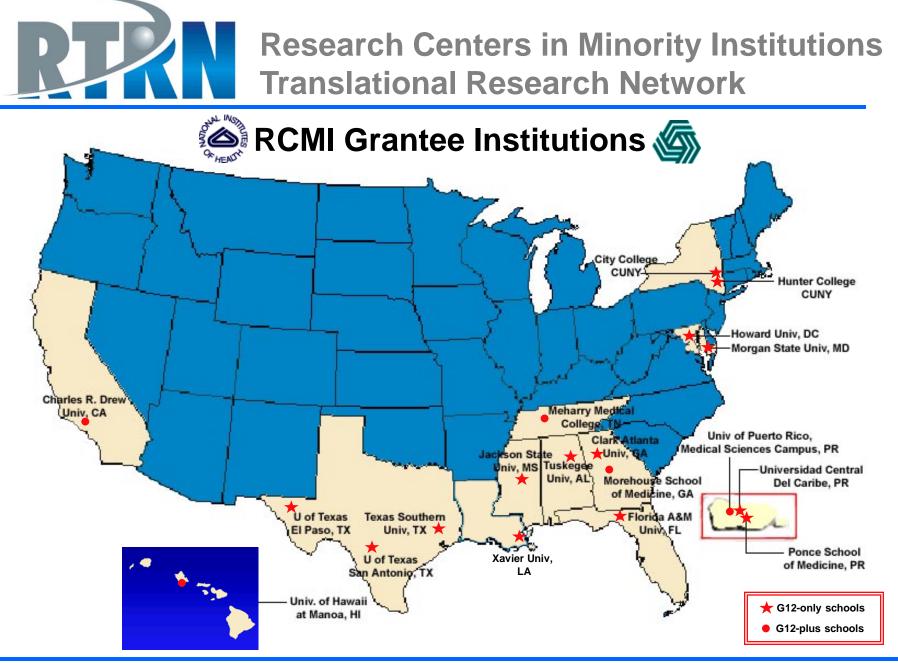


# <u>Collaborative Research Activities</u> Translational Research Cluster System RTRN Small Grants Program

### Furqan Haq, PhD, MBA RTRN Project Manager

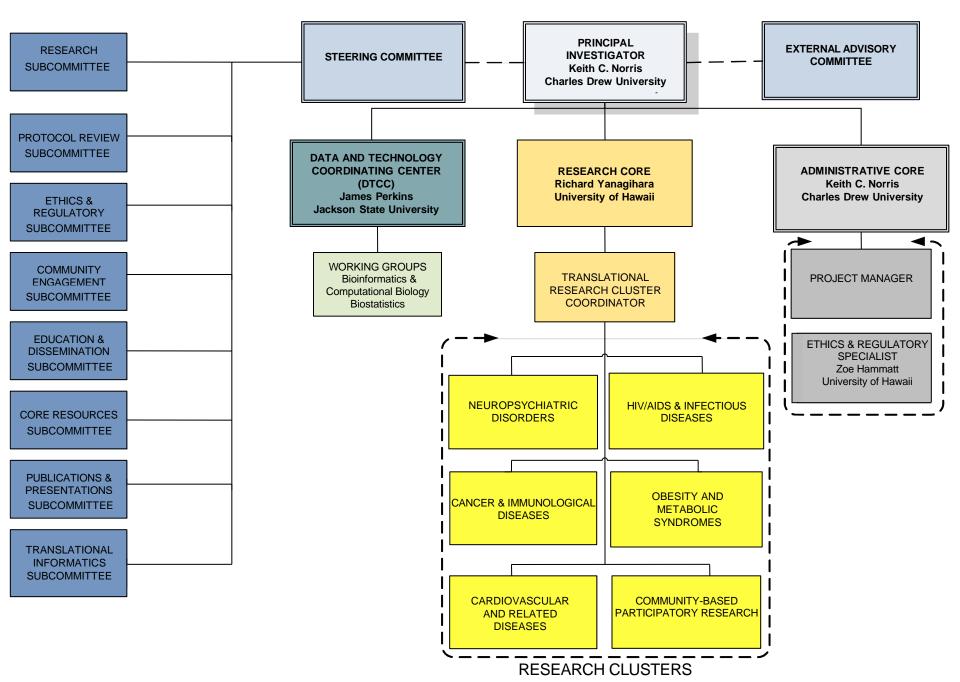




## **Challenges and Barriers to Collaborative Science**

Insufficiently detailed directory of investigators Inadequately developed technology infrastructure Geographic separation and time-zone differences Entrenched silo-science research culture Unfamiliarity with translational science spectrum Competing priorities and time demands

#### **RCMI TRANSLATIONAL RESEARCH NETWORK (RTRN) ORGANIZATIONAL CHART**





Research Cluster System

(R. Yanagihara)

Administrative

Core

(K.C. Norris) <sub>Support</sub>

### Data and Technology Coordinating

Support (J. Perkins)

### **Financial Resources and Human Infrastructure**



## **Translational Research Cluster System**

## Objective:

To facilitate the conduct of inter-institutional, crossdisciplinary translational research collaborations among investigators at the 18 RCMI grantee institutions.

### Specific Aims:

- 1. Create research networks
- 2. Coordinate and extend community engagement activities
- 3. Provide integrated training environments
- 4. Promote cutting-edge technologies



### 1. Create research networks

Identify basic, clinical and translational researchers at each RCMI grantee institution

Develop robust researchnetworking directory of investigators, showing their contact information, research interests, technologies, funding, and publications

✤Group investigators into one or more research cluster

HOWARD 

Facilitate collaborations among cluster members by providing cyber workspaces and scheduling videoconferences/teleconferences and seminars, with periodic face-to-face encounters



#### Infrastructure Grants at RCMI G12-plus schools & at Jackson State University

These grants focus on five DHHS major health disparity areas: (1) cancer and immunological diseases; (2) cardiovascular and related diseases; (3) HIV/AIDS and infectious diseases; (4) neuropsychiatric disorders; and (5) obesity and metabolic syndromes.

Program	BRC	CRC	CCRE	CCHD	COBRE	BRIN/ INBRE	SNRP	CRSRP	CRECD	CVD	MBRS	MIDARP	EXPORT	AASK	Cancer Ctrs
Funding Agency	NCRR	NCRR	NCRR	NCRR/ NIAID	NCRR	NCRR	NINDS	NICHD/ NCRR	NCRR	NHLBI	NIGMS	NIDA	NCMHD	NIDDK	NCI
Charles Drew University	✓	✓	✓	<b>√</b>				<b>~</b>	<b>√</b>		✓	<b>√</b>	<b>~</b>	✓	<b>~</b>
University of Hawaii	~	~	~		✓	~	~		√	~	~		~		~
University of Puerto Rico	~	~		✓	~				√		~		~		✓
Meharry Medical College	~	~		~			~	~	~		~		~	~	~
Morehouse School of Medicine	~	~	~				~	~	~	~	~		<b>~</b>	~	~
Howard University	~	GCRC											~	~	√
Jackson State University	>					4		✓		✓ JHS*	>		~		

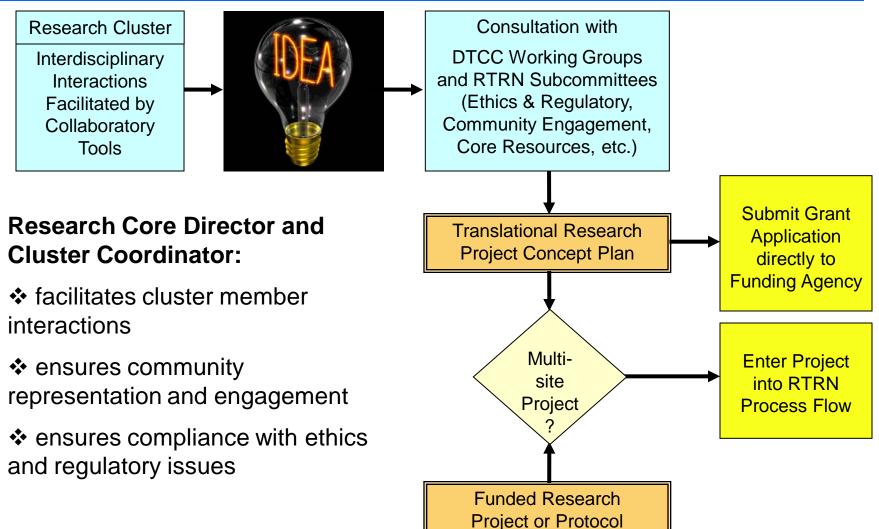
Recently, RCTR awards have been made to Charles Drew University, Morehouse School of Medicine and Meharry Medical College. Also, Morehouse School of Medicine, Jackson State University, University of Puerto Rico, and University of Hawaii are part of the U24 Networking Research Resources Across America grant.



# **Responsibilities of Cluster Leaders**

- Populate clusters with junior and senior investigators
- Ensure balanced representation from G12-only and G12plus RCMI grantee institutions
- Assist in the maintenance of a research-networking directory
- Facilitate collaborative linkages between cluster members
  - Convene regular cluster meetings via videoconferencing
  - Schedule regular Webinar seminars
- Orchestrate a Cluster Strategic Plan with timelines and goals
- Plan agenda for the Research Clusters Conference in March 2010 and future face-to-face meetings







## **Research Cluster Communication**

Research clusters will overcome the separation of space and time by functioning primarily through cyber workstations within the RTRN portal using online collaboratory technology.

videoconferencing (seminars, works in progress, meetings)
project management tools (WebCT, Microsoft SharePoint)
posting activities, project concepts, manuscripts, grant applications

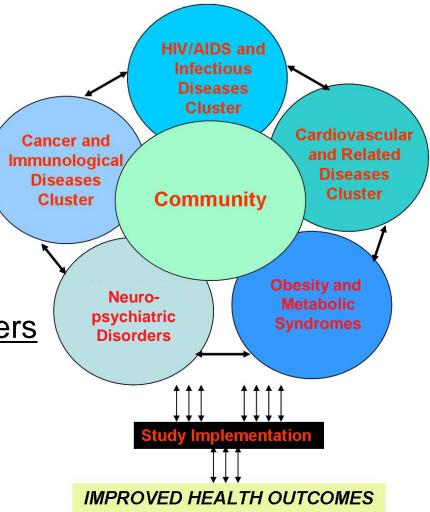
Clusters will meet regularly to discuss recent research findings, research methods, and prospective collaborative projects for reducing health disparities. Each cluster will be encouraged to develop one or more translational research projects per year.



2. Coordinate and extend community engagement activities in the diseasebased research clusters. At least one community researcher will be assigned to each research cluster.

#### **Disease-Based Research Clusters**

Cancer and Immunological Diseases Cardiovascular and Related Diseases HIV/AIDS and Infectious Diseases Neuropsychiatric Disorders Obesity and Metabolic Syndromes





### 3. Provide integrated training environments

The Education and Dissemination Subcommittee will work with the DTCC to develop education and training materials for dissemination through the RTRN portal, thereby allowing RTRN clinical personnel, such as nurses, data-entry technicians, research coordinators, principal investigators and administrators).

The portal will provide a listing of on-line courses available, including a tutorial on how to use the DTCC portal itself. Archived or live videos of trainings, seminars and lectures conducted across the different RCMI sites would also serve as training materials.



### 4. Promote cutting-edge technologies

The Core Resources and Translational Informatics Subcommittees will work closely with the DTCC and Research Clusters to develop and promote cutting-edge technologies. By attending regularly scheduled Research Cluster meetings, subcommittee members will be actively engaged in designing innovative tools and developing new applications for existing tools, in response to the individual needs of the Research Clusters. In so doing, collaborations will be significantly enhanced.

## **RTRN Small Grants Program**

<u>Objective:</u> To promote inter-institutional collaborations by providing modest funding for short-term research projects, including pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology; and development of new research technology. In particular, the Small Grants Program encourages crossdisciplinary translational research projects across two or more RCMI institutions that utilize the infrastructure of the Data and Technology Coordinating Center (DTCC).

FOA issue date: April 1, 2010

Application deadline: June 15, 2010

### Review: RTRN EAC, RCMI EAC and RCMI PI/PDs



#### RTRN SGP Proposals by School & Number of Applicants (June 2009 cycle)

<b>RCMI Grantee Institution</b>	Proposals Submitted	Applicants (Pls)		
Florida A&M University	5	4		
Howard University College of Medicine	3	3		
Ponce School of Medicine	2	2		
Texas Southern University	2	2		
Universidad Central del Caribe	2	2		
University of Texas at El Paso	1	1		
Charles Drew University	5	5		
Meharry Medical College	5	1		
Morehouse School of Medicine	1	1		
University of Hawaii at Manoa	6	6		
University of Puerto Rico	2	2		
TOTAL	34	29		



	Applic	ations	Awards		
<b>RCMI Grantee Institution</b>	PI	Co-PI	PI	Co-PI	
City College of New York		1		1	
Florida A&M University	5				
Howard University College of Medicine	3	2	2	1	
Jackson State University		1		1	
Morgan State University		1		1	
Ponce School of Medicine	2		2		
Texas Southern University	2				
Universidad Central del Caribe	2	2	1		
University of Texas at El Paso	1	1	1		
University of Texas at San Antonio		1		1	
Charles Drew University	5	4	3	1	
Meharry Medical College	5	6		1	
Morehouse School of Medicine	1	2		1	
University of Hawaii at Manoa	6	5	1	3	
University of Puerto Rico	2	2	1		



## **RTRN SGP Awardees (PI from G12-only Schools)**

Antonio Martins, Ph.D.	Neuroprotection of Progenitors and
Applicant – Universidad Central del Caribe	Mature Neurons in Experimental
Collaborator – Morehouse School of Medicine	Stroke Neuro
Julie Dutil, Ph.D.	Genetic Susceptibility to
Applicant – Ponce School of Medicine	Hypertension: From Rats to Human
Collaborator – Jackson State University	Cardio
<b>Qiyi Tang, M.D., Ph.D.</b>	Epigenetic Studies of Kaposi's
Applicant – Ponce School of Medicine	Sarcoma-associated Herpesvirus
Collaborator – University of Texas at San Antonio	(KSHV) Inf Dis
Kristin Gosselink, Ph.D.	A Role for Stress-Induced
Applicant – University of Texas at El Paso	Modifications to the GnRH System in
Collaborator – Morgan State University	Prostate Cancer Cancer
<b>Richard Enrique Blake, M.D.</b> Applicant – Howard University Collaborator – Meharry Medical College	Ultrastructural, Immunohistochemical and Biochemical Analysis of Small Leiomyomas Cancer
Lisa Fitzpatrick, M.D. Applicant – Howard University Collaborator – Charles Drew University	Pilot Study to Assess the Impact of Yoga and Meditation in HIV+ Clients in Care Community



## **RTRN SGP Awardees (PI from G12-plus Schools)**

Aaron Ohta, Ph.D. Applicant – University of Hawaii at Manoa Collaborator – City College of New York	A Smart Culture Dish Platform Inf Dis
Valerie Wonja, M.D.	CSF Monocyte HIV-1 Proviral DNA and
Applicant – University of Puerto Rico	Oxidative Stress in Women with HAND
Collaborator – University of Hawaii at Manoa	Inf Dis
Sheba Mariam George, Ph.D	Health Research Literacy Advancement
Applicant – Charles Drew University	among Multicultural Populations
Collaborator – University of Hawaii at Manoa	Community
Jorge Nestor Artaza, Ph.D.	Vitamin D Ameliorates the Development
Applicant – Charles Drew University	of Fibrosis Associated with
Collaborator – Morehouse School of Medicine	Cardiovascular Disease
Collaborator – University of Hawaii at Manoa	Cardio
Suzanne Porszasz-Reisz, Ph.D. Applicant – Charles Drew University Collaborator – Howard University	Histological and Genetic Analysis of Muscle in COPD Patients



## **Other Collaborative Activities**

- Teleconference with Brian Reynolds, PhD, of the Duke Translational Research Institute, to discuss strategies to increase participation and interactions within the Radiological Cluster
- Coordination between RCTRs and CTSA-affiliated schools in key function areas to reduce duplication, increase efficiency and promote inter-institutional collaboration
- Streamline IRB approval across RCMI grantee institutions
- Leverage participation in the U24 grant, entitled "Networking Research Resources Across America"



## Translational Research Cluster System DTCC Plan to Support Collaborations

- Revitalize the web presence for cluster scientists' interactions
- Create listservs for each cluster
- Schedule regular teleconferences for research clusters and project-specific calls
- Distribute funding opportunity announcements
- Send newsletters to each research cluster
- Establish tools, such as research blog and frequently asked questions
- Create "skill finder" tool (per Harvard Catalyst model), post "want ads" for collaborators
- Host monthly "lunch-and-learn" session, Webinar/videoconferences to showcase particular schools or projects and discuss collaborations



### **Conflict Resolution: Governance Manual**

Any conflicts arising between network investigators in the conduct of collaborative activities shall be addressed in consultation with the PIs, NIH and External Advisory Committee, as appropriate.

Conflicts of authorship shall be resolved according to standards set forth by the International Committee of Medical Journal Editors in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals.



## **Evaluation**

- 1) What is the impact of the collaboratory infrastructure on the scientific process as measured by scientific productivity (e.g., number and quality of publications), collaboration experience (e.g., quantity, quality and diversity of collaborations), training and faculty development support (e.g., increased access to mentors and seminars or accelerated academic advancement), workflow efficiency, and changes in social organization?
- 2) What are the influential determinants (barriers and facilitators) of successful collaboratory development, implementation, and scientific productivity?
- 3) What are the perceived benefits and limitations of collaboratory involvement at level of the individual, the group (collaborating units), the organization (the collaboratory or center), or the affiliated institution(s)?