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Of Medicine and Science
Division of Cancer Research and Training
Center to Eliminate Cancer Health Disparities

UCLA Jonsson Comprehensive Cancer Center

Experience of the CDU/UCLA Cancer Center Partnership to Eliminate Cancer Health Disparities

NIH/NCI Grant # U54 CA 143931
Year 6

PI at CDU: Jay Vadgama, Ph.D
PI at UCLA: Robin-Farias Eisner, M.D, Ph.D

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Acknowledgements

CDU-UCLA Cancer Center Partnership

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OVERARCHING GOAL

Reduce cancer health disparities in minority, under-resourced, and underserved populations in South Los Angeles.

Social Contributors to Health Disparities and role for the CDU-UCLA U54 Cancer Center Partnership

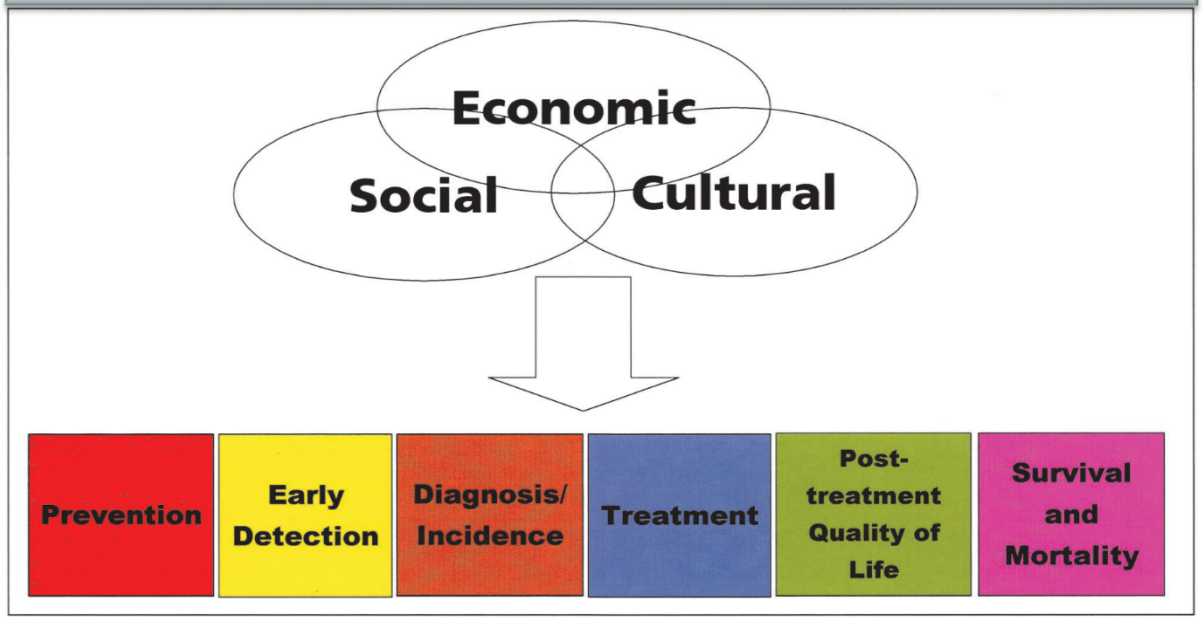

FIGURE 1 Factors That Influence Social Disparities.
Source: Adapted from Freeman, HP[3] and Institute of Medicine.[7]

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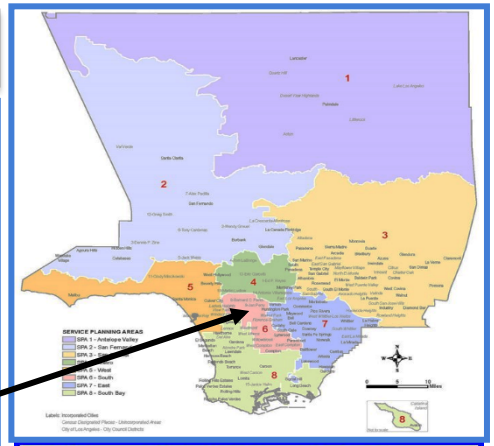
SPA6: South Los Angeles

SPA6 in Los Angeles County California



Cities Within SPA 6:

- Compton
- Crenshaw
- Florence
- Lynwood
- Paramount
- Rosewood
- Watts
- West Adams
- Willowbrook
- Windsor Hills

SPA6 has the highest percentage of childhood overweight (based on grades 5,7, & 9), the highest adult sedentary behavior and poorest adult nutrition ratings of all SPAs in the county

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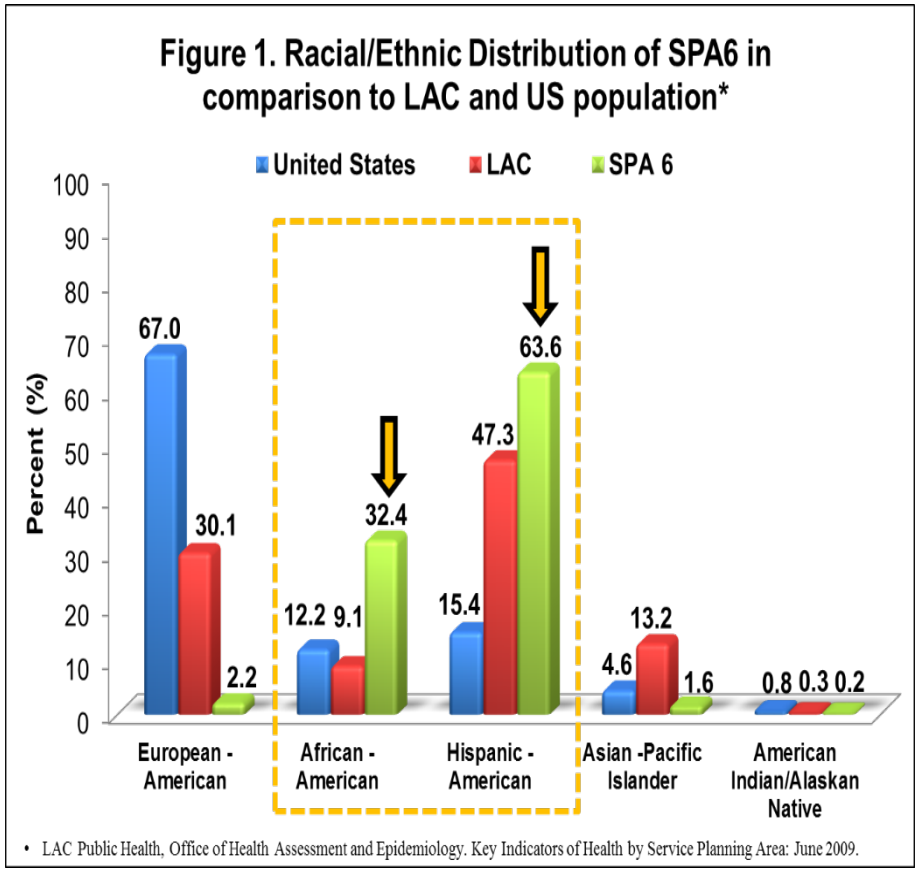
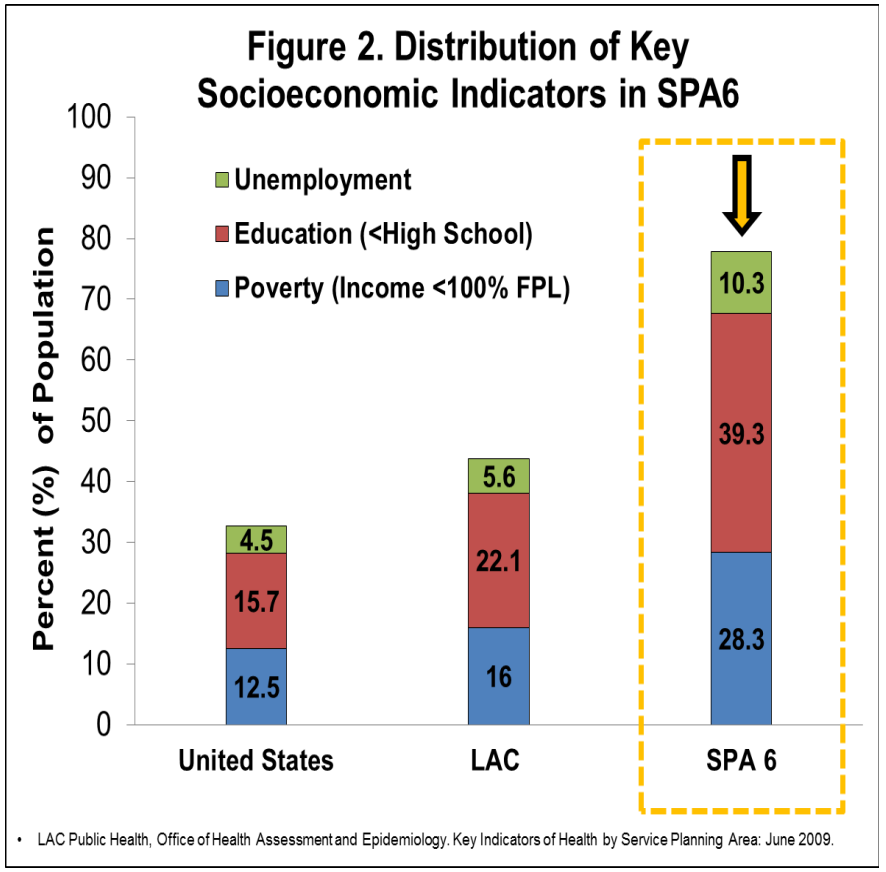
Status on Cancer Health Disparities in South Los Angeles



• LAC Public Health, Office of Health Assessment and Epidemiology. Key Indicators of Health by Service Planning Area: June 2009.



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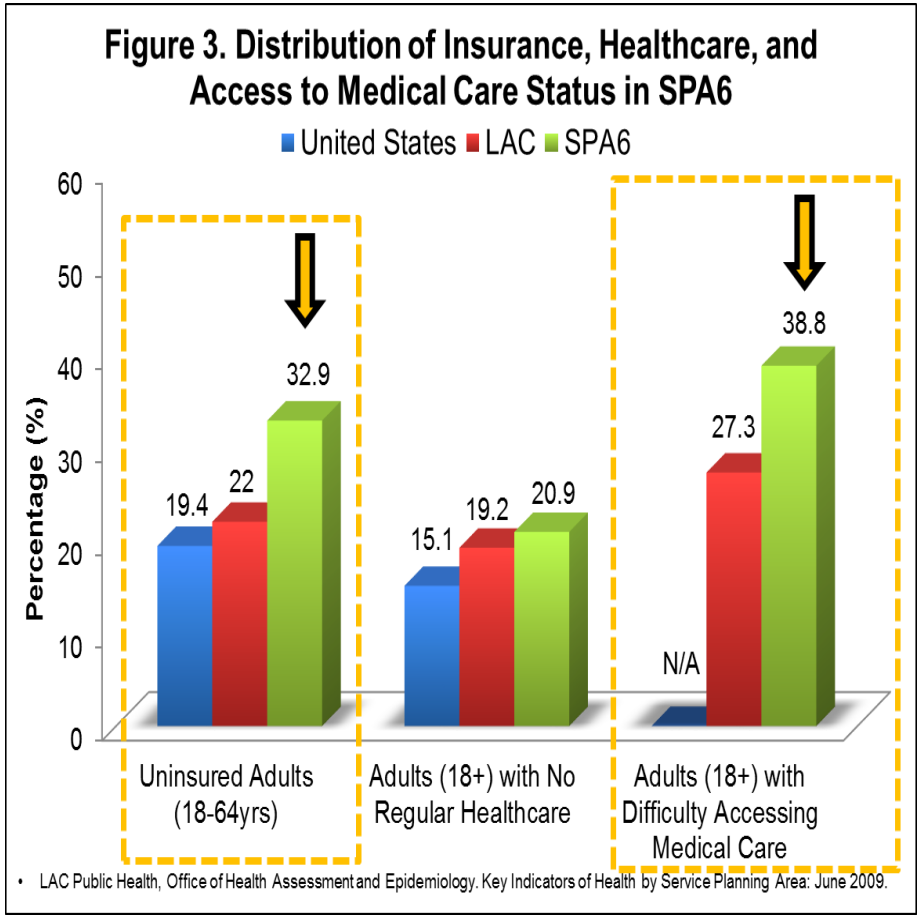

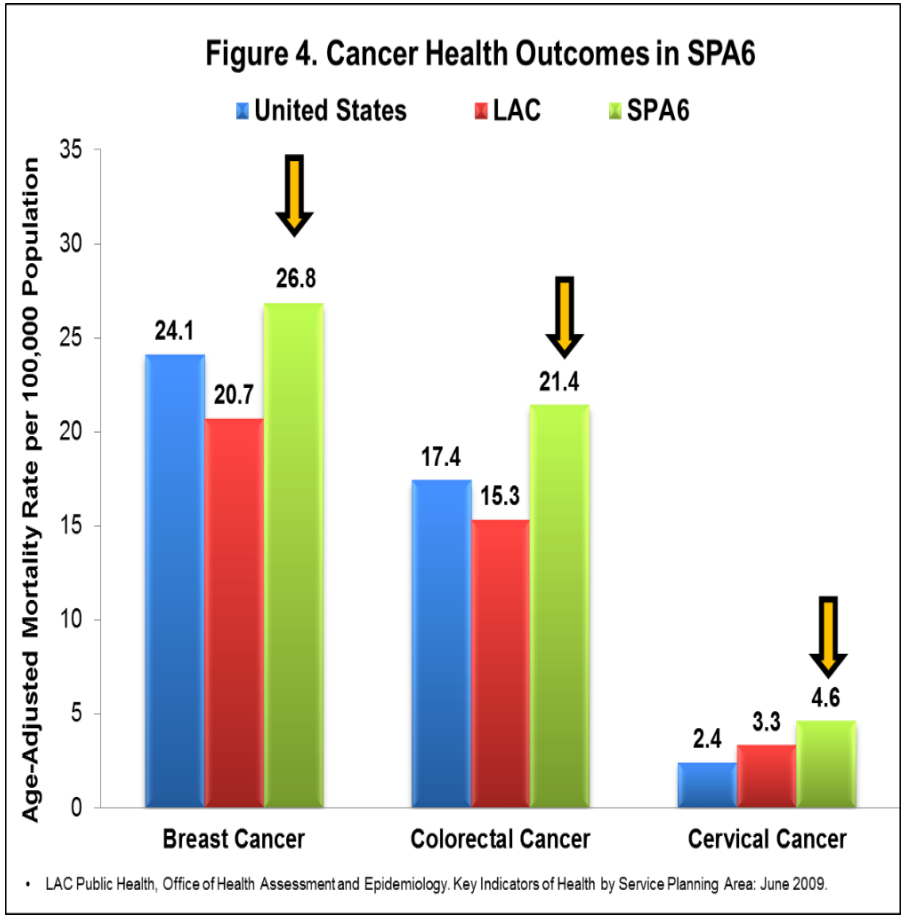

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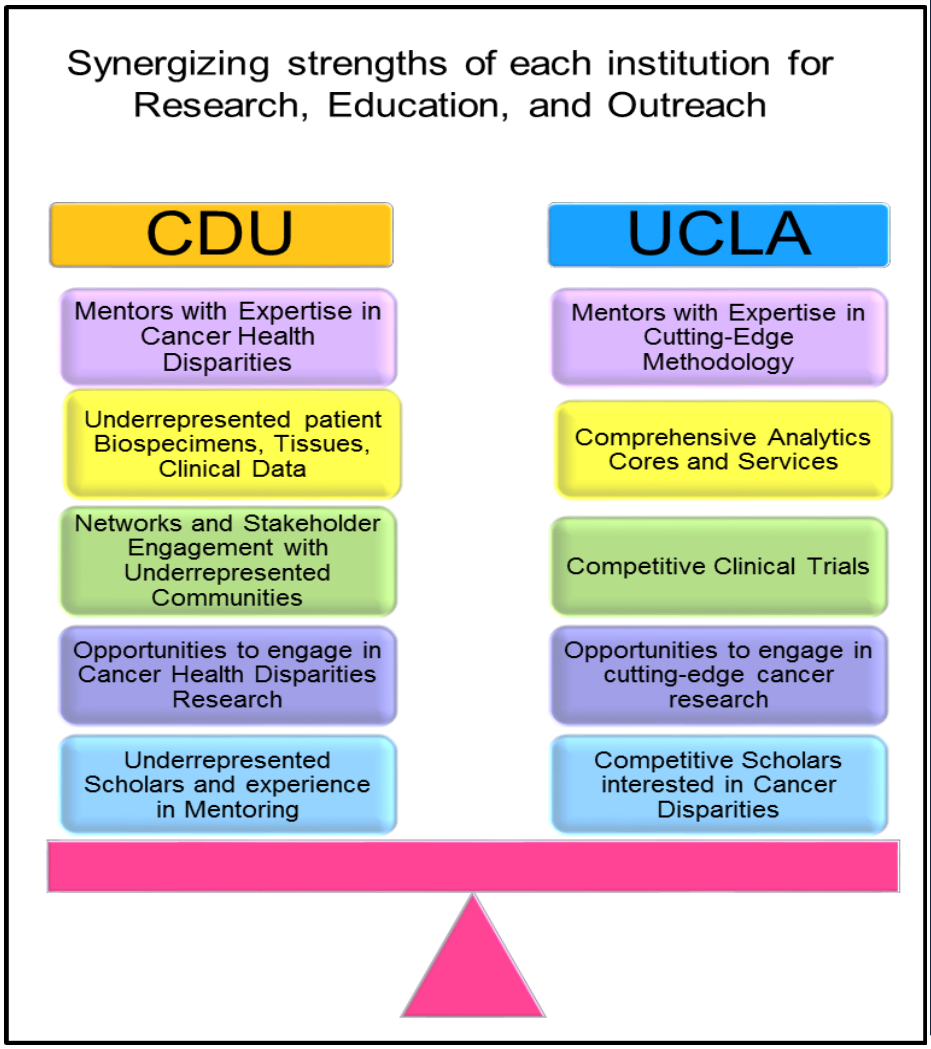
Rationale for Partnership



CDU Benefits	UCLA Benefits
Strengthened capability in cancer research, including cellular/ molecular aspects, genomics/proteomics; clinical research, clinical trials; cancer prevention and control; translational research; training/education; and outcome-based research.	Expanded scope of disparities research and enriched diversity of research environments through a partnership with investigators, students, and community partners at CDU for joint research projects.
An intellectual environment with the necessary infrastructure to enable CDU and JCCC to recruit and retain underrepresented investigators or investigators interested in pursuing careers in cancer health disparities research, augmented by state-of-the-art training in cancer research for junior faculty, postdoctoral fellows, medical students, and undergraduate students.	Increased awareness of cultural differences and perceptions, as well as expertise in designing and implementing studies that are culturally relevant and appropriate. Though JCCC researchers are known for their strengths in methodology and research design, research methods often need to be tailored to underserved and underrepresented populations.
Opportunity for investigators training in a cancer research and education to become proficient in the study of the unequal burden of cancer in underrepresented and underserved populations	
Increase in CDU intramural and extramural competitiveness for funding in cancer research. JCCC colleagues have an excellent track record in obtaining SPORE, RO1, training grants and other funding. The proposed skill-building workshops on cancer research, education, and training will provide an excellent continuing education opportunity for CDU investigators.	Improved reputation in health disparities research and engaging underrepresented patients, advancing joint cancer research, and service agendas. This addresses JCCC's limited opportunity to focus on clinical trials, basic and translational research, and training and education with minorities.

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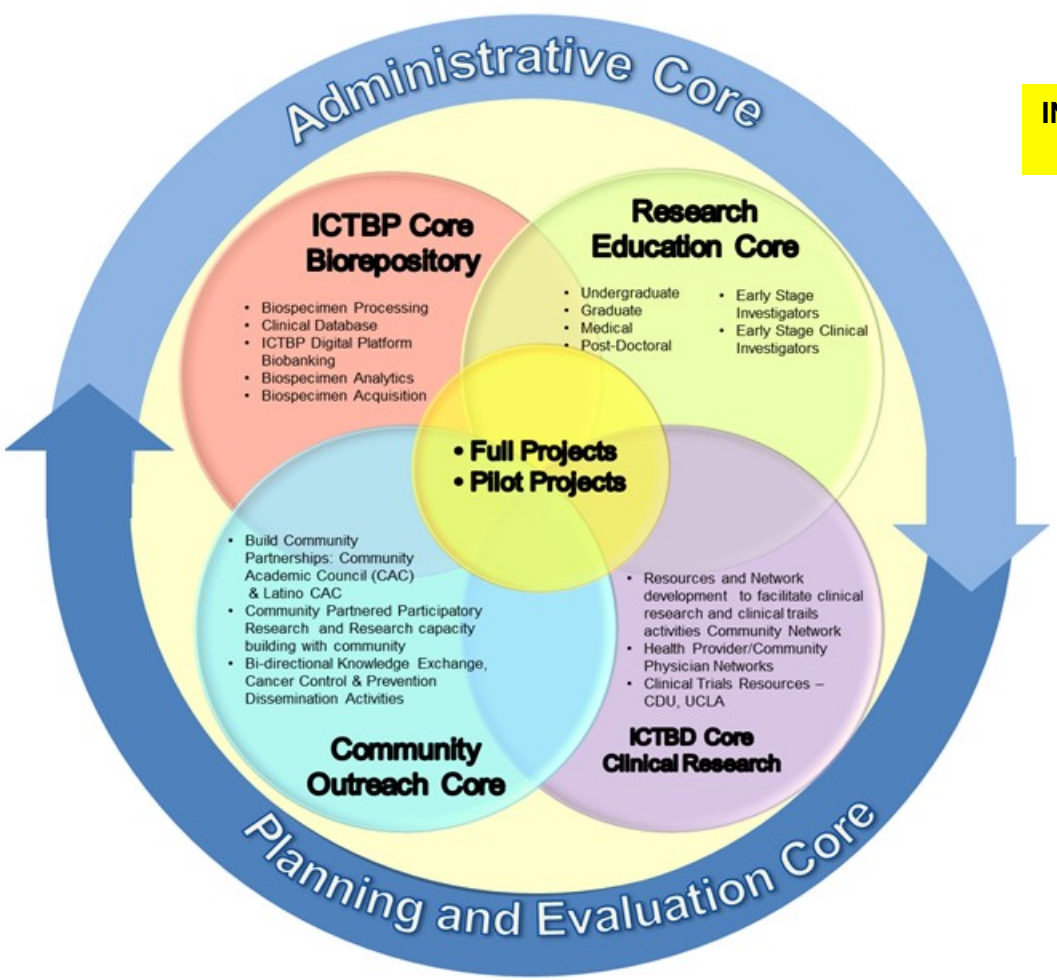
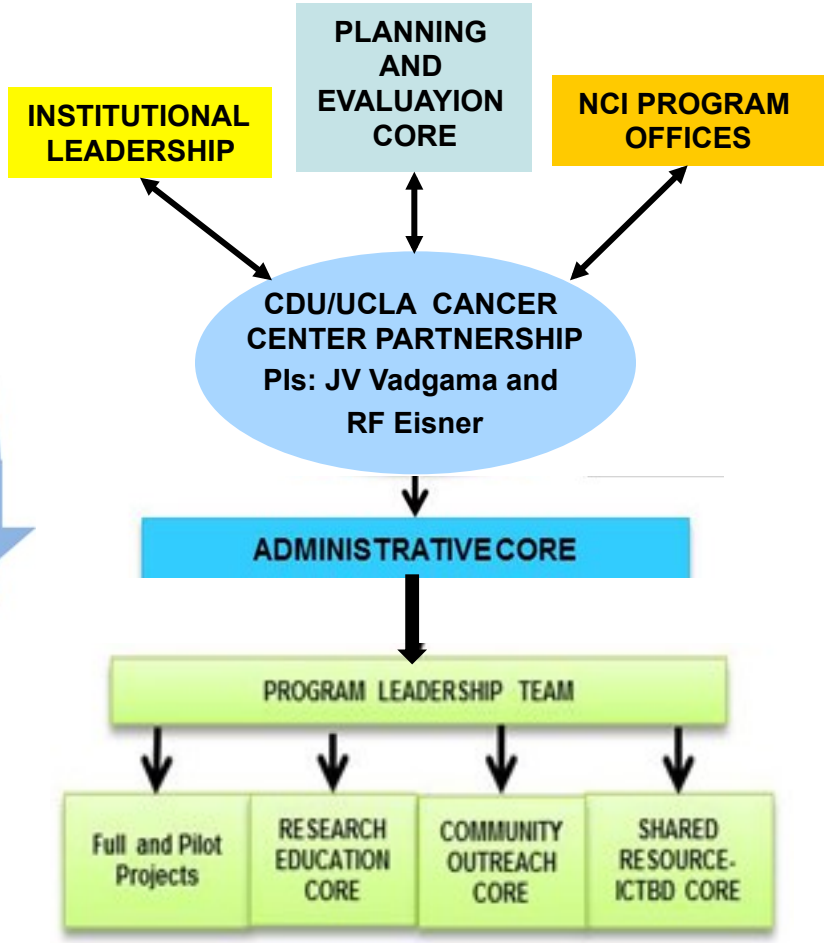
The Structure Design





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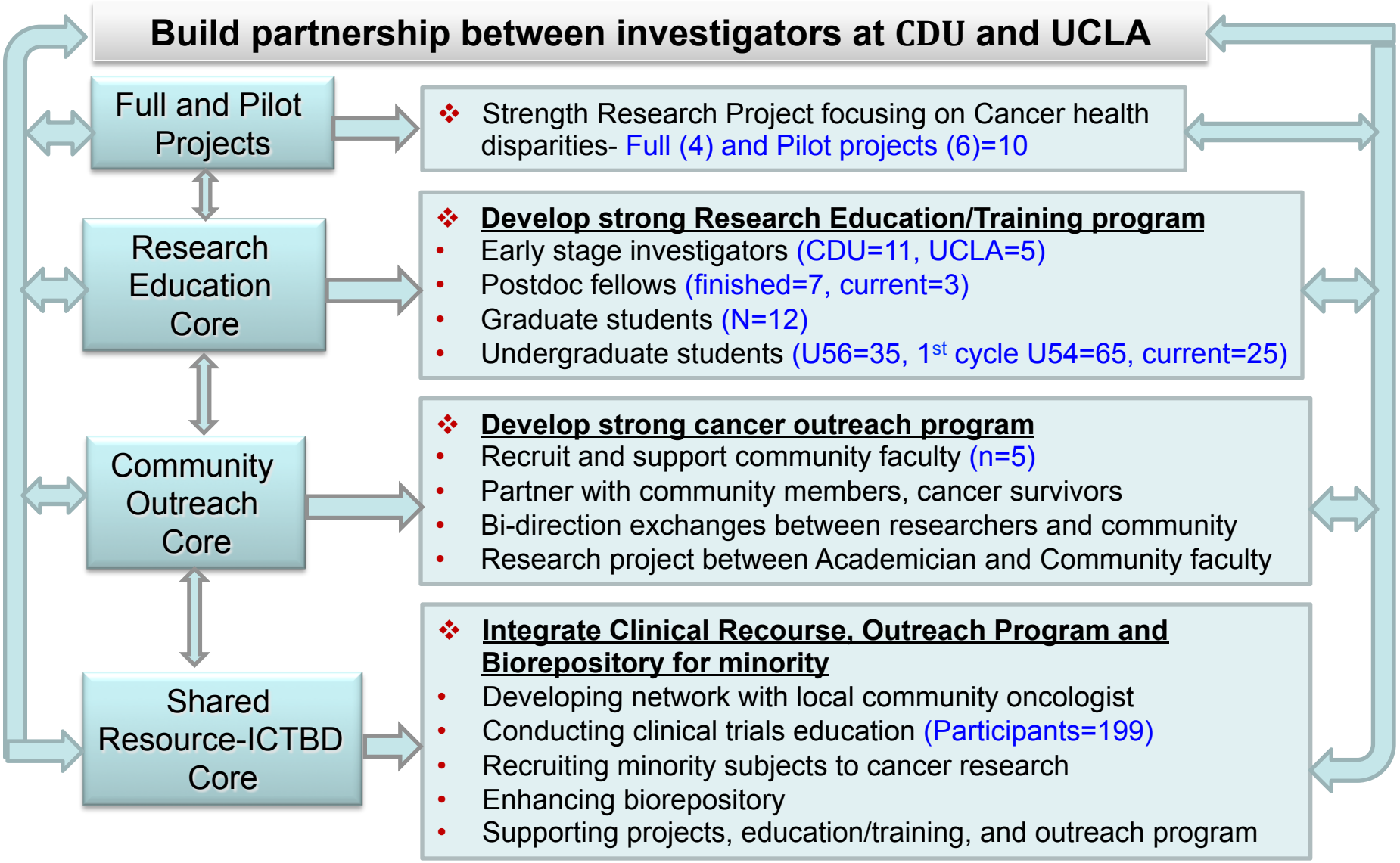
Highlights of Achievements



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Highlights of Achievements

Detailed Distribution of Type, Diversity, and Gender of All U54 Trainees 2009-2014							
	Diversity				Gender		Total
	African-American	Hispanic	Asian	Caucasian	Male	Female	
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
All Trainee Detailed Breakdown							
• Undergraduates	15 (23%)	22 (34%)	15 (23%)	13 (20%)	23 (35%)	42 (65%)	**65 (100%)**
• Graduate Students*	4 (80%)		1 (20%)		1 (20%)	4 (80%)	**5 (100%)**
• Medical Students	4 (57%)	1 (14%)	2 (29%)		3 (43%)	4 (57%)	**7 (100%)**
• Post-Doctoral Fellows**		1 (15%)	6 (85%)		4 (57%)	3 (43%)	**7 (100%)**
• All New Academic and Clinical Early-Stage Faculty	6 (37%)	2 (13%)	4 (25%)	4 (25%)	9 (56%)	7 (44%)	**16 (100%)**
Total	**29 (29%)**	**26 (26%)**	**28 (28%)**	**17 (17%)**	**40 (40%)**	**60 (60%)**	**100 (100%)**
Early-Stage Investigators (ESI) Detailed Breakdown							
• New Full-Time Faculty recruited to CDU	1 (14%)	2 (29%)	3 (43%)	1 (14%)	6 (86%)	1 (14%)	**7 (44%)**
• New Clinical Faculty recruited to CDU	3 (75%)		1 (25%)		2 (50%)	2 (50%)	**4 (25%)**
• Newly Engaged UCLA Faculty into Partnership	2 (40%)			3 (60%)	1 (20%)	4 (80%)	**5 (31%)**
Total	**6 (37%)**	**2 (13%)**	**4 (25%)**	**4 (25%)**	**9 (56%)**	**7 (43%)**	**16 (100%)**

Graduate Students include 2 Masters of Nursing Sciences students, 4 Masters of Public Health Students.
****3 of the Post-Doctoral Trainees supported by U54 received faculty appointment and were elevated to Early-Stage Faculty***

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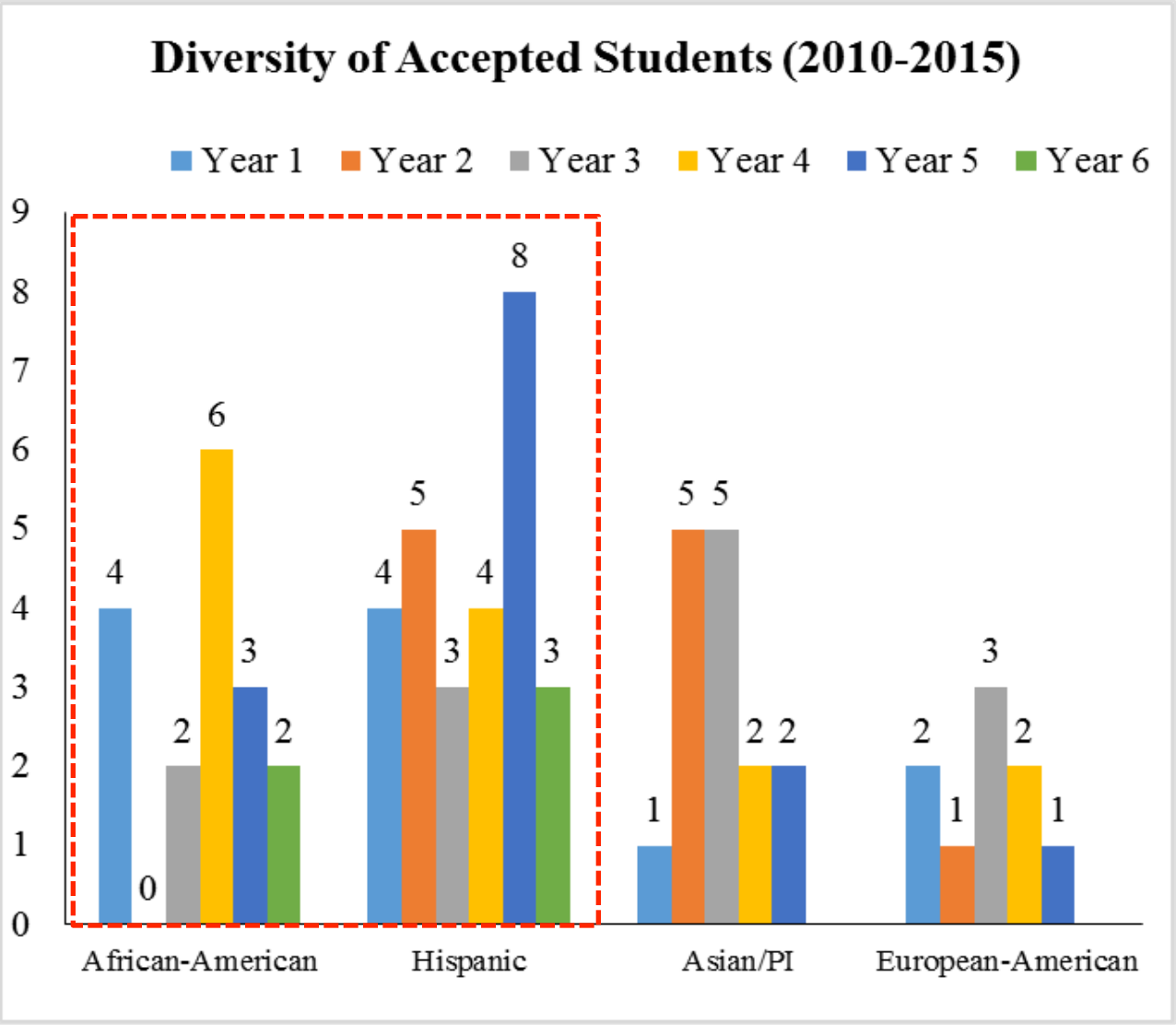
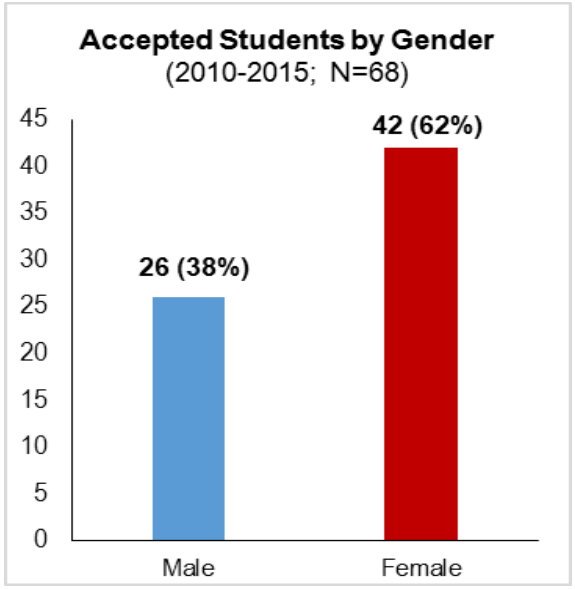
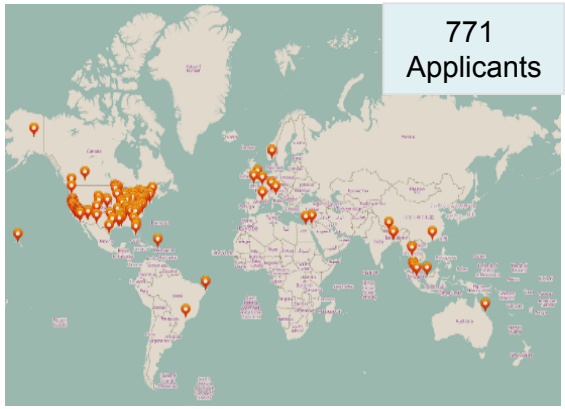
Example of the Undergraduate Cancer Research Training Program (UCRTP) –Nationally competitive cancer disparities internship program with over 200 applicants for 10-12 positions.





Global View of Applicants – (Years 1-6)



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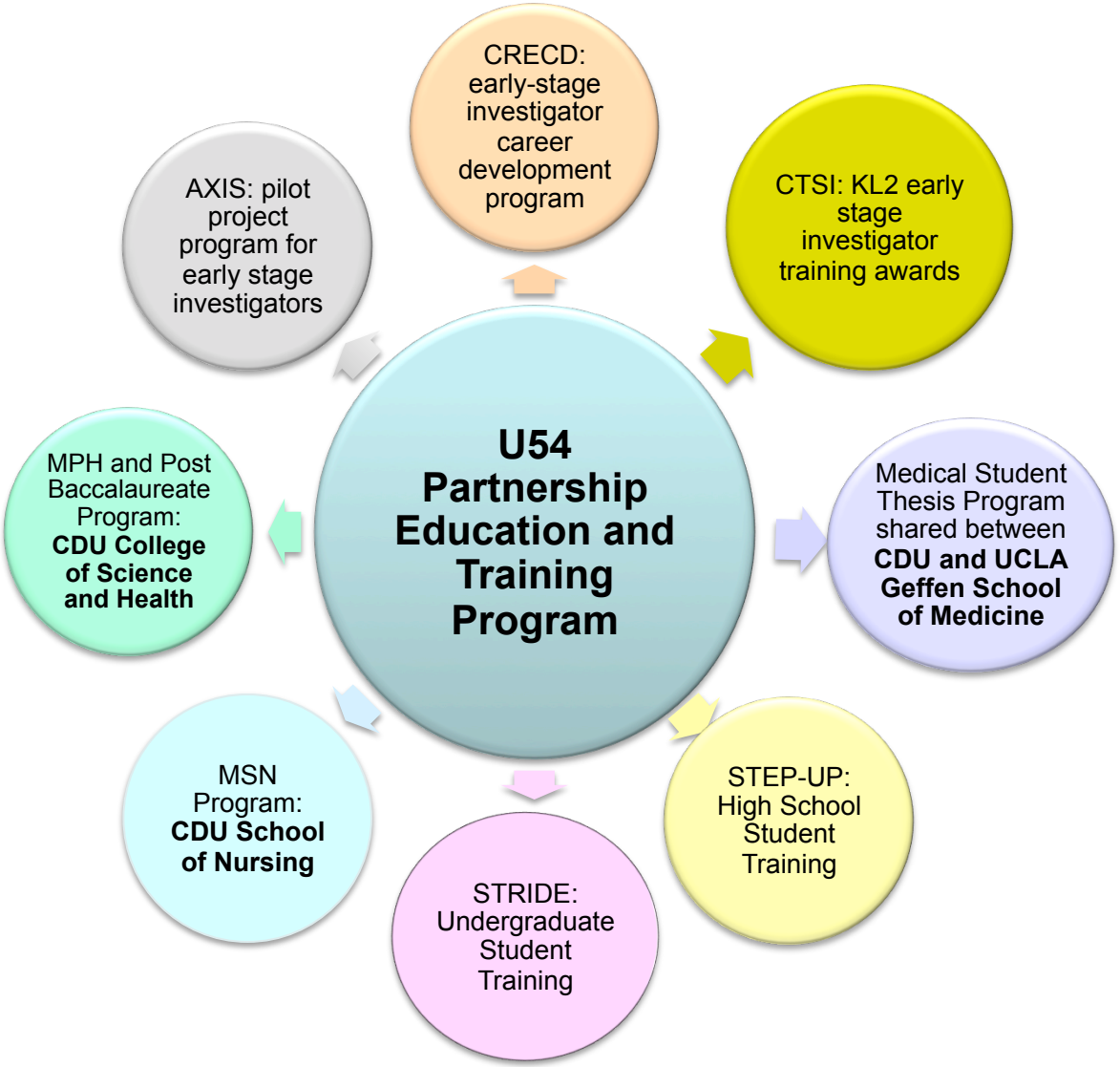
Cross Institutional Synergy of U54 Research Education and Other Training Programs in Current U54 (2009-2014)



Bidirectional Benefits

U54 Partnership Contributes:

- Formal Mentoring Structure & Mentoring Plans
- Experienced Mentors
- Scientific Projects
- Access to U54 ICTBP for Biospecimen Research
- Access to U54 Community Outreach for CPPR Research
- Access to UCLA JCCC Resources

Other Programs Contribute:

- Students/Trainees interested in cancer disparities
- Salary and Stipend Support
- Access to Resources not in U54 such as Bioinformatics Cores,

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Trainee Tracking and Outcomes

Table 4. Undergraduate Successes – Matriculation into Graduate or Medical School (U56 2005-2009 and U54 2009-2014 Tracking Outcomes)

	Tracking Duration	Still Under-graduate	Matriculated in Grad/Med School	Planning/ Applying to Matriculate	Employed, Not Planning	Total
U56	2005-Present	0 (0%)	20 (57%)	6 (17%)	9 (26%)	**35 (100%)**
U54	2009-Present	28 (43%)	17 (26%)	17 (26%)	3 (5%)	**65 (100%)**
Total	**4-8 years**	**28 (28%)**	**37 (37%)***	**23 (23%)**	**12 (12%)**	**100 (100%)**

* Total of 19 matriculated into Graduate School, 10 into Medical School, and 3 into Nursing.

Table 5. Post-Doctoral* Successes – Academic Promotion (U56 2005-2009 and U54 2009-2014 Tracking Outcomes)

	Tracking Duration	Still Post-Doctoral	Research Associate	Practicing Clinician	Assistant Professor	Unknown	Total
U56	2005-Present	0 (0%)	5 (36%)	6 (43%)	1 (7%)	2 (14%)	**14 (100%)**
U54	2009-Present	3 (24%)	0 (0%)	1 (13%)	4 (50%)	0 (0%)	**8 (100%)**
Total	**4-8 years**	**3 (14%)**	**5 (23%)**	**7 (32%)**	**5 (23%)**	**2 (9%)**	**22 (100%)**

* Post-Doctoral Trainees include PhD Post-Doctoral Fellows and MD Clinical Residents/Fellows

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Trainee Tracking and Outcomes

Table 6. ESI* Successes – Academic Promotion (U56 2005-2009 and U54 2009-2014 Tracking Outcomes)				
	Tracking Duration	**Assistant Professor**	**Associate Professor**	**Total**
U56	2005-Present	0 (0%)	1 (100%)	1 (100%)
U54**	2011-Present	15 (93%)	1 (7%)	16 (100%)
Total		**15 (87%)**	**2 (13%)**	17 (100%)

* Early Stage Academic and Clinical Faculty Outcomes with baseline of Assistant Professor.
** The majority of U54 ESI's were recruited Year 3, hence new appointees are not eligible for several years.

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Highlights of Achievements Outreach Core

Provide bi-directional knowledge exchange and/or dissemination, capacity building, and community-partnered participatory research

- Engage the South Los Angeles community in research focused on reducing cancer disparities
- Assess the capacity and interest of faith-based centers in South Los Angeles to engage in cancer prevention and control activities

- Life Worth Saving Organization- **Yvette Pye**
- Cancer prevention "questions and answers" by **Dr. Vadgama**
- Fundraising
- Cancer Clinical Trial Education- **total 199 community members attended**
- Cancer Survivors Support Group- **in collaboration with Community Faculty, Martha Navarro**
- Cancer Awareness Symposium- **local Churches in collaboration with Community faculty, Dr. Rev. Joe Waller**
- Old school Grand Musicale & Cancer Awareness Fundraising – **Laura Chapman and Rev Waller**
- Annual Cancer Awareness- **four Community Conferences – Aziza Wright and Loretta Jones**

To date, >800 additional community members engaged

- Support community-academic seed grants that implement and evaluate evidence-based interventions addressing cancer disparities

4 Seed Pilots in U54 1st cycle

- NIMHD R24 funding- $767,959
- One pilot project in 2nd cycle lead by community faculty (CDU) and celebrated with research faculty (UCLA)

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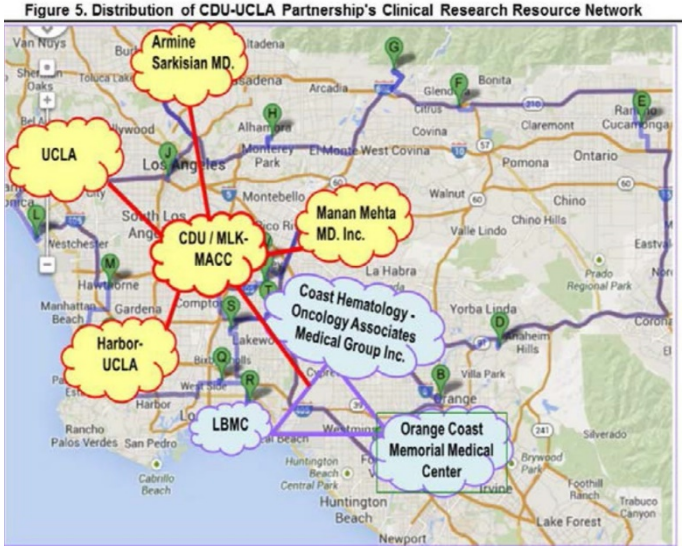
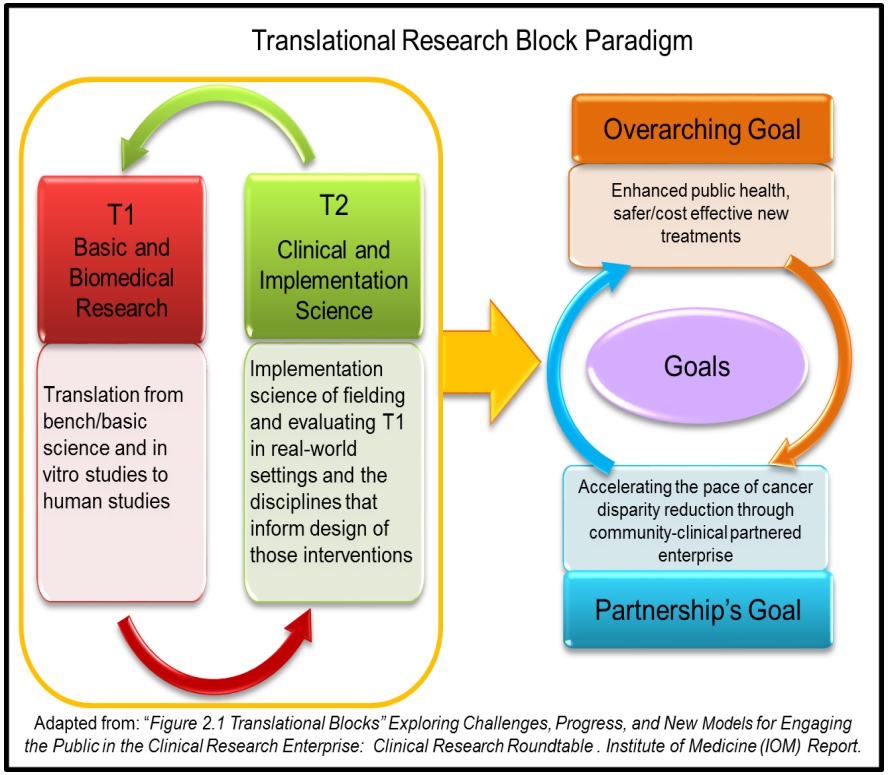
Highlights of Achievements
ICTBD Core

Integrate Clinical Resource, Outreach Program and Biorepository Information

Figure 5. Distribution of CDU-UCLA Partnership's Clinical Research Resource Network



- Integrating with Outreach program
- Conducting Cancer Clinical Trial Education



Adapted from: "*Figure 2.1 Translational Blocks*" *Exploring Challenges, Progress, and New Models for Engaging the Public in the Clinical Research Enterprise: Clinical Research Roundtable . Institute of Medicine (IOM) Report.*

- To enhance patient recruitment and engagement into biospecimen, clinical research, and clinical trial protocols
- Providing resources to support cancer research projects for CDU-UCLA investigators
- Providing resource for Research Education and Outreach cores
- Facilitating cancer research focused on translational research from lab - bed and/or bed to lab to community and enhance research capability of CDU

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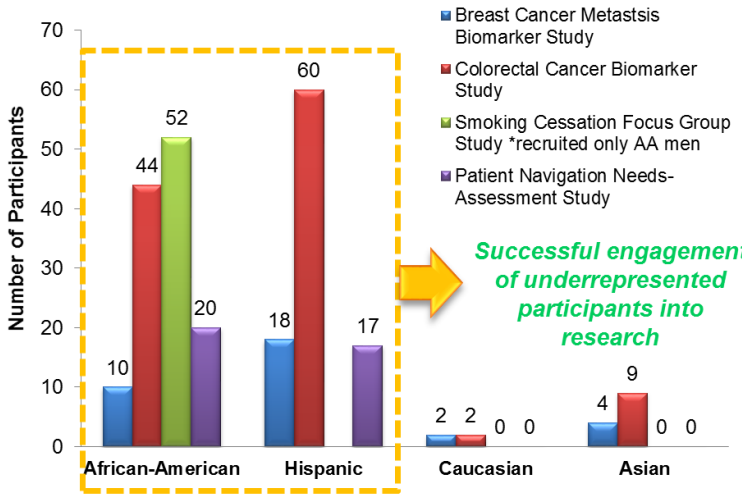
Examples of Clinical Research Resource Usage in Cycle 1

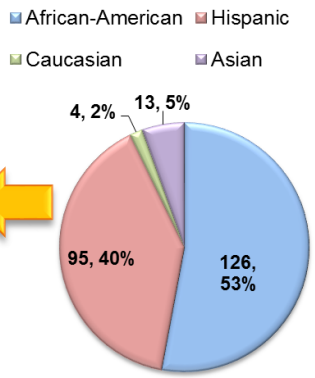
Summary of Participant Recruitment at CDU into U54 Studies by the Clinical Research Resource

Distribution of Participant Diversity in CDU-intiated Research supported by the CRR (2009-2014)

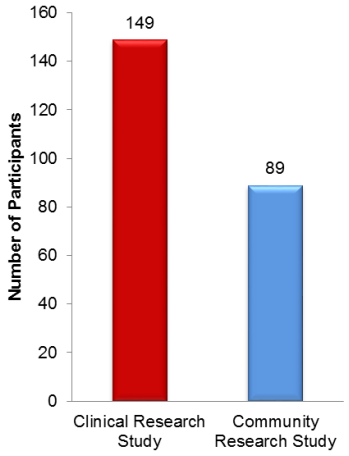


Successful engagement of underrepresented participants into research

Combined Distribution of Ethnicity of all CDU-initiated Research Supported by CRR (2009-2014)

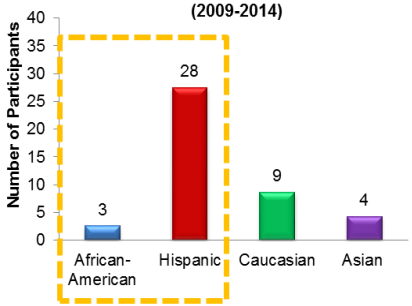


Distribution of Participants engaged by CRR by Type of Research Study

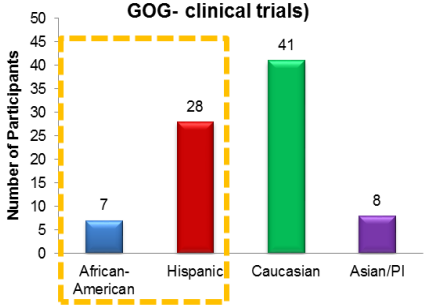


Summary of Participant Recruitment at UCLA into Clinical Trials

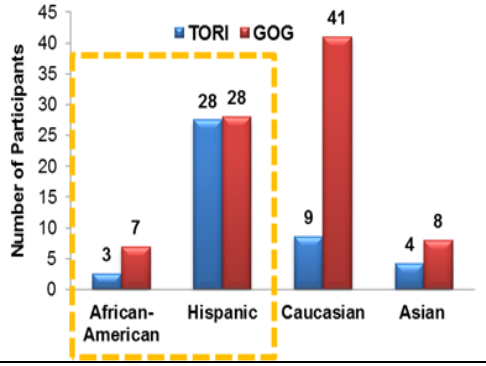
Distribution of Participant Diversity in UCLA-initiated Research (Translational Oncology Research International - TORI - clinical trials) supported by the CRR (2009-2014)



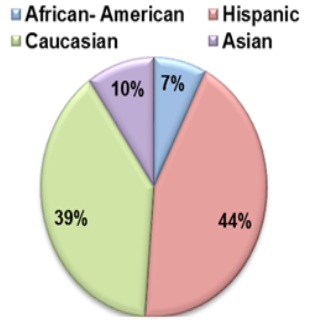
Distribution of Participant Diversity in UCLA-initiated Research (Gynecologic Oncology Group – GOG- clinical trials)



Distribution of Participant Diversity at UCLA Clinical Trials TORI and GOG (2009-2014)



Combined Distribution of Ethnicity of UCLA Clinical Trials (2009-2014)



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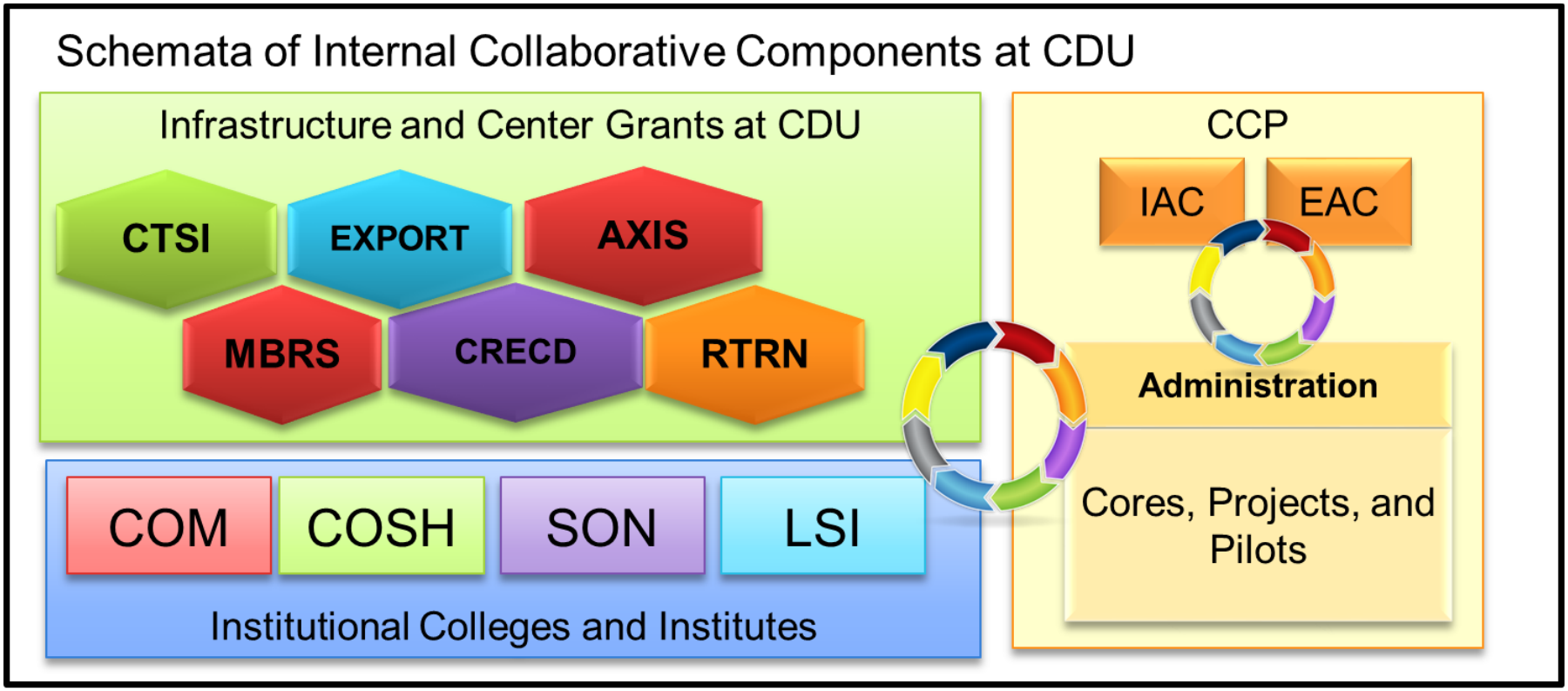
Internal Collaborations at CDU



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Highlights of Outcome

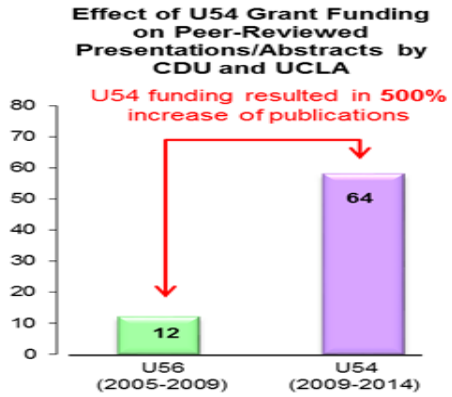
- U54 Supported Investigators had over **186** peer-review publications and over **76** directly cited the U54 Grant Support
- Over **79** national abstracts
- Trainee presentations locally and nationally were more than **142**

U54 Presentation Outcomes

Summary of U54-funded Peer-Reviewed Abstracts and Presentations at National Meetings and Conferences by Year and Institution

	CDU*	UCLA*	Total
U56 (2005-2009)	12 (100%)	--	**12 (100%)**
Year 1 (2009-2010)	7 (100%)	--	**7 (100%)**
Year 2 (2010-2011)	14 (88%)	2 (12%)	**16 (100%)**
Year 3 (2011-2012)	3 (60%)	2 (40%)	**5 (100%)**
Year 4 (2012-2013)	10 (63%)	6 (37%)	**16 (100%)**
Year 5 (2013-2014)	17 (85%)	3 (15%)	**20 (100%)**
Totals	**63 (83%)**	**13 (17%)**	**76 (100%)**

** Institution of primary presenter



Summary of U54-Funded Trainee Presentations at National Professional Meetings and Local Cancer Journal Club

	2010	2011	2012	2013	2014	Total
Presentations at Professional Meetings*	4	6	3	9	7	**29**
Presentations at Cancer Journal Club	17	16	25	26	26	**110**
Total	**21**	**22**	**28**	**35**	**33**	**139**

* Presentations where trainees (Undergraduate, Graduate, Medical) were primary presenters at National Conferences.
** Journal Club presentations include by ESI Trainees.

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Highlights of Outcome

Grant Funding:

- Investigators and studies supported by the U54 Cancer Center Partnership received funding for over **42 grants** (intramural and extramural), totaling over **$25,638,223**.
- To date (Jan 2016), Center has **7** new grants (including the U54 renewal), bringing total to **49** grants received by investigators 2009 to present, totaling over **$28,446,545.**

Funding agencies include NCI/NIH, NIMHD/NIH, NCATS/NIH, DOD, and private foundations including ACS, California Community Foundation, and Susan G. Komen

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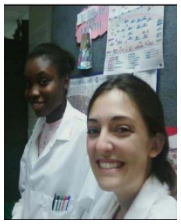
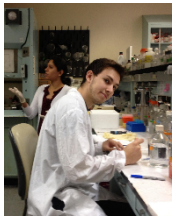
Trainee Snapshots

Undergraduate Students

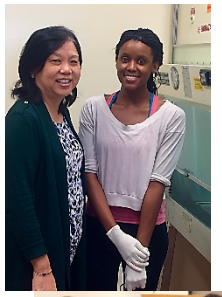
11th Cohort

1st Cohort

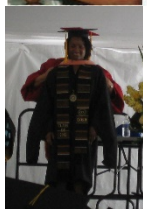


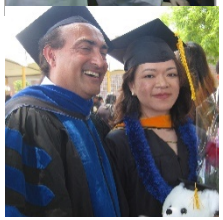


Some of our Current Year-Round Trainees

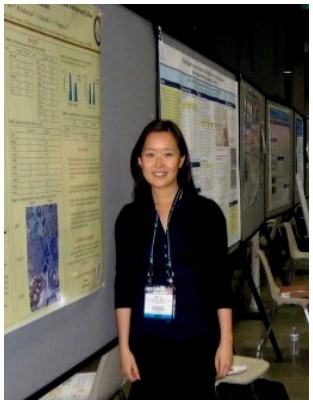


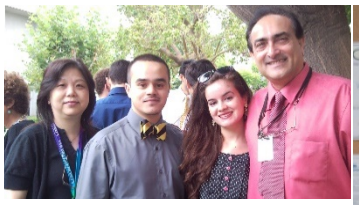
Graduate Students





Medical Students





Thank you