# NIH Council of Councils DPCPSI Update

June 20, 2014

James M. Anderson, MD, PhD

Director

Division of Program Coordination, Planning, and Strategic Initiatives



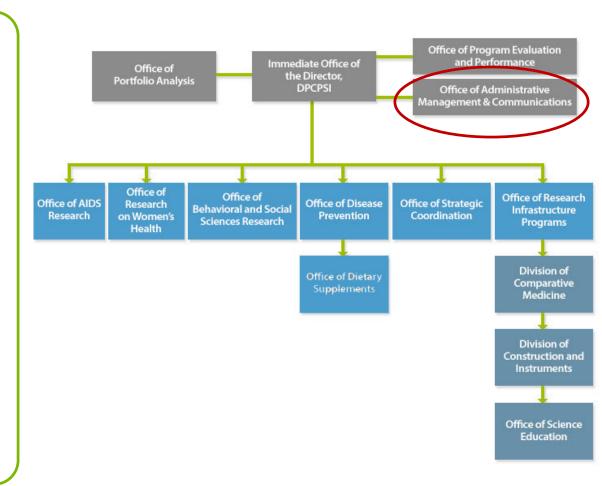


### Plan for the Day

- Overview of Aquatic/Zebrafish Model Resources
- Scientific Presentation on: A Zebrafish Model for the FA/BRCA Pathway and Connecting Fish Medical Models to Human Health
- Remarks by the NIH Director
- Closed Session: Review of Applications
- Presentation on Enhancing Reproducibility
- Common Fund Discussion of Proposed Concepts
- Early Independence Award Process Evaluation and Discussion
- Update on the Common Fund Process and Management Evaluation Working Group Report
  - Discussion and Vote

## Office of Administrative Management and Communications (OAMC)

- Established in November 2013 to support DPCPSI offices in fulfilling their missions and realizing their visions:
  - delivering timely and quality administrative, communication, management, and technical services
- Director: Ruby Akomeah



### **New DPCPSI Senior Staff**

#### **OAMC**

Director: Ruby Akomeah



#### **OBSSR**

Acting Director: William Riley, PhD

Deputy Director: Stephane Philogene, PhD

#### **ORIP**

Deputy Director: Michael Chang, PhD



# DPCPSI Scientific Retreat June 13, 2014

- Presentations from the Office Directors
  - Office missions, current and planned scientific initiatives, and opportunities for coordination with other Offices
- What limits us? What will we do about it?
  - Group 1: Analytic challenges and possible solutions
  - Group 2: Approaches and criteria for developing FOAs and signing onto PAs as a secondary
  - Group 3: Challenges and solutions to establishing, implementing, and coordinating research agendas across the ICs
  - Group 4: Research support challenges
    - Research challenges to working with the ICs and how can we make our interactions more effective

#### Increasing the Impact of DPCPSI

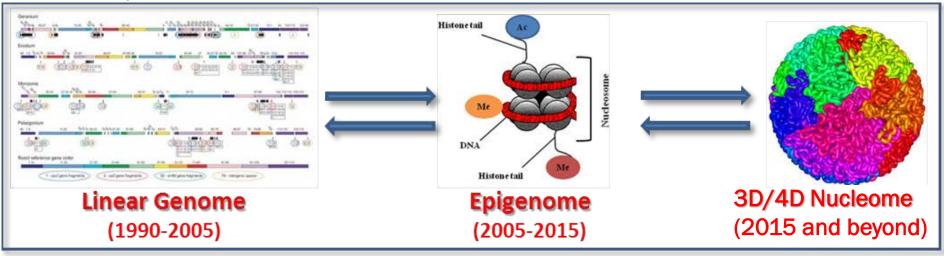
- Lead in portfolio analysis
- Opportunities for disruptive innovation
- Balance between facilitating vs. leading
- General solutions vs. specific scientific questions
- Best practices for priority setting, planning, and coordination
- Facilitating interactions with ICs
- Trans-DPCPSI processing/sharing communication
- Getting the most for the dollars spent

# 4D Nucleome New FY15 Common Fund Program

The 4D Nucleome program aims to understand principles of nuclear organization in space and time, the role of nuclear organization in gene expression and cellular function, and how changes in nuclear organization affect development and disease.

#### **Program Deliverables:**

- Tools to explore nuclear organization and its relationship to the regulation of gene expression programs, as well as nuclear dynamics (4D architecture)
- Reference maps of the 3D architecture of the interphase nucleus for a variety of cells and tissues
- Validated predictive models of genome conformation/function relationships during development and disease



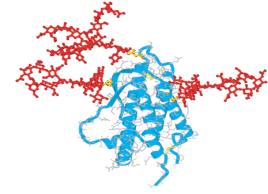
### Accelerating Translation of Glycoscience: Integration and Accessibility

Glycans participate in multiple fundamental cellular mechanisms that contribute to <u>health and disease</u>. However, they are difficult for may researchers to study.

- The primary roadblock: the limited availability of affordable and accessible tools and technologies that can be used by non-specialists.
- Objective: To develop accessible new tools and technologies that make glycoscience possible for any biomedical investigator.

*Initiative 1*: Facile methods and technologies for synthesis of biomedically relevant carbohydrates and their glycoconjugates

*Initiative 2*: Accessible tools for probing and analyzing carbohydrates and their interaction partners

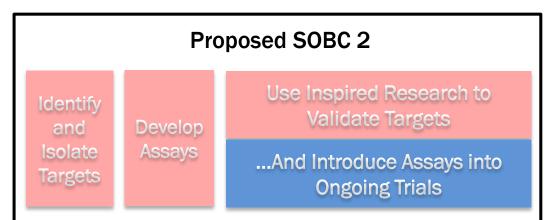


Nature Biotechnology, 25, 145-146 (2007)

*Initiative 3*: Accessible resources for integration and analysis of carbohydrate and glycoconjugate structural, analytical, and interaction data

## Science of Behavior Change (SOBC) Still in Planning Stages

Opportunity to improve behavioral intervention research by providing useful intervention targets and validated assays to measure their engagement.



#### Physical Activity

- Fall 2014 Workshop to consider PA
  - Redefine PA within context of clinical cohorts and associated omics tools for discovery
  - Protocols and techniques that would enable researchers to uncover the mechanisms by which PA improves overall health and the long-term, overarching benefits of PA
  - Assess feasibility of new PA cohort(s)
- Continue to refine the overall concept for consideration as a new FY 2016 Common Fund program

#### Thank You.