



Presentation 17 – Joel Kupersmith

**Report of the
Office of Research and
Development**




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Department of Veterans Affairs
September 21, 2005



VA Research

Our mission is clear and Congressionally-
mandated :

*“To discover knowledge and create innovations
that advance the health and care of veterans and
the nation.”*



VA Research Standards

- **Is the research based on rigorous science?**
- **Will the research produce data that will drive clinical policy?**
- **Will the research translate to improved health care?**
- **Will the research help veterans?**



Rich 50 Year History

- **3 Nobel Laureates**
- **6 Lasker Award Winners**
- **Important Discoveries and Inventions**
 - > **Devices**
 - ✓ Cardiac Pacemaker
 - ✓ Radioimmunoassay
 - ✓ CT Scanner
 - > **Treatments**
 - ✓ TB
 - ✓ Hypertension
 - ✓ Heart Failure



Rich 50 Year History

- How your doctor treats you is based in many ways on VA research



How VA Research Works



Intramural Research Program

- VA Research is an intramural program.
- Researchers must be employed by VA (5/8s or more in most cases).
- Unlike agencies such as the NIH or DoD, VA has ***no*** statutory authority to make research grants to colleges and universities, cities and states, or any other non-VA entity.



Organization of VA Research

- Four research services with the VA Office of Research and Development (ORD)
 - Biomedical Laboratory R&D Service (BLR&D)
 - Clinical Science R&D Service (CSR&D)
 - Health Services R&D Service (HSR&D)
 - Rehabilitation R&D Service (RR&D)



Types of Research Sponsored

- Investigator-Initiated Research (Merit Review)
- Mentored Research (Career Development)
- Large-scale, multi-site clinical trials (Cooperative Studies Program)
- Centers of Excellence (all Services)
- Service-Directed Research
- Special Initiatives (e.g., Gulf War Illnesses Research)



Merit Review

- Merit Review
 - > Our core business
 - > Must produce excellent science
 - > Process must be sacrosanct
 - > Must be absolutely fair (especially in view of history)
 - > Must have uniformity in procedures
 - > New initiative - NIH Impact II Computerized system
 - ✓ Will revolutionize system and also promote uniformity




Current ORD Leadership

- | | |
|-------------------|--------------------------|
| ■ CRADO | Joel Kupersmith |
| ■ Deputy CRADO | Vacant |
| ■ Director, BLR&D | Timothy O'Leary |
| ■ Director, CSR&D | Timothy O'Leary (acting) |
| ■ Director, RR&D | Robert Ruff (acting) |
| ■ Director, HSR&D | Shirley Meehan (acting) |




Long Term Vision




Long-Term Vision

- Genomic database
- Integration of research and clinical care



Long-Term Vision

- Genomic database
 - **Concept:** to link patients' genetic information with the VA electronic health record
 - **Goal:** to develop genetic assessments that will potentially enable "mass customization" of medical treatment
 - ✓ Particularly pharmacogenetic customization




Genomic Medicine


- **New research will emphasize:**
 - Understanding the role of genetics in the prevention and cause of disease,
 - Using genetic information to improve how clinicians prescribe medications and to prevent adverse reactions,
 - Developing computer systems to effectively and confidentially manage genetic data that can be used to identify genetic predispositions and provide optimal patient care,
 - Developing laboratory capability to do genetic and pharmacogenomic profiling within VA
 - Learning how to use genetic information effectively in every day practice.



Integration of Research and Clinical care




**Bed to Bench
Bench to Bed**




**Bed-to-Bench
Bench-to-Bed**

- In the VA, research and patient care are under the same roof
- This is unique and we need to take advantage of it
- We need to assure that we are choosing research projects that directly benefit our veterans and that they get the benefits of it



**Bed-to-Bench
Bench-to-Bed**

- **Bed-to-Bench Bench-to-Bed**
 - Translation of research findings from basic to clinical to health services research
 - Clinical input into research agenda to properly inform it



**Translation of Laboratory Science
to the Bedside**

- **Steps**
 - Use laboratory science and animal models to develop concepts for clinical care
 - Undertake clinical research based on these concepts
 - Put evidence base concepts into clinical guidelines
 - Assure that guidelines are carried out

