

# Council of Councils Meeting DPCPSI Update

**James M. Anderson, M.D., Ph.D.**

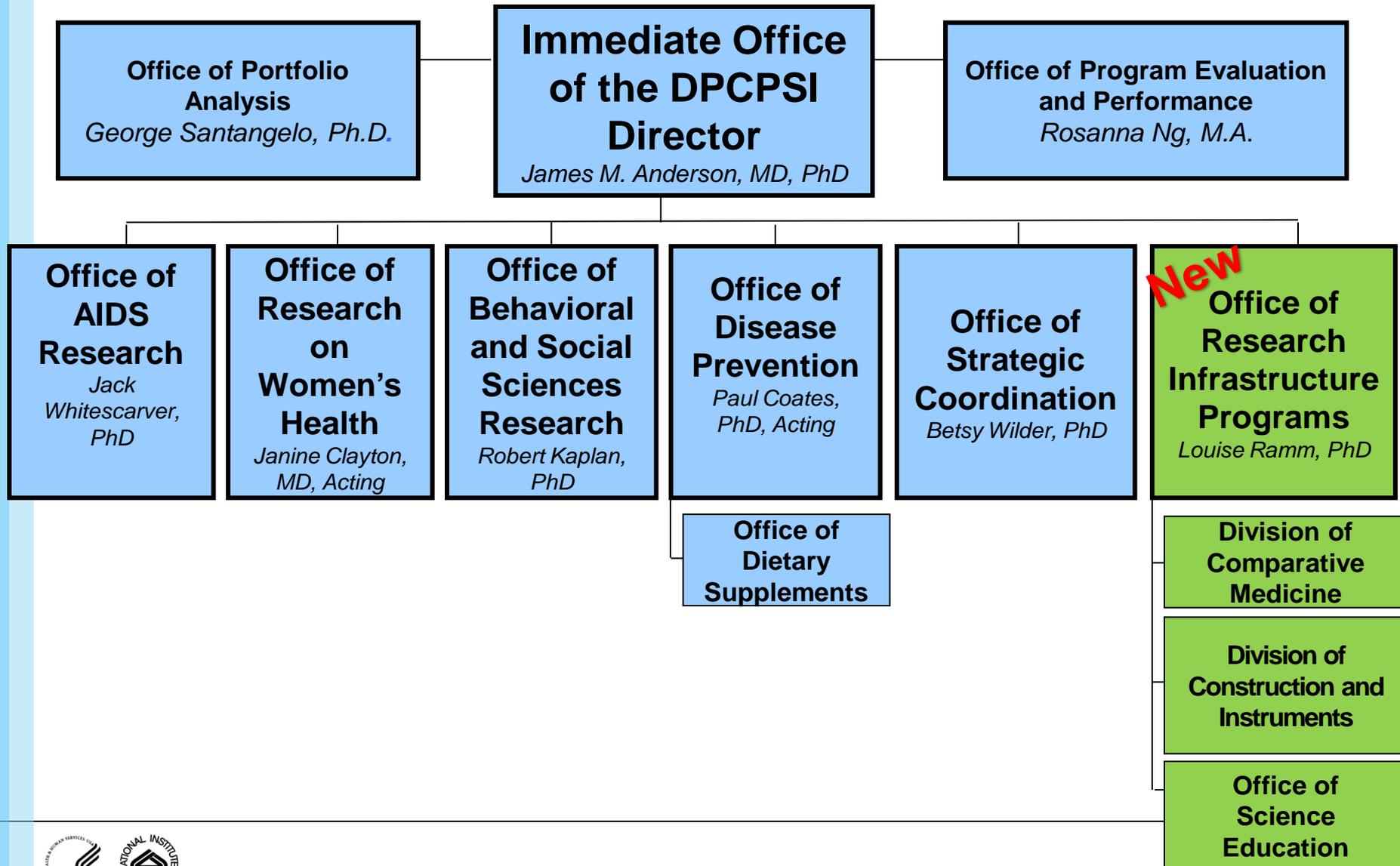
Director

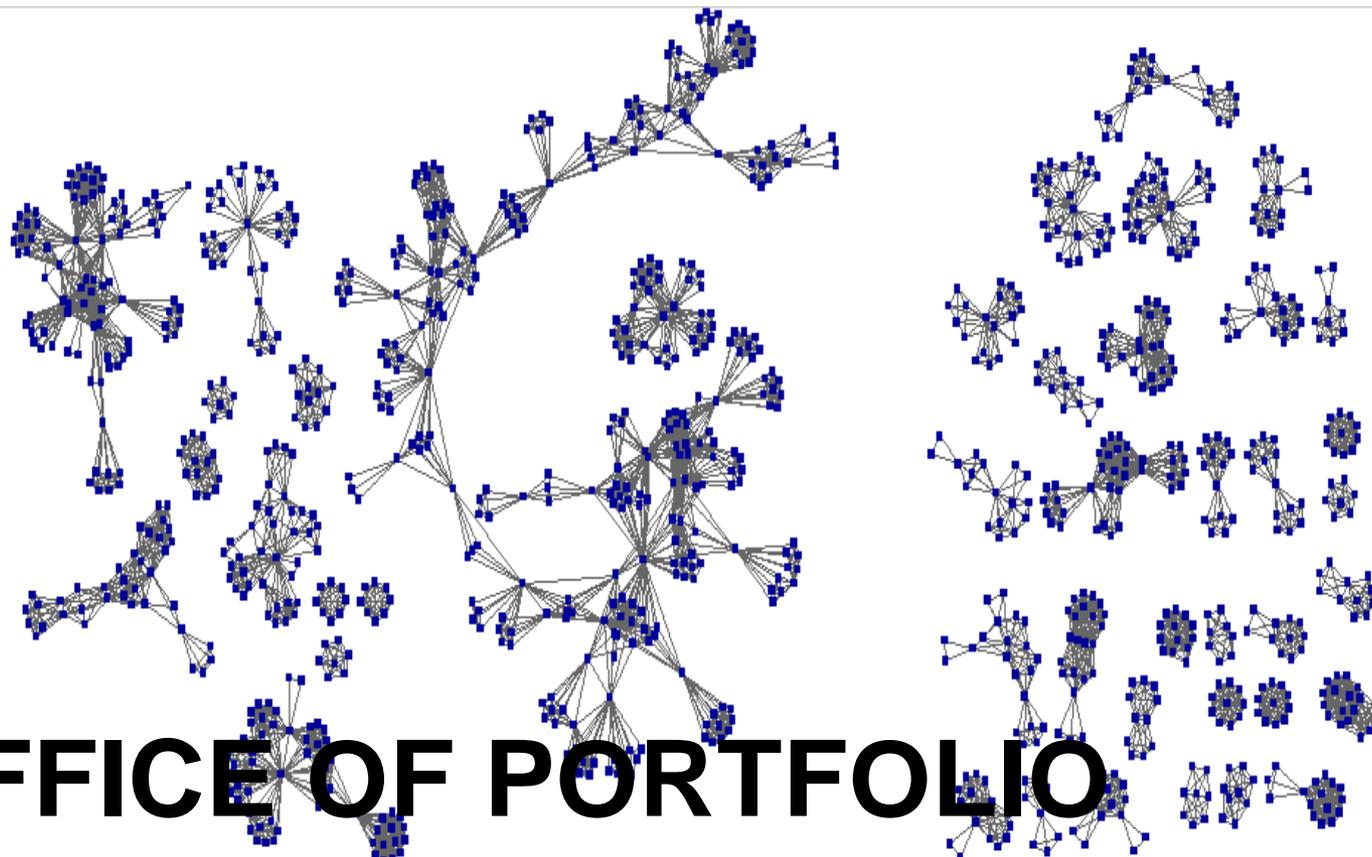
Division of Program Coordination, Planning,  
and Strategic Initiatives

June 5, 2012



# Division of Program Coordination, Planning, and Strategic Initiatives *After January 10, 2012*

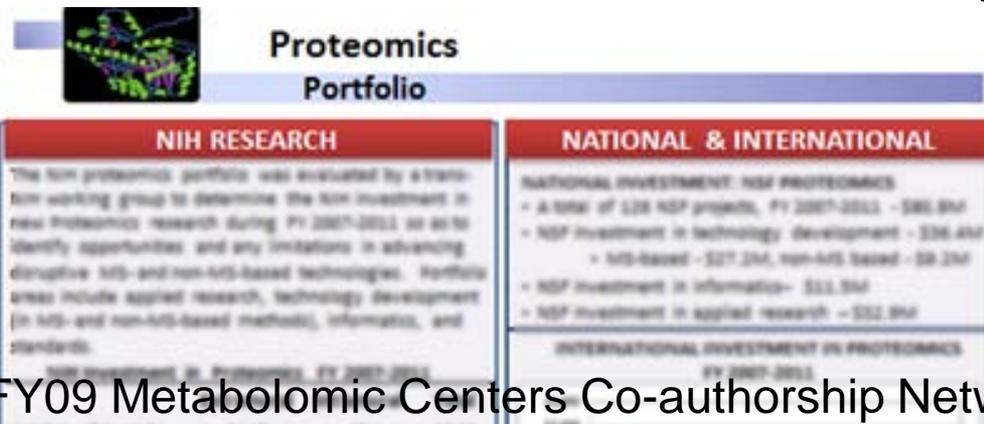




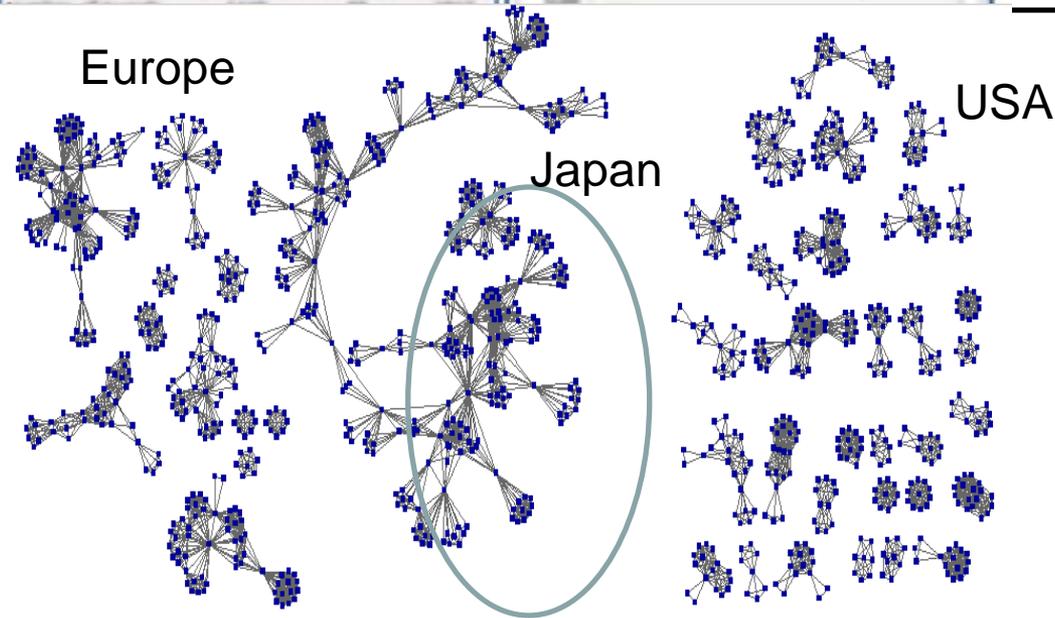
# OFFICE OF PORTFOLIO ANALYSIS



# Portfolio Analysis for Common Fund Project Refinement



- Analyses inform existing and possibly new concepts
- Summarizes NIH's investment in the research area, international activity, funding, possible opportunities, etc.
- Examples shown are from Common Fund programs





# OFFICE OF RESEARCH INFRASTRUCTURE PROGRAMS

- a few updates from DCM

# Scientific Accomplishments and Advances – Council of Council meeting presentations

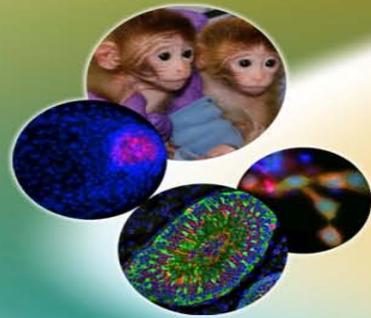
## The National Swine Research and Resource Center and Genetic Engineering of Swine

- Randall S. Prather, PhD, University of Missouri

## Nonhuman Primate Studies for the Prevention of HIV Infection

- Ronald Veazey, DVM, PhD, Tulane National Primate  
Research Center, Tulane University





# Improving Animal Models for Regenerative Medicine

National Institutes of Health, OD  
Office of Research Infrastructure Programs  
Division of Comparative Medicine



**NIH Symposium** • May 23–24, 2012 • Lister Hill Auditorium, NIH Bethesda, MD

For information about this event, please contact [RegenerativeMedicine@lmbps.com](mailto:RegenerativeMedicine@lmbps.com).

## **Purpose:**

- Colloquium on current status of and requirements for the use of animal models for cell-based regenerative medicine
- Moving these techniques into clinical practice

**Keynote speaker:** Dr. James Thomson, University of Wisconsin University

**Participants:** 56 non-NIH, 84 NIH (18 ICs), FDA, USDA, NIST, Armed Forces Institute for Regenerative Medicine

## **Meeting sessions included:**

1. Cross species review of stem cell biology in vertebrate model systems
2. New and emerging technologies in stem cell transplantation
3. Specific disease modeling and tissue repair
4. The potential challenges of stem cell therapy
5. Clinical translation of animal models

# Planning ahead...brain storming meeting

## **Next Generation Animal Models Targeting Personalized Disease Phenotypes (improving predictability and utility of animal models)**

- September 2012 in Bethesda, MD at NIH
- Group of 12-14 leaders of research teams and 8-10 NIH staff
- Purpose: Explore opportunities and impact of developing “personalized animal models” to help solve the most difficult challenges in the post-genomic era - validating disease-associated genetic variations and biomarkers in humans and developing new class of effective individualized therapeutics





# OFFICE OF BEHAVIORAL AND SOCIAL SCIENCES RESEARCH

# Office of Behavioral and Social Sciences Research (OBSSR)

Based on trans-NIH need → new funding opportunity announcements:

- Practical Interventions to Improve Medication Adherence in Primary Care (R01, R21)
- Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care (R01)
- Systems Science and Health in the Behavioral and Social Sciences (R01, R21)



U. S. Department of Health & Human Services



OFFICE OF BEHAVIORAL  
AND SOCIAL SCIENCES RESEARCH  
NATIONAL INSTITUTES OF HEALTH



# Training Programs and Meetings

2012 NIH SUMMER INSTITUTE ON  
Social and Behavioral  
Intervention Research

National Institutes of Health  
6th Floor, Building 31  
June 28-29, 2012

Advancing  
Prevention:  
Knowledge Gaps and New Partnerships

July 9-12, 2012  
Training Institute for  
Dissemination and  
Implementation  
Research in Health  
Dolce Hayes Mansion | San Jose, California

Randomized Clinical Trials  
Involving Behavioral  
Interventions

TIDIRH

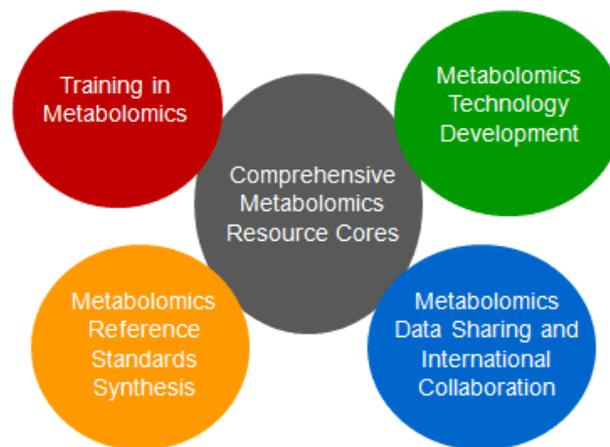
Institute on Systems  
Science and Health



# **OFFICE OF STRATEGIC COORDINATION**

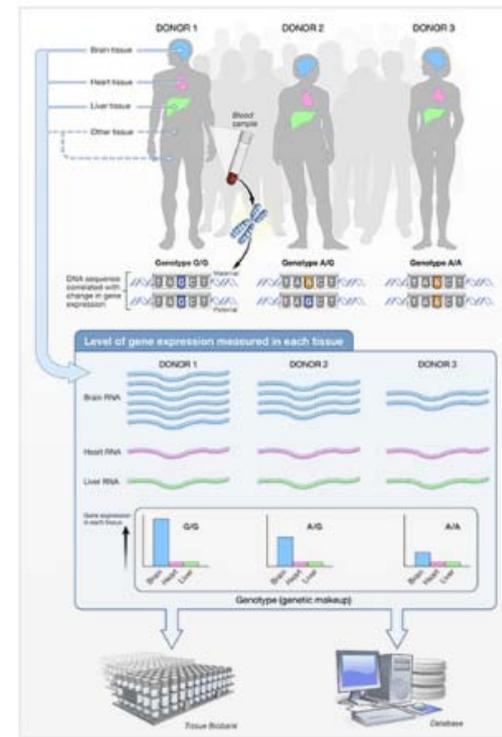
# Increasing Metabolomics Research Capacity

- Regional Comprehensive Metabolomics Resources Cores
- Training in Metabolomics
- Metabolomics Technology Development to Enable Large Scale Metabolomics Analyses
- Metabolomics Data Sharing and Program Coordination Core
- Metabolomics Reference Standards Synthesis



# Genotype-Tissue Expression (GTEx)

- Resource for studying genetic variation and gene expression in reference tissues
- Pilot Goals Achieved
  - ✓ Enroll at least 10 post mortem donors/month
  - ✓ RNA integrity number (RIN)  $\geq 6$  for 70% of 12+ organs
  - ✓ eQTLs detected for 4-10% of genes
- Scale-up Goals
  - 900 post-mortem donors, completely genotyped
  - Over 25,000 peripheral tissues
  - Gene expression levels measured by RNA-Seq for >20,000
  - Methylation, somatic DNA mosaicism, etc.
  - Associated clinical and histopathological information
  - Access system for data and samples
  - ELSI study of donor families
  - Human Gene Expression Atlas
  - Comprehensive *cis*- and *trans*-eQTL results for each tissue



# Single Cell Analysis

- Program to catalyze conceptual and technical advances in the analysis of single cells to uncover fundamental biological principles obscured by conventional experimental approaches
- Three FOAs issued for FY 2012:
  - Studies to evaluate cellular heterogeneity using transcriptional profiling of single cells (U01)
  - Exceptionally Innovative Tools and Technologies for Single Cell Analysis (R21)
  - Accelerating the Integration and Translation of Technologies to Characterize Biological Processes at the Single Cell Level (R01)
- Robust response by scientific community
- Single Cell Analysis Workshop held April 17–18 in Bethesda





# OFFICE OF RESEARCH ON WOMEN'S HEALTH

# Office of Research on Women's Health

- Recent Finding: Addicts' cravings have different roots in men and women
  - Brain imaging study published in the *American Journal of Psychiatry*, January 31, 2012.
  - Investigators at the Yale University *Specialized Center of Research (SCOR) on Sex and Gender Factors that Affect Women's Health*,
- Testimony to National Academies of Science on women of color in biomedical research workforce
- Coordinate International Violence Against Women Working Group
- Ongoing Leadership Search for Director, Office of Research on Women's Health

# OFFICE OF DISEASE PREVENTION

# Office of Disease Prevention

- New responsibilities in tobacco research, resulting from the Family Smoking Prevention and Tobacco Control Act (2009)
- After the Associate Director for Disease Prevention is appointed, will coordinate NIH research activities. ICs will make the awards.
- For FY2012
  - NIH competitive revision applications for research relevant to tobacco product regulation (FY12 \$20M)
  - Administrative Supplements to NIH-funded program projects/center grants: Research and pilot projects relevant to tobacco product regulation (\$40M/yr for 2 yrs)
  - NIH Intramural Tobacco Research Program
  - Funding of NIH grants relevant to Tobacco Control Act
- Ongoing Leadership Search for Associate Director for Prevention; Director, Office of Disease Prevention

# **SPECIAL COUNCIL REVIEW**

# Special Council Review

- Management of NIH recourses in austere times → e.g. NIGMS >\$750k Direct review → HHS requested that NIH develop a SCR
- Pilot of Special Council Review in May 2012 Councils to apply:
  - Extra consideration before awarding grant to PI with >\$1.5M annual total costs for NIH research support
  - To advise on whether additional funds should be provided
- Feedback will assist NIH in refining policies for conducting SCR
- Pertinent only to DCM/ORIP

**QUESTIONS?**



# NIH...

## Turning Discovery Into Health

