

# Submitting Successful Cancer Center Support Grant: A Core Director's Perspective

Tim Synold, City of Hope Analytical Pharmacology  
Core Facility  
March 2<sup>nd</sup>, 2020



# Description of the APCF

## MAJOR EQUIPMENT



➤ Waters Quattro Ultima with an Agilent 1100 HPLC front-end.



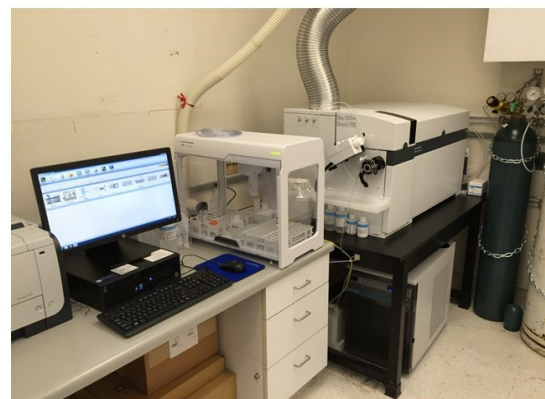
➤ Waters Quattro Premier XE with an Agilent UPLC front-end.



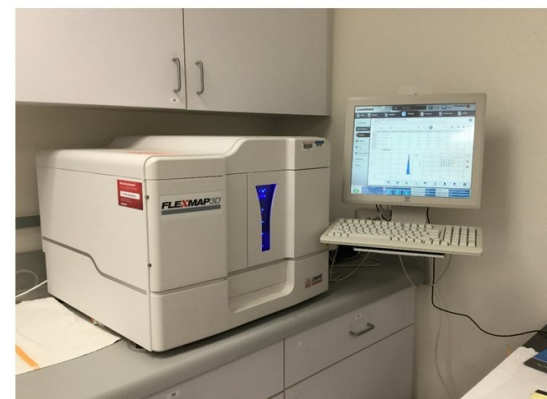
➤ AB Sciex QTRAP 5500 with a Shimadzu LC-20 HPLC front-end.



➤ Agilent 6410 with an Agilent 1260 HPLC front-end.



➤ Agilent 8800 inductively coupled plasma triple quadrupole mass spectrometer.



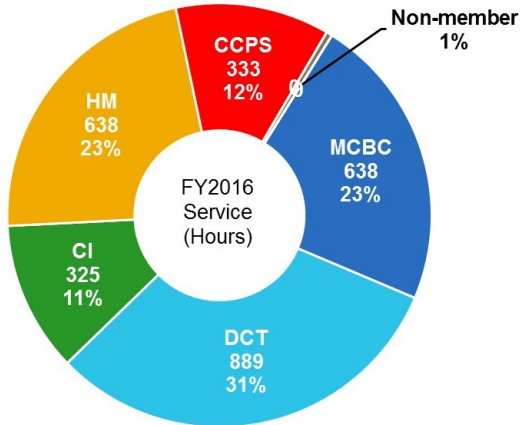
➤ Luminex FlexMap3D multiplex immunoassay platform.

# Key Considerations for a Successful Application

- Description of resources, equipment, and processes demonstrating state-of-the-art
- Evidence of importance to the CC;
  - Breadth and scope of users (# of users and Programs)
  - Support of peer-reviewed research
  - Publications (especially high impact)
- Policies and procedures ensuring cost-effectiveness, access, prioritization, and quality control
- Governance and oversight
- Future plans that are aligned with member needs.

# How Critical is the Shared Resource to the Research of the Center?

## PROGRAMMATIC IMPACT



### Core utilization by year

Category	2012	2013	2014	2015	2016
No. of CC users	22	23	24	28	33
No. of cancer clinical trials	37	27	16	30	37
Funding source (%)					
Peer-reviewed	82	78	79	71	85
Non peer-reviewed	18	22	21	29	15
Assay development & re-initiation (#)					
New methods	9	17	9	9	6
Existing methods	15	15	18	25	24
Sample analysis (#)					
Analytical chemistry <sup>^</sup>	3977	1946	1916	2176	2531
Immunochemistry <sup>*</sup>	1845	1840	1262	4551 <sup>+</sup>	2458
Total no. of samples analyzed	5822	3786	3178	6727	4989
Total no. of specimens processed	1438	818	763	806	807

<sup>^</sup>LC-MS/MS, AAS, HPLC, GC/MS, and ICP-MS  
<sup>\*</sup>Luminex, ELISA, Flow cytometry, and QPCR  
<sup>+</sup>Includes 2538 samples analyzed in support of R01AG037037 (A. Hurria<sup>CCPS</sup>)

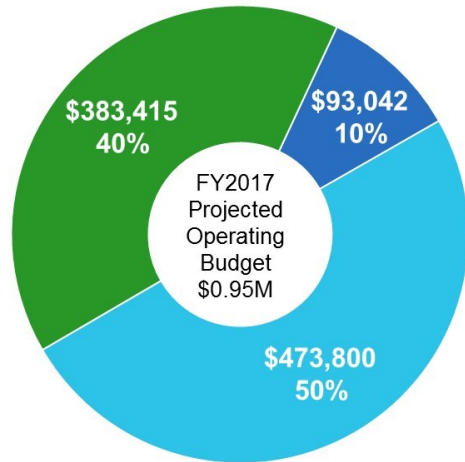
- Used by members of all 5 CC Programs.
- 85% with peer-reviewed funding.
- Supporting 12 NIH-funded grants totaling \$8.1M per year in direct costs.
- Contributed to 48 publications.
- During the previous funding period, developed or initiated 147 analytical methods and analyzed 25,502 samples.





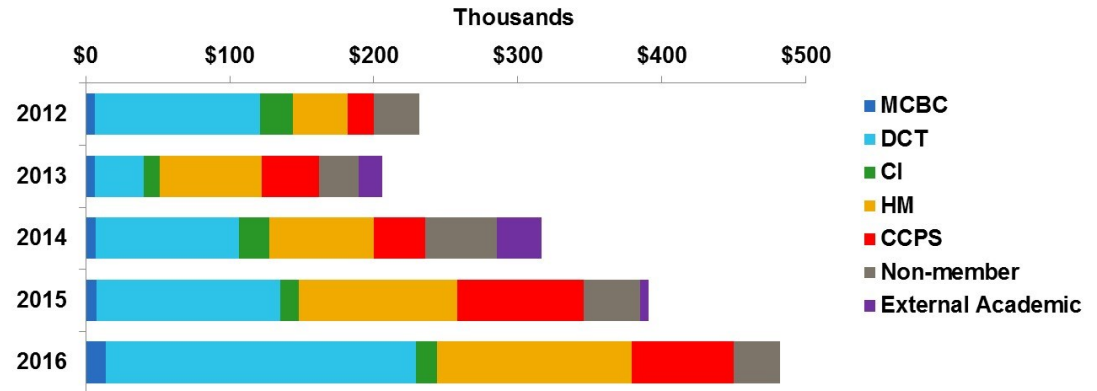
# Governance Ensuring Cost-effectiveness, Access, Prioritization, and Quality Control

## OPERATING BUDGET



■ CCSG ■ Fee for Service/Chargebacks ■ Institutional Support

## REVENUE BY PROGRAM MEMBER TYPE (2012-2016)



- Each core has an advisory committee made up of key users that meets  $\geq$  bi-annually.
- Shared Resource Steering Committee reviews rates annually.
- Annual user survey gauges satisfaction with existing services and identifies new areas for development.

# Reviewers Comments from Last Competitive Review - December 2017

- The CCSG provided 10% of the APCF budget, however 99% of its constituents are COHCCC members from all of its five programs.
- The quality of the core equipment and reinvestment by COH administration are outstanding.
- The APCF has been exceptionally productive.
- The team has demonstrated an exceptional level of commitment to ongoing and future COHCCC efforts.

**Assessment:** Exceptional merit