put VA data to work for Veterans
- Actively promote Diversity, Equity, and Inclusion within our sphere of influence
- Build community through VA research



# CROSS-CUTTING CLINICAL PRIORITIES OF VHA ORD



Toxic military exposures



Post-Traumatic Stress Disorder



Suicide prevention



Traumatic Brain Injury



Precision oncology



Pain / opioids



COVID-19



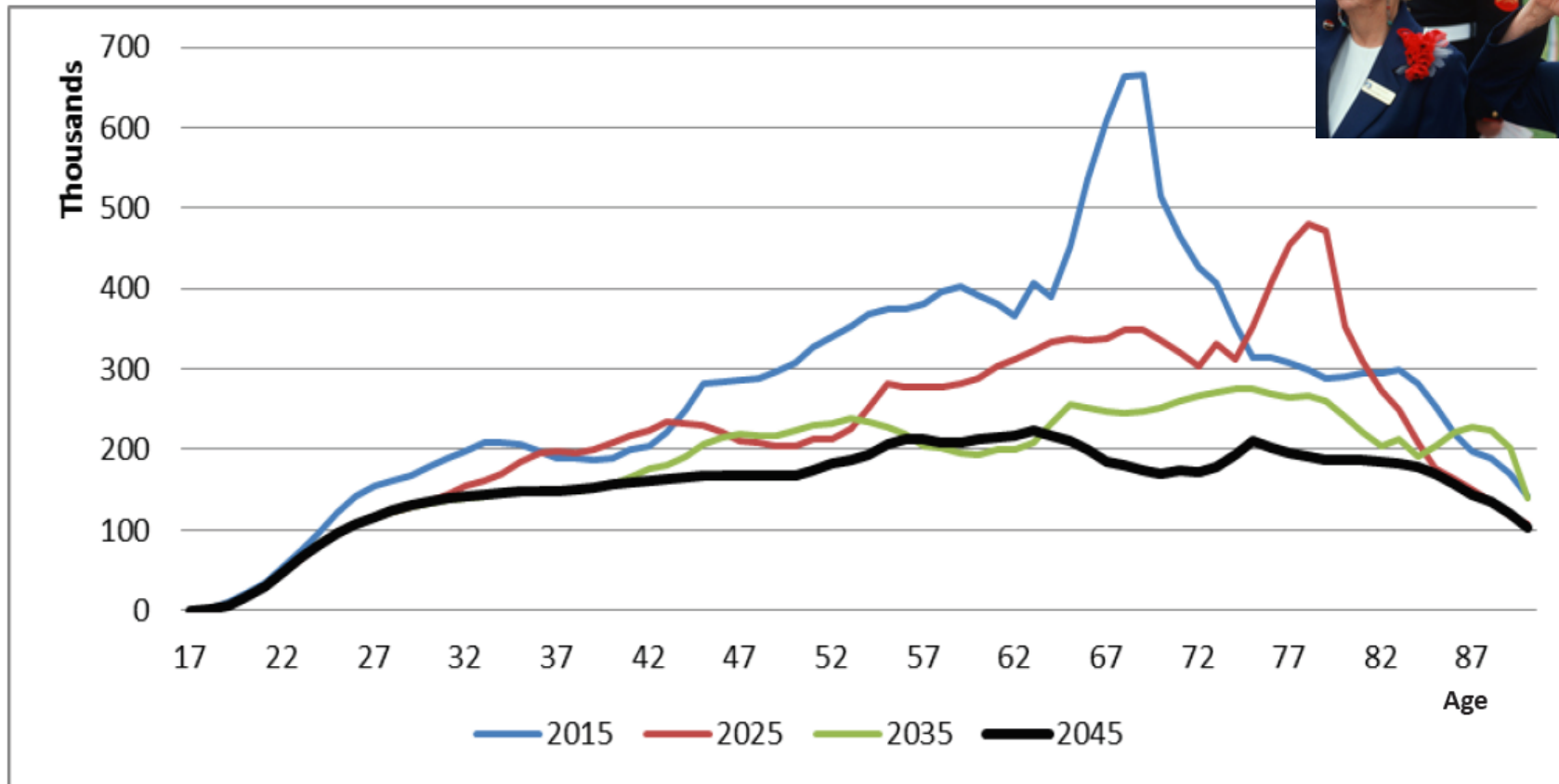
# OVERVIEW OF SIMILARITIES & DIFFERENCES BETWEEN PRORP & VA

	<b>PRORP</b>	<b>VA</b>
<b>Population</b>	Younger & healthier	Older & more health challenges
<b>Conditions</b>	More acute injuries	More chronic conditions
<b>Goals</b>	Battlefield care; RTD	Lifetime health
<b>Organization</b>	One of many CDMRP research programs targeting a specific topic	Broad research program organized along translational pathway to advance the health and care of Veterans
<b>Orthopedic Research?</b>	Entire portfolio	In multiple portfolios across translational pipeline
<b>Funding mechanism</b>	Grants	Intramural awards to VA investigators
<b>Funding cycle</b>	Annual single submission	Biannual with resubmissions
<b>RFAs</b>	More top-down; focus areas & mechanisms can change year-to-year	More bottom-up; Fewer RFAs that are more consistent; Guidance from special emphasis areas; Most research investigator initiated
<b>Scientific Review</b>		Contractors have smaller role
<b>Programmatic Review</b>	External Panel	SPMs & service directors serve as internal panel
<b>Portfolio Balance</b>	By yearly review cycle	Overall
<b>Funding</b>	All at once from single FY budget	Funded on year-to-year basis as per application budget & modifications



# VETERAN POPULATION VA SERVES: FY2015 – FY2045 PROJECTIONS

## Veteran Age Trends



May 2018 Projection showing Veteran age becoming more evenly distributed over 30 years as population declines  
[https://www.va.gov/vetdata/docs/Demographics/VetPop\\_Infographic\\_2019.pdf](https://www.va.gov/vetdata/docs/Demographics/VetPop_Infographic_2019.pdf)



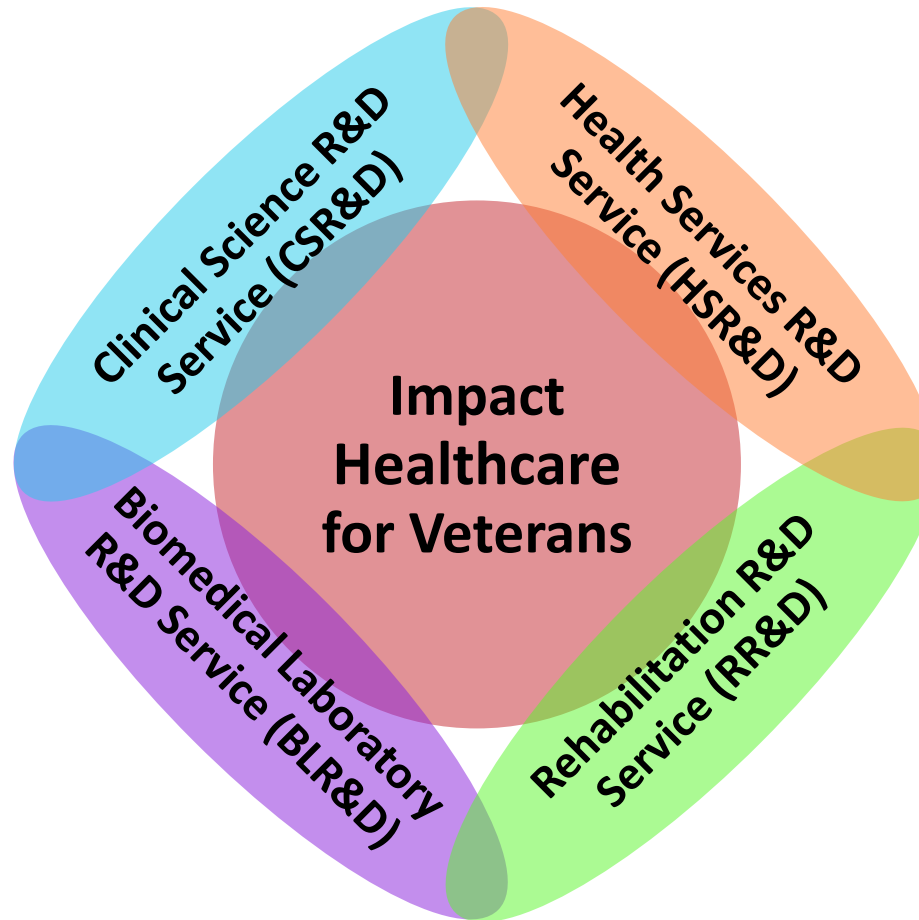
# FOUR SERVICES IN OFFICE OF RESEARCH AND DEVELOPMENT (ORD)

## CSR&D

- Clinical, interventional, effectiveness, epidemiological, and technological studies

## BLR&D

- Preclinical research at molecular, genomic, & physiologic levels
- Tissue banking
- No intact human beings



## HSR&D

- All aspects of health care delivery
- Quality, implementation, access, cost/value, outcomes, & safety

## RR&D

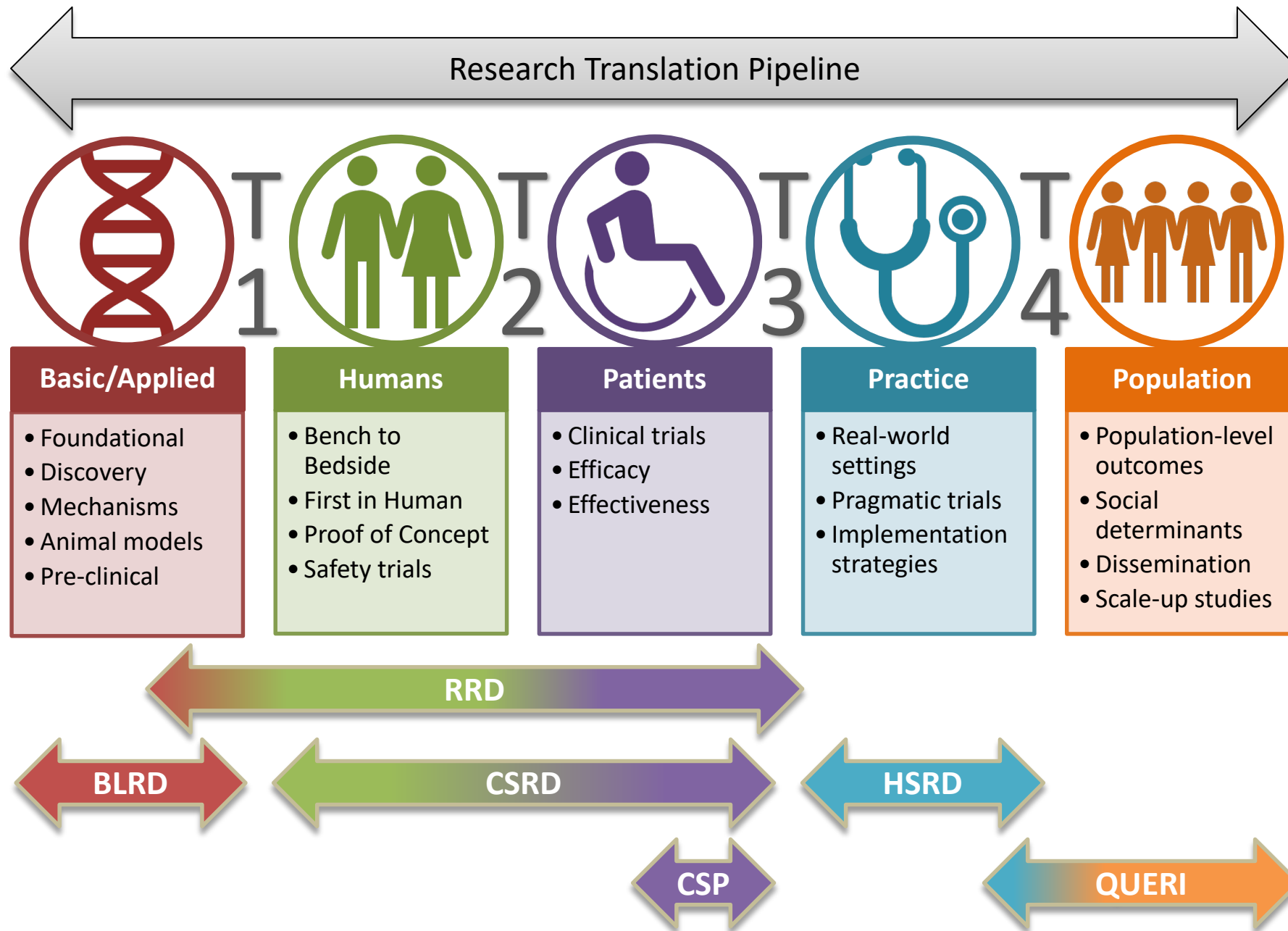
- Maximize Veterans' functional independence and participation in their lives and community
- Restore
- Replace
- Return





## OTHER ORD PROGRAMS

- Office of Research Protections, Policy, and Education (ORPP&E)
- Technology Transfer Program (TTP)
- Cooperative Studies Program (CSP)
- Million Veteran Program (MVP)
- Quality Enhancement Research Initiative (QUERI)
- Biosafety & Biosecurity Program
- VA Biorepository Brain Bank Program
- Veterinary Medical Office
- Research Equipment Quick Use Initiative Program (REQUIP)
- Women's Health





# ORTHOPEDIC RESEARCH DISTRIBUTION BY PORTFOLIOS WITHIN SERVICES

## Research Portfolios in RR&D (as an example)

### Portfolios that may include Orthopedic research underlined

- Spinal Cord Injuries/Disorders & Neuropathic Pain
- Regenerative Rehabilitation Medicine
- Brain Health & Injury
- Musculoskeletal Health & Function
- Sensory Systems & Communication Disorders
- Behavioral Health & Social Reintegration [RRD4]
- Rehabilitation Engineering & Prosthetics/Orthotics
- Chronic Medical Conditions & Aging





# ORD FUNDING ELIGIBILITY

- **Principle Investigators must**
  - Hold VA 5/8ths salaried appointment when funded (promise of appointment sufficient to apply)
- **Co-Investigators**
  - No minimum on VA appointment
- **Proposed research must be**
  - Conducted at a VA facility
  - Relevant to Veterans  
(e.g. pediatric disorders likely not appropriate)
- **Submitting a Letter of Intent (LOI) is often the first step in the review process**





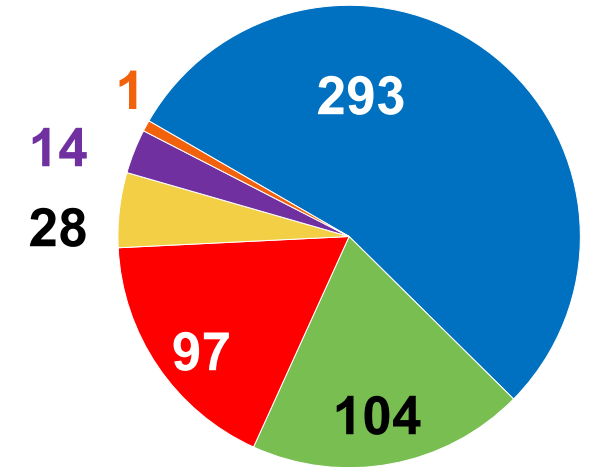


# ORD AWARD TYPES

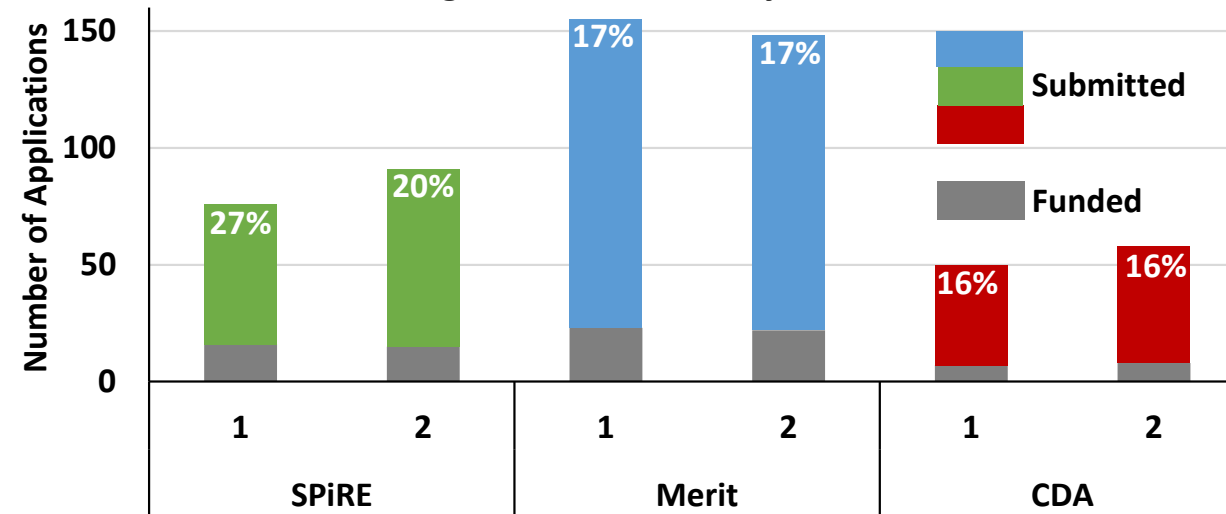
ORD an intramural research program, no “granting” authority

- Merit Awards (I01)**
    - Up to 4 years & \$1.2M total
  - Small Projects in Rehab Research (SPiRE)\* (I21)**
    - 1-2 years, \$115K/year
  - Career Development Awards (CDA) (IK1, IK2)**
    - Up to 5 years of salary support, project funds
  - Research Career Scientists (IK6)**
    - 5 - 7 years, salary support
  - Research Award Enhancement Program/ Centers\* (I50)**
    - 5 years, \$440k/\$1.26M/yr
  - Other**
    - Service Directed Research
- \* RR&D only award

FY20 RR&D Active Awards



Funding Success - Last 2 Cycles





## CURRENT RR&D SPECIAL EMPHASIS AREAS

- **Prosthetic & assistive technology** needs of Women Veterans
- **Exoskeleton** research, including powered motorized orthoses for stroke, traumatic brain injury, or other **non-SCI/D** diagnoses
- Non-pharmacological interventions for **chronic pain** impacting outcomes that may include pain reduction, medication use, ADL, & QoL
- Effect of prolonged **exposure to opioids** on long-term outcomes from **traumatic brain injury**
- **Suicide prevention** interventions within a rehabilitation context **for participation in life roles**
- Rehab-related effects/treatments for **COVID-19**; secondary effects, influence of comorbidities/risk factors, etc.
- **Health Disparities and conditions that impact underserved Veterans** (e.g., racial and ethnic minorities, with disabilities, LGBTQ+) to better understand onset, severity, duration, rehabilitation, and recovery from disability.





## HOW VA COORDINATES WITH PRORP

- Cross-agency representation on panels
- Funding research in areas where we have similar goals and objectives
- In the past, joint VA/DoD panel presentations at DoD R&A events  
Currently ORD leadership representation at R&A events
- Joint outreach with other Federal funding agencies at conferences
- Relaying funding announcements to investigators and reviewers

VA



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# Questions?

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VA



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# Extra Backup Slides



# RR&D REVIEW & SELECTION PROCESS- HOW DIFFERS FROM DOD

## **Applications and Scientific Review**

- RFAs consistent round to round with only minor changes in emphasis
- 8 scientific portfolios & with 13 review panels (10 for portfolios, 2 CDA, 1 RCS)
- Review panels meet for 1 day 2x per year (spring/fall for SPiRE & winter/summer for others)
- Efforts made to recruit same reviewers for resubmissions
- Up to 3 submissions allowed for Merit/CDA & 2 for SPiRE
- Resubmissions must respond to reviewer comments and apps judged on responsiveness
- Renewals must include progress report section to describe work performed in prior award

## **Programmatic Review**

- SPMs meet with Service Directors and discuss funding recommendations based on merit and portfolio needs; final funding decisions made by Service Directors based on recommendations & budget
- Funding success rates can fluctuate round-to-round by panel and overall based on available funds, quality of applications, and overall balance of scientific portfolios



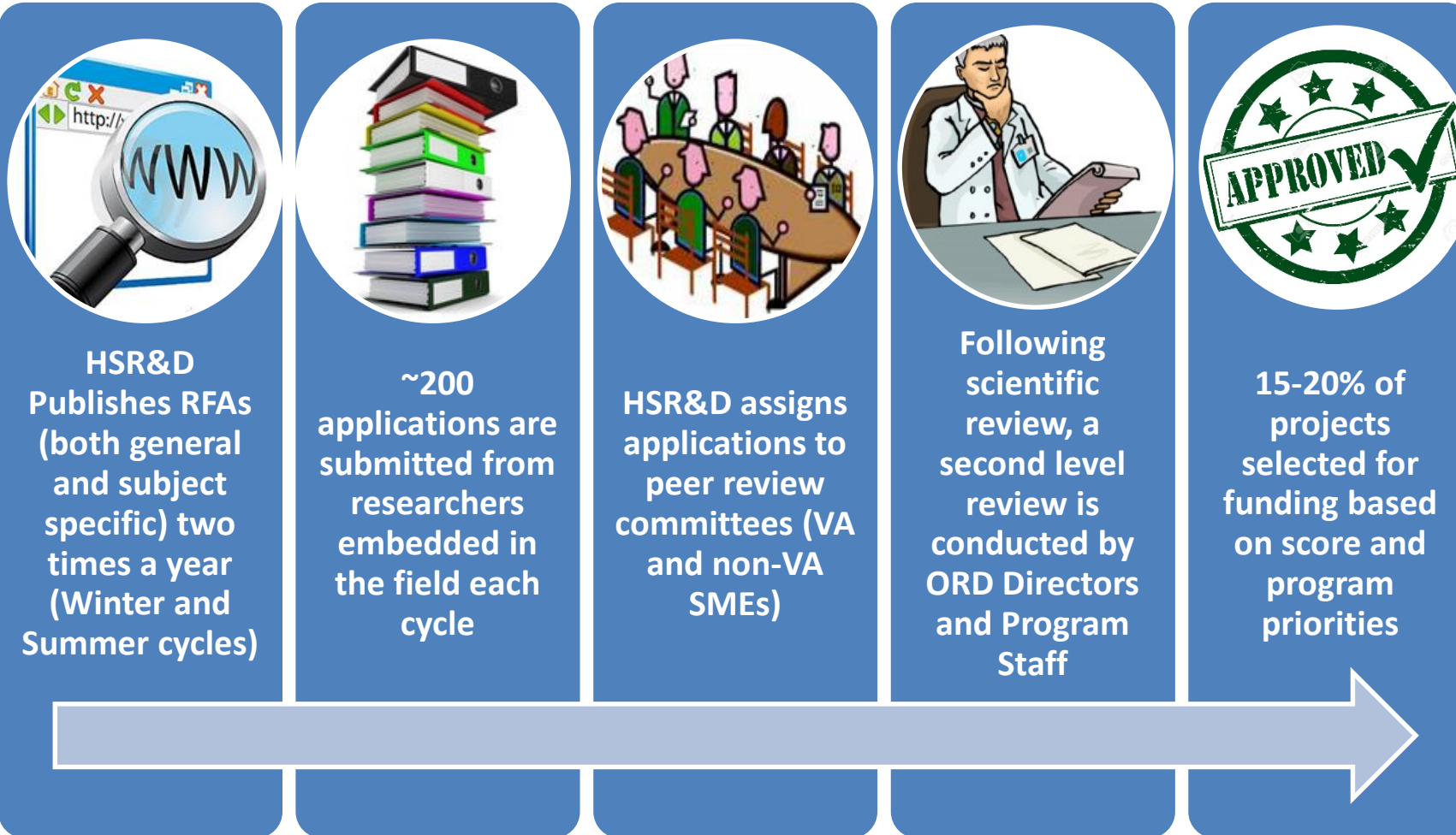
# RR&D FUNDING PROCESS- HOW DIFFERS FROM DOD

## Funding Process

- Research and clinical care are funded by different appropriations and these funds must be kept separate
- VA yearly research appropriation:  
FY20 \$800M with \$50 M rescission from FY19  
FY21 \$815M with \$20M rescission from FY20
- No fixed allocation of funds to specific award mechanisms
- Projects funded on a year-to-year basis as requested in application budget and any modifications
- Applicants must complete Just-in-Time process to fulfill all requirements before receiving an official start date and funds
- Investigators expected to spend down each year's funding by end of FY or return/reallocate-  
"SPEND the MONEY you GET in the Year you get it!"



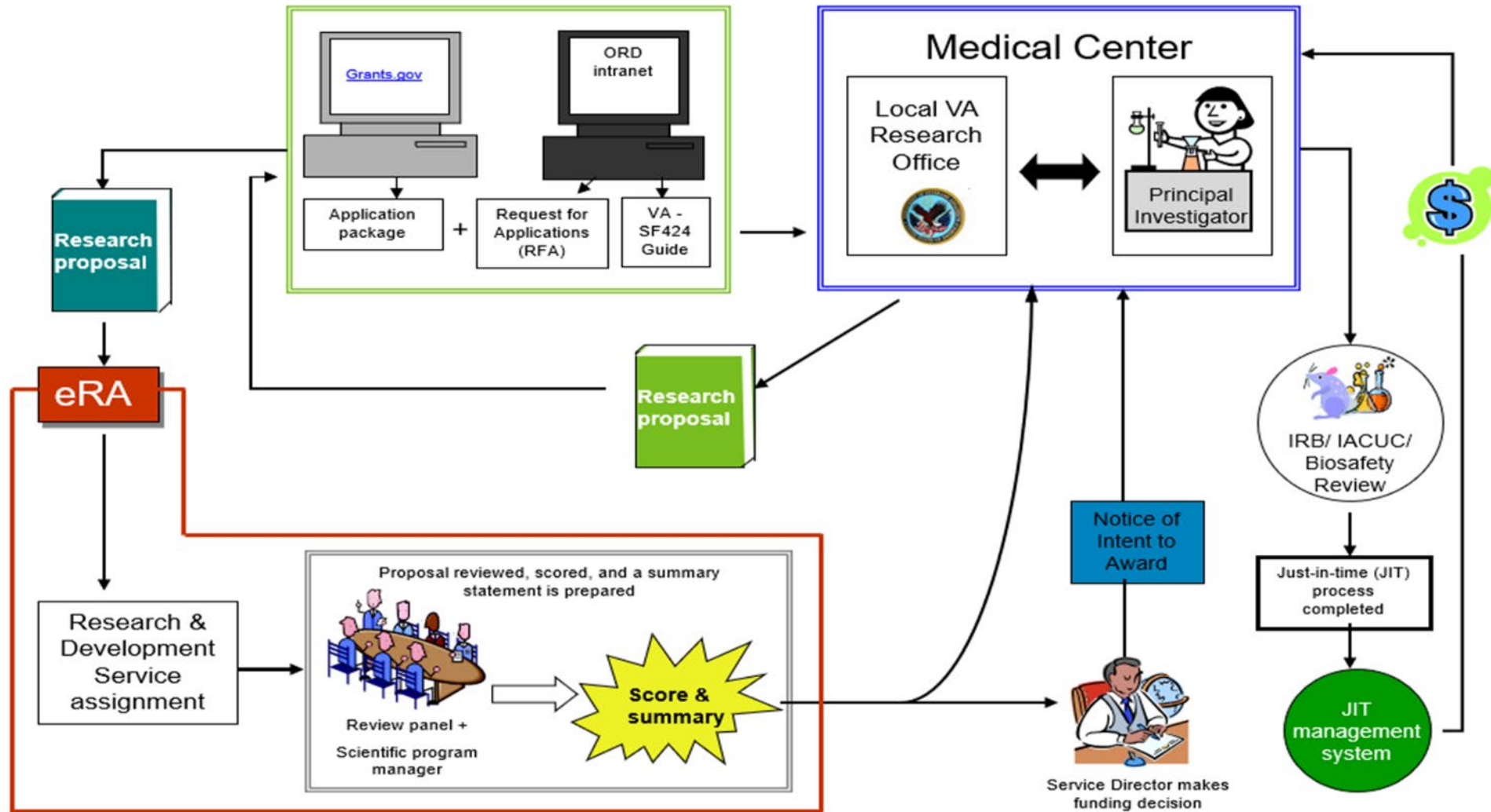
# HSR&D Selects Projects for Funding Through a Structured Peer Review Process



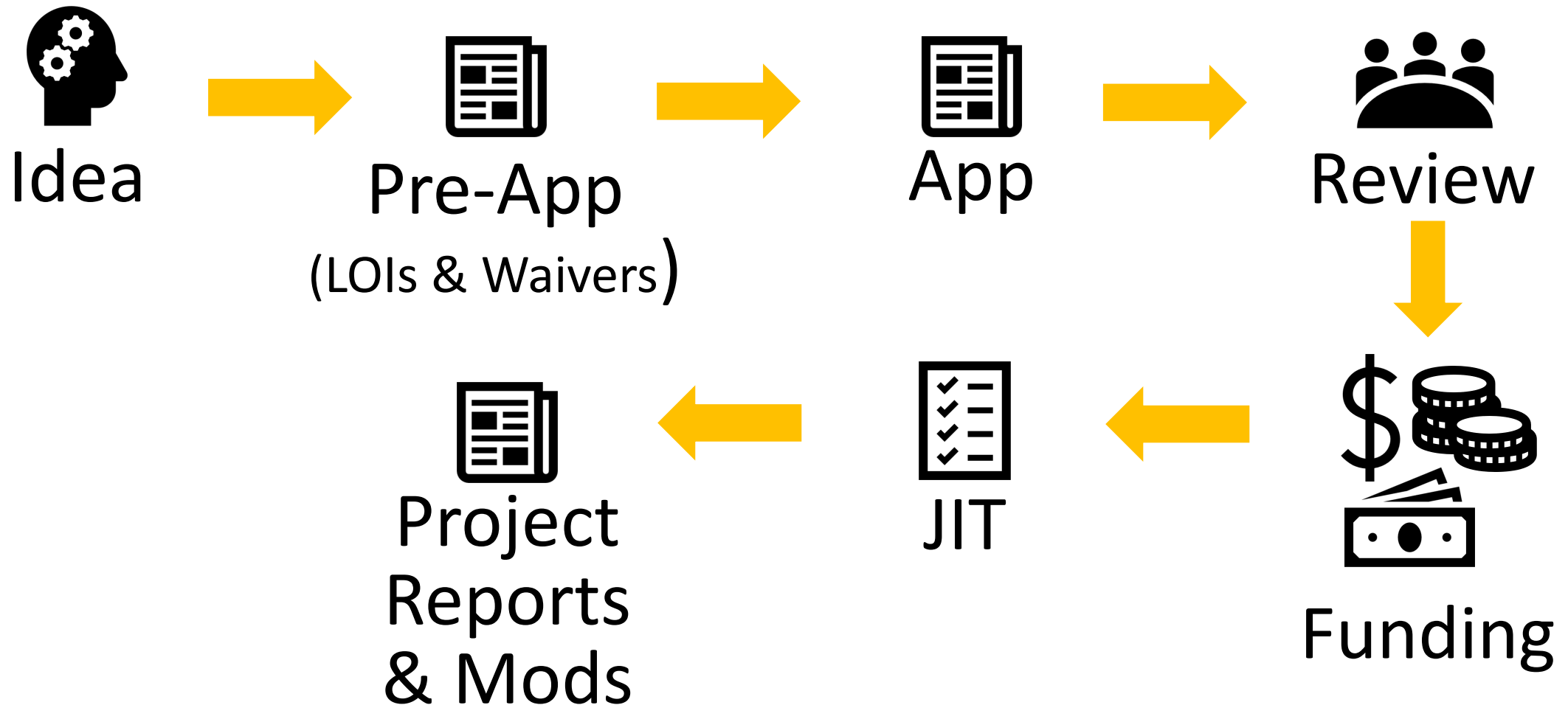




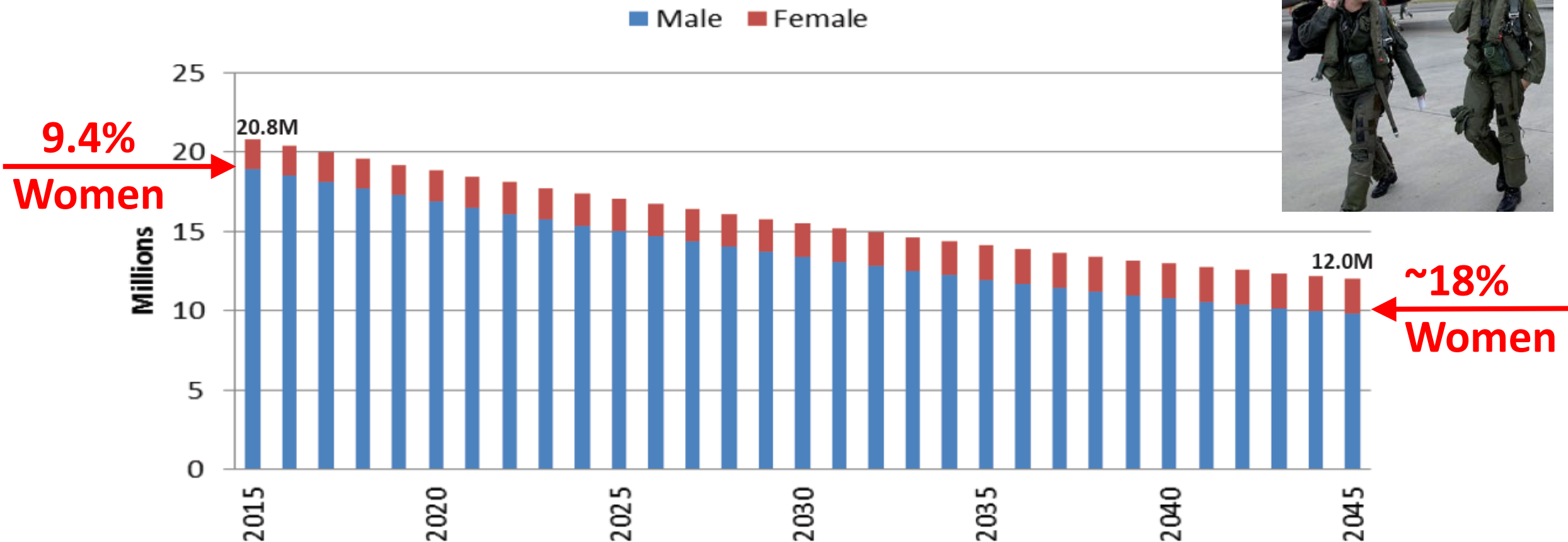
# RR&D Selects Projects for Funding Through a Structured Peer Review Process



# RR&D Management of Research Idea through Project Execution



# Veteran Projections by Gender



Projection showing total Veteran population declining while % Women Veterans increasing over 30 years

[https://www.va.gov/vetdata/docs/Demographics/VetPop\\_Infographic\\_2019.pdf](https://www.va.gov/vetdata/docs/Demographics/VetPop_Infographic_2019.pdf)