



VHA SLC RESEARCH AND DEVELOPMENT

Offers Veterans a brighter tomorrow
 Serves as a model of research excellence
 Attracts exceptional investigators
 Fosters dynamic collaborations.

VA HEALTH CARE | Defining EXCELL in the 21st C. 20 February

VA |  U.S. Department of Veterans Affairs
 VA Salt Lake City Health Care System | ent of Veterans Affairs
 City Health Care System

VHA SLC Research and Development: History

- **1946** –Emphasized affiliations with Medical Schools including U of U SOM
- **1955** – Congress appropriated an explicit VA research budget-separate line item
- **1956** – First Career Development Awards through the Clinical Investigator Program
- **1970s** –System evolved as we know it with Merit Review Boards.

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VHA Research and Development: Accomplishments

- 1947 Developed and tested effective therapies for **tuberculosis**. Multi center trials led to the development of the CSP
- 1956 Work with radioisotopes led to the development of modern radioimmunoassay diagnostic techniques
- 1960 Invented the first clinically successful implantable **cardiac pacemaker**.
- 1961 Pioneered the concepts that led to the development of the CAT scan
- 1963 **Lasker Award** to Dr. Michael DeBakey for originating new techniques in cardiovascular surgery
- 1967 performed the first successful **liver transplants**.
- 1971 **Lasker Award** to Dr. Edward Freis for developing drug therapy for moderate **hypertension**
- 1974 **Lasker Award** to Dr. Ludwig Gross for discovering **leukemia and cancer** causing viruses
- 1975 **Lasker Award** to Dr. William Oldendorf for pioneering computerized tomography
- 1976 **Lasker Award** to Dr. Rosalyn Yalow for developing radioimmunoassay

3

VHA Research and Development: Accomplishments

- 1977 **Nobel Prize** to Dr. Andrew Schally (peptide hormone production in the brain) and Dr. Rosalyn Yalow
- 1984 Developed the **nicotine patch**
- 1990 discovered a peptide in the venom of the Gila Monster that would become the basis of the **diabetic medication** Byetta
- 1991 established the Cleveland Functional Electrical Stimulation Center
- 1994 Discovered that one aspirin a day reduced by half the rate of death and non fatal heart attacks in patients with unstable angina
- 1998 **Nobel Prize** awarded to Dr. Ferid Murad for discoveries related to nitric oxide
- 2000 showed that colonoscopy is superior to sigmoidoscopy for screening for **colon cancer**
- 2004 showed that lutein could prevent and reverse symptoms of **macular degeneration**
- 2012 **Lasker-DeBakey Award** to Dr. Tomas Starzl for work on liver transplantation

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4

VHA Research and Development Scope: Annual Budget

- \$727mm in direct appropriations requested for FY 2019
- \$570mm from other government agencies (NIH, DoD, CDC, etc)
- \$600mm from other including Medical Care Research Support

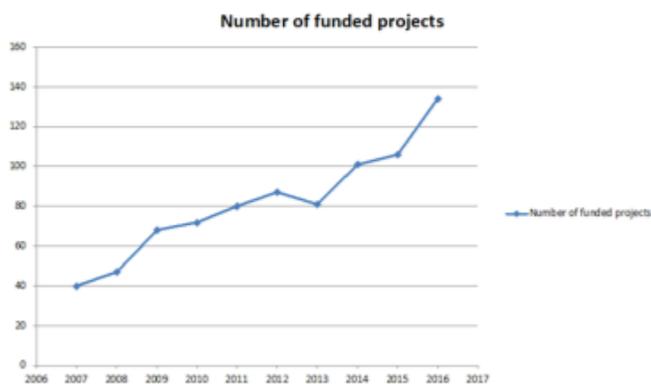
- Total: \$1.9 billion

VHA SLC Research and Development: Size of the Enterprise

- 123 Funded VA Programs
- 392 Total Projects (up from 367 in 2016)
- Over 300 Clinical studies
- Approximately 40 Animal Studies
- 25 studies with INDs
- 154 Active Investigators

VHA SLC Research and Development: VA Funded Projects-Trajectory

Number of VA funded Projects



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7

VHA SLC Research and Development: Funding FY17

- \$22.5mm in total research funding
 - \$11mm in VA funded research
 - \$11.5mm from other funding sources
- \$11mm in VERA (indirects)
- \$10mm in research contracts/operations

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8

VHA SLC Research and Development: Western Institute of Biomedical Research (WIBR)

- A nonprofit corporation established to promote research and related educational activities at the VA Salt Lake City Health Care System, by providing a flexible funding mechanism for private and public grants to support VA approved research projects.
- FY 2017 funding \$4.786mm
 - DoD
 - Industry
 - SWOG
 - CDC
 - Private donors

VHA Research and Development: VA Research Programs

Office of Research and Development (ORD)
consists of four research services

- Biomedical Laboratory Research and Development Service (BLRD)
- Clinical Science Research and Development (CSRDR)
- Health Services Research and Development (HSRD)
- Rehabilitation Research and Development (RRD)

VHA Research and Development: Categories of Research Awards

- Merit Review
- Career Development Awards
- Career Scientist Awards
- Special Programs
- Infrastructure Support
 - Proposals
 - Veterans Equitable Research Allocation (VERA)

VHA SLC Research and Development: Merit Review

- An intramural funding mechanism to support investigator-initiated research.
- Typically funds \$150k/year for four years
- Available in all four services
- For PhD investigators need an approved LOI
- **Currently excellent funding level**

VHA SLC Research and Development: Career Development Program

- Awards are provided in all areas of VA's research enterprise
- **CDA-1:** Entry level career development program is open to clinicians and non-clinicians. Only RRD is currently offering this award.
- **CDA-2:** Mid-level program open to clinicians and non-clinicians who must specify their career development plans and research project over 3-5 year duration. This is supported by all four services (**currently excellent funding level**)
- **CDEA:** Career development Enhancement Award for senior VA scientists open to clinicians and non clinicians (i.e. sabbatical).
- **Research Career Scientist** – Non-clinician scientists who have made extraordinary contributions beyond their individual research programs.
- **Senior Research Career Scientist** – Non-clinician scientists who are international leaders in their research area.

13

VHA SLC Research and Development: Research Investigator Support

- Research time in 8ths. **For clinicians is mapped to community standard.**
 - 3/8 for Merit award
 - 6/8 for CDA
 - 8/8 for Research Career Scientist
 - 1/8 for committee assignments
- VA Awards are Intramural
 - **Clinicians are paid through their service**
 - Non-clinicians are paid from their grants

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14

VHA SLC Research and Development: Special Programs at SLC

- COIN – Center of Innovation (Matt Samore)
- CTSP – Centralized Transcription Services Program (Susan Zickmund)
- NODES – Network of Dedicated Enrollment Sites (Dan Clegg)
- MVP – Million Veterans Program (Larry Meyer)
- VINCI – VA Informatics and Computing Infrastructure (Nebeker/DuVall)
- GRECC – Geriatric Research, Education, & Clinical Center (Mark Supiano)
- MIRECC – Mental Illness Research Education, and Clinical Centers (Todd/Renshaw)
- Rural Health (Rand Rupper)

VHA SLC Research and Development: Challenges

- Space constraints: currently 69K sq ft
- Agility within the VA System
- Recruitment and retention of highly skilled staff
- Policy Compliance
- Reactionary

VHA SLC Research and Development: Resources

Space



Currently
just under
69K sq ft

Genomics
(MVP DNA storage)
Break ground in 2017!



VHA SLC Research and Development: What Lies Ahead?

- Improve the health of veterans through ground breaking research across the spectrum
- Grow Merit Reviews
- Develop committed young investigators
- Provide research opportunities for excellent established investigators
- Create greater synergy with clinical activities
- Further integrate with the University of Utah
 - Specific programs (NAVIGATE, CCTS)
- Succession planning