The President's Precision Medicine Initiative in Oncology

- A presidential initiative to improve cancer treatment through cancer genomics
- Foundational clinical trials (MATCH—Adult and Pediatric)
- Preclinical models to advance predictive oncology: the right drugs for the right patient at the right time
- A large annotated database of cancer patients: for researchers, health care providers, and patients (GDC; Warren Kibbe & Lou Staudt)

The President's Precision Medicine Initiative in Oncology (1)

Improve pre-clinical models for evaluating targeted therapeutics and immunotherapy (input from NCI workshop)

- ✓ "Administrative supplements (for CCSGs) to support research in canine immunotherapy via collaboration of NCI-designated Cancer Centers and Veterinary Medical Colleges"—issued April 12, 2016; 17 responses; 8 funded

- ✓ "Administrative supplements (for CCSGs, SPOREs, NCTN, and UM1 grantees) to support collaborative research efforts to enhance preclinical drug development and preclinical clinical trials utilizing patient derived xenograft (PDX) models"—issued May 2, 2016; 65 responses; 10 funded

The President's Precision Medicine Initiative in Oncology (2)

Expand support for development of immunotherapy trials (input from 2 NCI workshops):

- ✓ "Administrative supplements (for CCSG, P50, and U01/U10 grantees) to support biomarker development and correlative studies associated with clinical trials of immunotherapy"—issued April 15, 2016; 23 responses; 13 funded
- ✓ "Administrative supplements (for CCSG, P50, or P01 grantees) to support studies of how the microenvironment of pancreatic ductal adenocarcinoma affects immunotherapy"—issued April 26, 2016; 36 responses; 9 funded
- ✓ "Administrative supplements for P30 CCSGs to support improvement and optimization of T-cell therapies and cGMP manufacturing processes for production of autologous T-cell therapy products targeting solid tumor"—issued May 9, 2016; 15 responses; 3 funded

The President's Precision Medicine Initiative in Oncology (3)

Employ clinical materials from drug resistant patients for molecular analysis, leading to rational studies of targeted combinations

- ✓ "Administrative supplements to CCSGs, SPORES, U10 Cooperative Agreements, and UM1 funded sites in the ETCTN to study mechanisms of cancer sensitivity and resistance to therapy utilizing samples and information from human clinical trials—issued May 31, 2016; **38 responses; 10 funded**
- ✓ Create a repository of molecularly analyzed samples of resistant disease (pre- and post-treatment pairs)—To be issued in Fall of 2016 by Leidos as administrative supplements to NCORP sites. Standardized therapy programs for patients treated in the community, not eligible for NCTN trials, whose clinically-annotated tumors will get MATCH panel and will be stored for further evaluation by extramural investigators