

National Cancer Institute
Center to Reduce Cancer Health Disparities

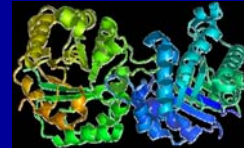
***CRCHD and IMAT: Fostering
Collaborations, Exploring Synergies and
Reducing Cancer Health Disparities***



Dr. LeeAnn Bailey
October 26th , 2008

CRCHD STRATEGIES

- **Disparities Research Across the Continuum**
 - Support research pursuits including basic, clinical and community based population research. Range from treatment to end-of-life care including risk, incidence, and mortality, known to be influenced by socioeconomic, cultural, environmental, institutional, behavioral, and *biological factors*.



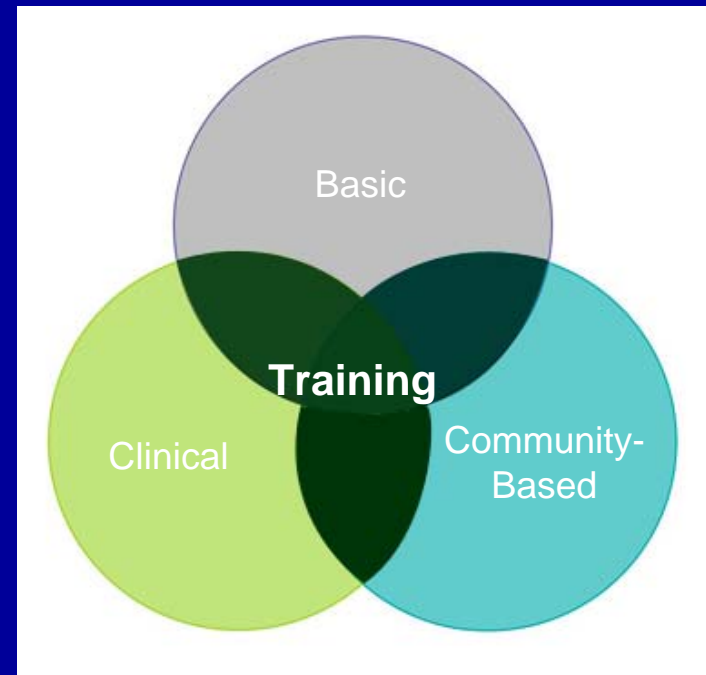
- **Training and Career Development for Diverse Populations**
 - Provide a continuum of mechanisms to support the research and educational support of individuals and groups of individuals through other training and career development programs, with special emphasis on training the first generation of cancer health disparities researchers

What is Cancer Health Disparities (CHD) Research?

- Basic, clinical or population-based research that explicitly focuses on cancers that are more serious or more prevalent in racial/ethnic minorities and other underserved populations and advances the development of the cancer research continuum for these cancers.
- Examples:
 - Triple negative breast cancers in young African American women
 - Lung cancer risk and prognosis in African Americans
 - IRF-1 studies, breast cancer, obesity and African American and Hispanic women
 - Non 16/18 HPV mutations and Native Americans

CHD Research for the Future

- Integration Will Be Key -



-Technology-

Foundation and New Priorities

Basic

Community - based

Clinical



MI/CCP



CNP

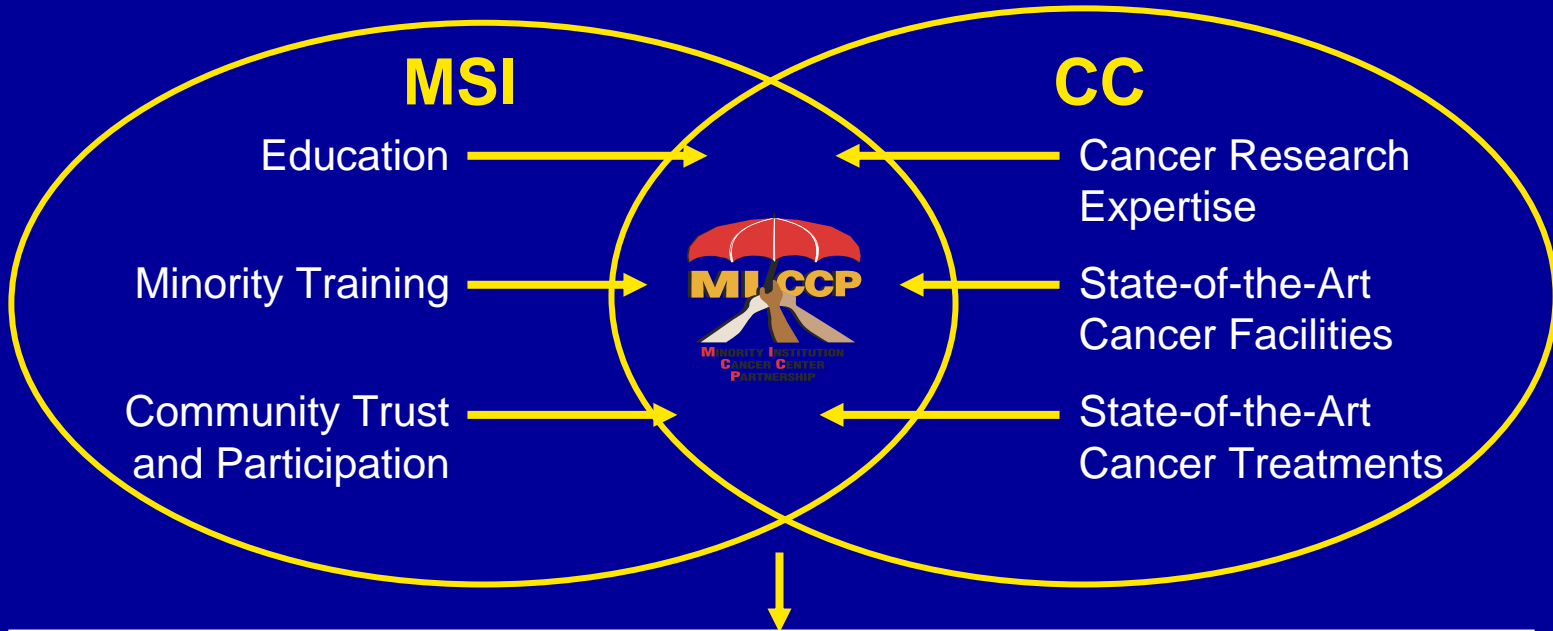


PNRP

CURE



MI/CCP Synergistic Partnership Model



- Build research capacity and training at MSIs
- Create stable, long-term collaborations between MSIs and CCs in research, training, career development, and outreach
- Improve effectiveness of CC research, education and outreach for underserved populations
- Export successful approaches for addressing disparities to all CCs and other key networks and consortiums

Ultimate Goal
Overcoming Cancer Health Disparities

Community Networks Program

Goal

Significantly improve access to and utilization of beneficial cancer interventions in the community through education, research and training among racial/ethnic minorities and underserved populations.



– Cancers

- Breast
- Cervical
- **Colorectal**
- Prostate

– Populations

- African American
- Hispanic/Latino
- American Indians/Alaska Natives
- Pacific Islanders
- Asian
- Underserved populations

Patient Navigation Research Program

Navigators work with cancer patients to “navigate” the health care system and access appropriate social and financial services.



The most important role of patient navigators is to ensure that individuals with suspicious cancer findings receive timely diagnosis and treatment.

Areas of Collaboration and Technology Application

- Sample archive and epidemiological & clinical databases**
- Maximize information content for each clinical sample collected**
- Compile tools and information on mRNA expression, microRNA expression, SNPs, CNV, DNA methylation, & gene mutations**
- Integrate genomic data for systems approach to study gene regulatory networks, integrated pathways, etc.**
- Unique samples and populations for cross validation**

Extraordinary Opportunities in Cancer Health Disparities

Spawning New Research

Expanding Diversity Training



1. Increase the size of the talent pool
2. Emphasize scientific areas of greatest need
3. Expand and extend the period of training

Underserved Eligibility Criteria

- Individuals from racial and ethnic groups that have been shown to be underrepresented in cancer-related biomedical, behavioral, clinical, or social science research
- Individuals with disabilities
- Individuals from disadvantaged backgrounds/ Low SES
- Individuals who come from a disadvantaged social, cultural, and/or educational environment,
- First generation college

**Institution certifies eligibility*

<http://crchd.cancer.gov>



Training and Education



34 Post-Docs



21 Med Students
25 Med Fellows



178 Master Students
157 Pre-Docs



**881 Trainees
(2001-2007)**



35 Post-Bac
338 Undergrad



72 Junior Faculty



21 High School Students

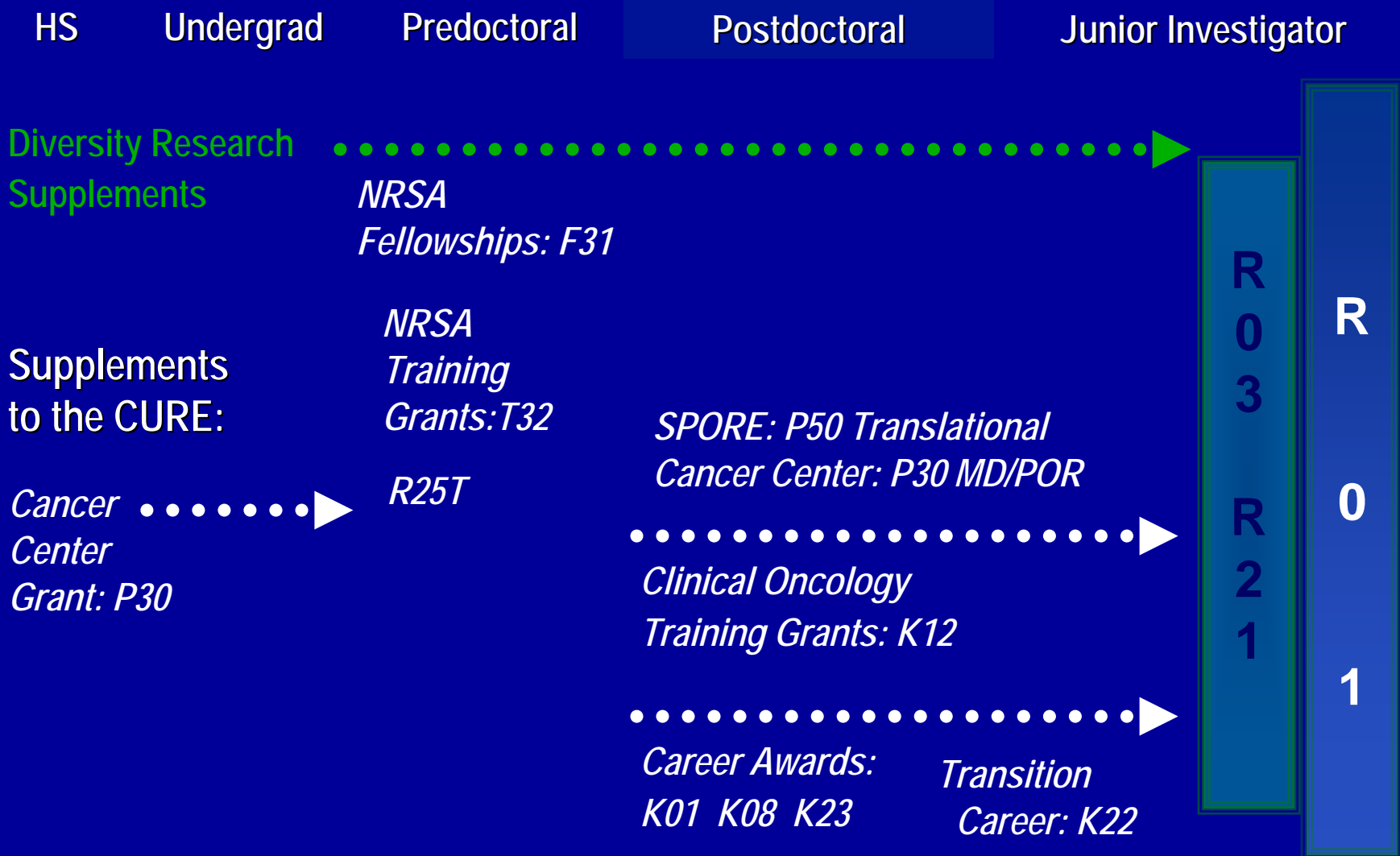
Emerging Technologies Continuing Umbrella of Research Experiences (ET CURE)



- Increase the number of scientists from underserved populations with training in nanotechnology, clinical proteomics, bioinformatics and cancer health disparities
- Create a pipeline of competitive underserved students and investigators in the fields of emerging and advanced technologies
- Enhance application of emerging and advanced technologies to cancer research through increased training and educational opportunities
- Foster academic, scientific and multi-disciplinary research excellence, culminating in the emergence of a mature investigator capable of securing competitive advanced research project funding



Continuing Umbrella of Research Experiences



Continuing Umbrella  Research Experiences

CONTINUING UMBRELLA OF RESEARCH EXPERIENCES

High School Undergrad Predoctoral Postdoctoral Junior Investigator

Existing Mechanisms
 P30 CCR/Frederick Summer Fellowships
 P30
 F31, T32
 K99/R00*, F32/33
 CCR/Frederick Post Docs
 Career Development K Award Series

Research Supplements to the CURE AND Diversity Supplements

Future Mechanisms
 • P30 HS/UNG
 CCR/Frederick Summer Fellowships
 Emerging Technology Training Grants: T32 & R25T
 Emerging Technology Fellowships F31
 CCR/Frederick Post-doctoral Opportunities
 F32/33
 Career Development K Award Series
 K01, K08, K23
 K22

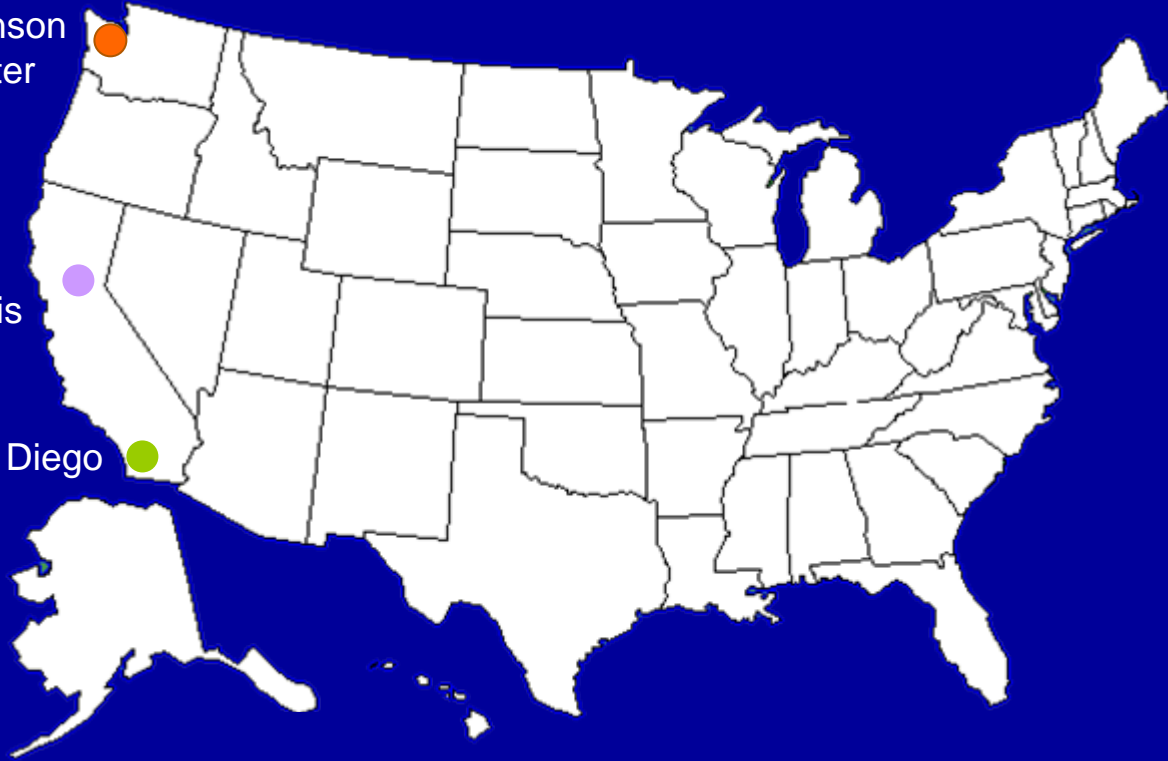
Administrative and Research Supplements to the CURE

FY 08 Pilot Sites

Fred Hutchinson
Cancer Center

University of
California Davis

University of San Diego



● (Clinical Proteomics)
Dr. Leland Hartwell
Fred Hutchinson Cancer Center

● (Biophotonics and Innovative Cancer Research)
Dr. Ralph deVere White
University of California Davis

● (Nanotechnology)
Dr. Dennis Carson
University of San Diego

<i>Current Mechanisms</i>	<i>Career Level</i>	<i>Duration of Support</i>	<i>Direct Costs</i>
Diversity Supplements	All Levels	2yrs (Attached to an active R01,U01 type grant with 2 remaining years)	50- 100K
NRSA F31	Pre-Doctoral	Up to 5 yrs	50- 100K
P30 Administrative Supplements	High School/ Undergrad	2 to 5 yrs	150- 250 K
Career Awards (K) K01,K08,K23, K22	Post-Doctoral	2 to 4 yrs	100 K salary + 30 - 50 K R&D
<i>Future Mechanisms</i>	<i>*Critical Mass</i>		
T32	Pre- Doctoral/Post- Doctoral	Up to 5 yrs	Up to 500 K
R25T	Pre- Doctoral/Post- Doctoral	Up to 3 yrs	Up to 300 K

Nanotechnology

Diversity Supplement Summary

2 Diversity Supplement Fellows 07
University of California, San Diego, CA

Round I Applications 08

3 FY08 University of California, San Diego

Round II Applications 08

2 University of California, San Diego

Round I Applications 09

1 Stanford University

3 University of California, San Diego



Manuel
Ruidiaz



Sergio
Sandoval

University of California, San Diego
Nanotechnology Graduate Students

Cornell
University,
Ithaca, NY

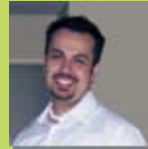


Diego Rey

F31
Pre-doctoral
Fellow
Nanotechnology



Kristina
Pohaku



H. Paul
Martinez



Maria Jose
Cortez-Mateos

Round I Applicants 08
University of California,
San Diego



Round I 09
Applicant
Stanford
University
Palo Alto,
California

Center of Nanotechnology for
Treatment, Understanding,
and Monitoring of Cancer

University of California, San Diego, CA



Sergio Garibay



Ana Sanchez

Round II Applicants 08
University of California,
San Diego

Round I 09 (TBD)

Training/Funding Opportunities

<http://crchd.cancer.gov>

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