



Meharry-Vanderbilt-TSU Cancer Partnership

2018 PACHE Meeting

Maximizing Institutional Research Capacity Through Building Relationship and Collaboration With the Institution

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Outline of Talk

Objectives: Leveraging PACHE support to advance cancer health disparities research

Outline:

1. Brief history of Meharry-Vanderbilt-TSU (MVT) Cancer Partnership and Meharry Translational Research Center (MeTRC) U54 grants
2. Main structural and programmatic similarities/differences between these two programs
3. Critical experiences for leading these two similar but dissimilar programs
4. Interactions, leveraging and institutional collaborations between these programs & NIH
5. Educational programs and shared/utilization of common resources
6. Complementarity and diverse challenges and Institutional support
7. Examples of tangible outcomes and conclusions
8. Acknowledgements

Brief History of MVT Cancer Partnership and Meharry Translational Research Center (MeTRC) U54 Grants

MVT Cancer Partnership

- 1999: Meharry-Vanderbilt Cancer Partnership established with Drs. Hal Moses and Samuel E. Adunyah original PIs
- 2001: 1st NCI U54 funding
- 2006: Renewal and TSU added as subcontract to Meharry
- 2011: Renewal as a Triad MVT Cancer Partnership with multiple PIs approach
- 2016: Renewal as MVT Cancer Partnership with Multiple PIs approach

* 19 years experience as a PI and Meharry's Admin Core Director of NCI cancer partnership U54 Grant

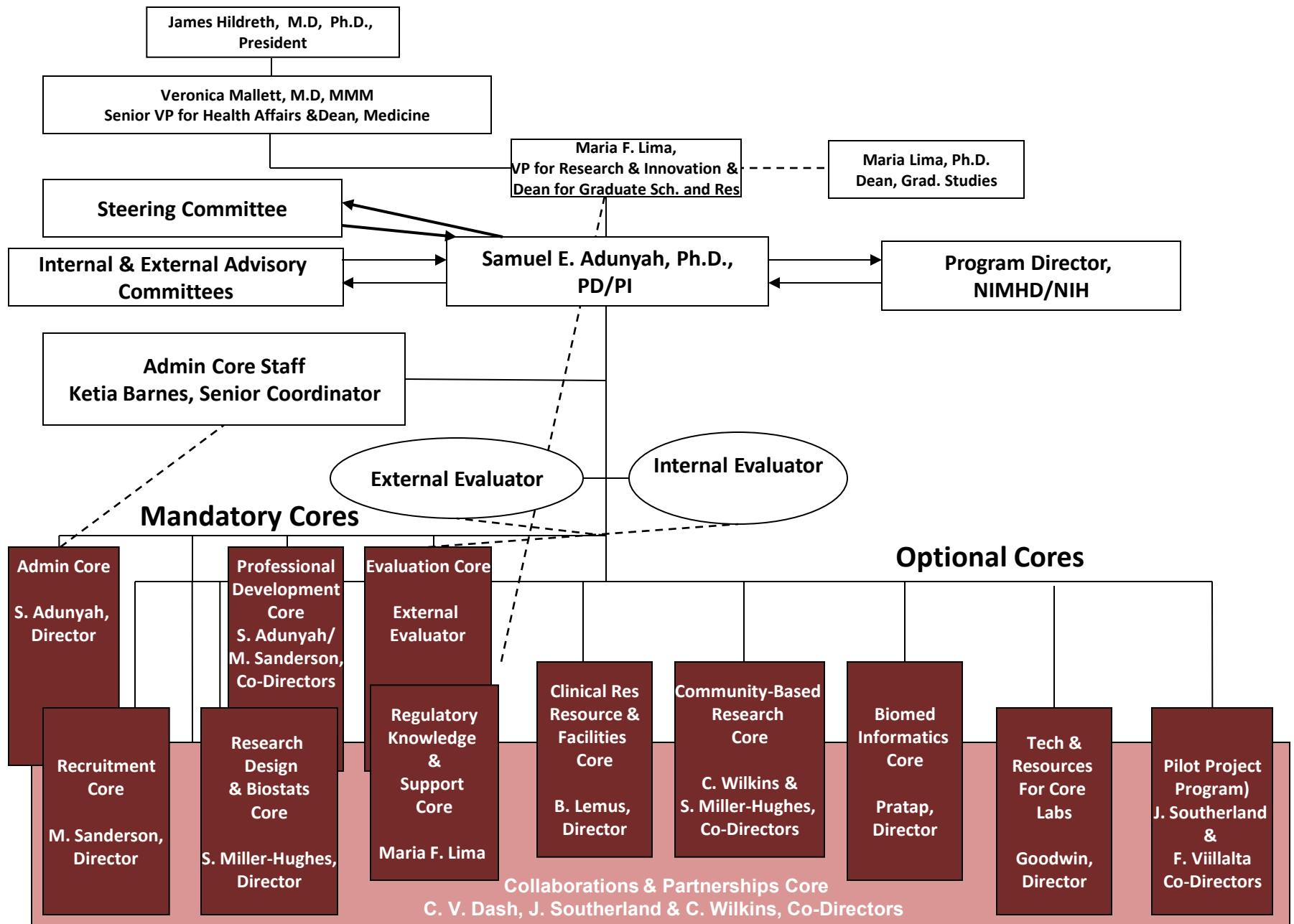
*16 years experience as Co-chair of our partnership IAC and PIs Executive Committee Meetings were relevant

Meharry Translational Research Center (MeTRC)

- 2008: Established with HIV Center for Health Disparities and Women's Health Center as main focus
- 2009: Funded by U54 mechanism from NCRR with Dr. James Hildreth as PI/PD
- 2011: Dr. Adunyah appointed as PI/PD and Director of Admin Core
- 2011: Dr. Adunyah appointed Ketia Barnes as Senior Program Coordinator to oversee Admin Core Staff of 4
- 2012: Focus of Center expanded to include cancer, CVD, diabetes and Neurological Disorders
- 2014: Successful competing renewal (**impact score of 20**) with funding from NIMHD with Dr. Adunyah as PI/PD and Director of Admin Core
- 2016: Funded as an eMERGE Affiliate site with Dr. Adunyah as PI and funded by NIMHD with sequencing support from NHGRI

Comparison Between Components of MVTC Partnership and Meharry Translational Research Center (MeTRC)

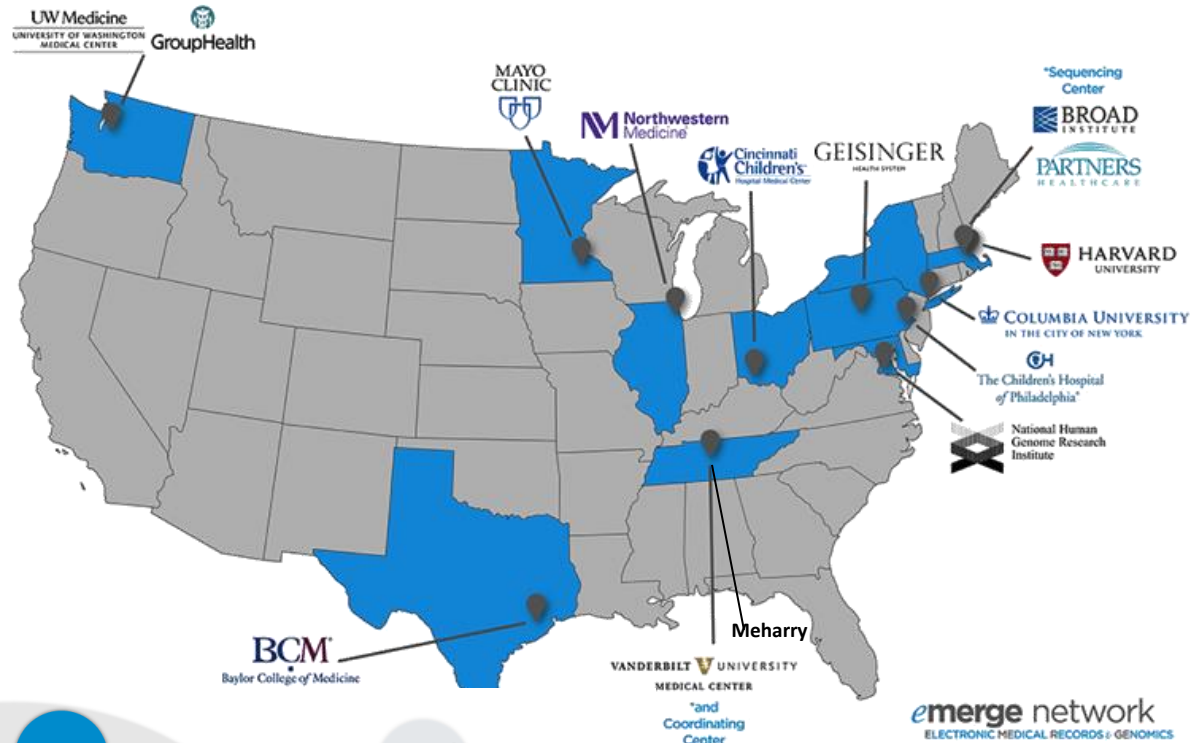
	MVT Cancer Partnership (PACHE)	Meharry Translational Research Center (MeTRC) R-CTR
Core Resources Support	6 Cores	12 Cores
Mandatory Cores	<ul style="list-style-type: none"> • Admin Core • Evaluation 	<ul style="list-style-type: none"> • Admin Core • Collaborations and Partnership Core • Evaluation Core • Professional Development
Optional Cores	<ul style="list-style-type: none"> • Biostatistics Core (Vanderbilt) • Clinical Trials Core (Meharry) • Translational Pathology (Meharry) • Outreach Core (TSU, Vanderbilt, Meharry) • Cancer Education & Research Training (Meharry, TSU, Vanderbilt) 	<ul style="list-style-type: none"> • Biomedical Informatics Core • Clinical Research Resources Core/Clinical Translational Research Core • Clinical Translational Pilot Project Program • Community-Based Research Core/Community Engagement Core/CERC • Research Design and Biostatistics Core • Regulatory Core Knowledge and Support Core • Recruitment Core • Technologies and Resources for Core Laboratories
Research Projects (Total # supported)	<ul style="list-style-type: none"> • 4 to 5 R01 types full projects • 2 to 3 Pilot Projects 	<ul style="list-style-type: none"> • 21 Pilot Projects • 2 CERC Projects
Governance	<ul style="list-style-type: none"> • PIs Executive Committee (plus Admin Core Staff as non-voting members) • IAC • PSC • NCI 	<ul style="list-style-type: none"> • Steering Committee (plus 4 Admin Core Staff as non-voting members) • IAC • EAC • NIMHD and NHGRI



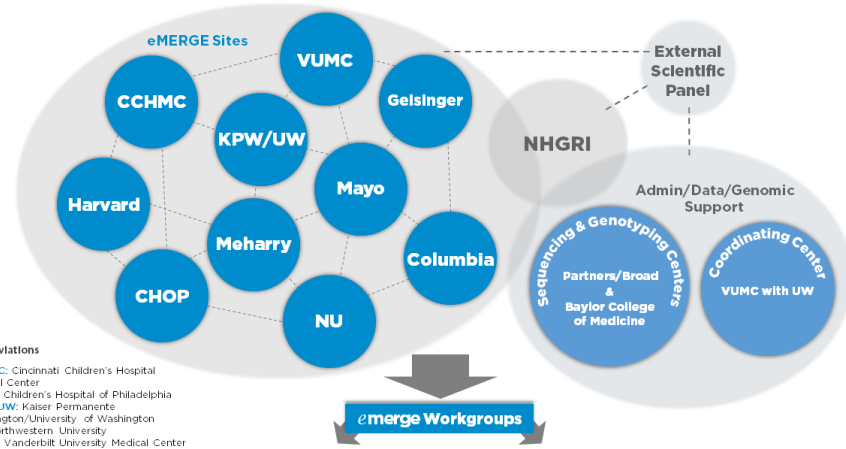
Leveraging MVTC Partnership NCI U54, NIMHD Translational Research Center (MeTRC) U54, RCMI U54 Grants Meharry Institutional Resources

Area of Leverage	MVT Cancer Partnership NCI U54	Meharry R-Center (MeTRC) NIMHD U54	Meharry Institutional Funds	New RCMI NIMHD U54
Faculty Recruitment Phil Lammers, M.D Medical Oncologist	Partial salary support as Director of Oncology Clinical Trials Core Partial salary support as PI of MVT Cancer Partnership	Partial salary support @ 40% effort + Postdoc R21 type pilot project support as PI	Partial salary support via Department of Internal Medicine & Dean's Office	
Translational Pathology Core (Morphology and Tissue Bank)	Partial salary support for Drs. Billy Ballard & Shawn Goodwin, Co-Directors, Lab supplies Lab Personnel	Partial salary support for Dr. Shawn Goodwin, Director Postdoc support New Equipment & Lab Supplies	Partial salary support for Dr. Billy Ballard, Chair and & Chief Pathologist, Department of Pathology	Salary support for Dr. Shawn Goodwin Equipment Lab supplies

eMERGE : Electronic Medical Records and Genomic Network



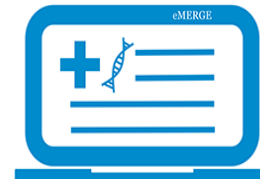
eMERGE connects **genetic data** with **electronic medical records** to study ways to provide better, more informed medical care to patients. Here's how it works:



abbreviations
 CCHMC: Cincinnati Children's Hospital Medical Center
 CHOP: Children's Hospital of Philadelphia
 KPW/UW: Kaiser Permanente Washington/University of Washington
 NU: Northwestern University
 VUMC: Vanderbilt University Medical Center

CAGACAGTAATC
 TAAATTCGCCGT
 GAAATGATCATC

genetic data is collected from patients and stored in biorepositories located at eMERGE's 9 sites.



once genetic data is merged with each site's **electronic medical records**, research takes place to detect genetic make-up that causes a person to be (a) more susceptible to particular conditions or (b) better suited for certain medications.



this information can be shared with medical care providers to drastically **improve healthcare** for a wide variety of patients.



Leveraging MVTC Partnership NCI U54, NIMHD Translational Research Center (MeTRC) U54, RCMI U54 And Meharry Institutional Resources

Area of Leverage	MVT Cancer Partnership NCI U54	Meharry R-Center (MeTRC) NIMHD U54	Meharry Institutional Funds	NHGRI Sequencing Support
<p>eMERGE Project Goal:</p> <ul style="list-style-type: none"> Recruit 500 AA for genetic studies on breast, colon, lung and prostate cancer for germ line DNA sequencing Return of Actionable/Pathological Sequencing results to Primary Care Physicians and participants via EMR Deposit data in the national eMERGE database 	<ul style="list-style-type: none"> Drs. Adunyah & Lammers' role in study design Dr. Lammers' role in identification of participants and enrollment Oncology CTO's involvement 	<ul style="list-style-type: none"> Funded by NIMHD as a supplement to MeTRC U54 grant MeTRC Admin Core's admin support Dr. Sid Pratap's role MeTRC supported e-IRB Drs. Murray and Singh and CTTC's Staff role on participants recruitment, consenting, enrollment, blood collection & shipping 	<ul style="list-style-type: none"> Assistance from Meharry's Grant Administration/Grant Management assistance IRB Office 	<ul style="list-style-type: none"> Paid for genetic sequencing (germ line sequencing) of participants DNA at eMERGE sequencing lab @ Baylor University
<p>Project Update: Successful and near completion</p>	Return of Results (RoR)	Role in RoR	Blank	Blank

Leveraging MVTC Partnership NCI U54, NIMHD Translational Research Center (MeTRC) U54, Office of Minority Health Resources And Meharry Institutional Resources

Areas of Leverage	MVT Cancer Partnership NCI U54	Meharry R-Center (MeTRC) NIMHD U54	Meharry	Office of Minority Health Resources (OMHR)
Training of Medical Students in Summer Cancer Research	Yes Summer Medical Students research Support	Yes MeTRC support- Investigators and core facilities provide training at Meharry	Yes Other Meharry Cancer Researchers serve as mentor students	No
Training of PhD and MSPH Students	Yes Stipend and Research Supplies	No (Indirectly)	Yes (School of Graduate Studies and Research)	No
Cancer Research Pilot Projects	Research projects led to 2 SC1 projects (specific examples: Drs. Anil Shanker & Amos Sakwe)	MeTRC supported cancer research pilot projects (R03 or R21 types)	Meharry IRB/IACUC Office Grants Office	No
Grant Writing (Professional Development)	No	Yes. Planned and provided travel award for more than 20 attendees from other HBCUs.	Yes. IT Technical support and CME Program	Drs. Tamara Henry from OMHR as Speaker and Facilitator

Conclusions

- Leadership in NCI-supported PACHE U54 program provided me an extraordinary experience for PI/PD role towards successful renewal of Meharry's R-CTR Program
- Strong complementarity and yet major difference exist between PACHE and R-CTR Programs
- Collaborations, resources sharing and interaction between these programs and Meharry Medical College are germane to Meharry's overall research mission towards addressing health disparities in cancer, CVD, diabetes and HIV/AIDs

Acknowledgements

NCI:

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Program Staff/Officers
Dr. Sanya Springfield
Dr. Nelson Aguila
Dr. Anil Wali
Dr. Peter Ogunbiyi
Other Program Staff
Grant Admin

MVT Cancer Partnership:

Dr. Hal Moses, PI, VICC
Dr. Ann Richmond, VICC
Dr. Phil Lammers, PI, Meharry
Dr. Baqar Husaini, PI, TSU
Dr. Margaret Whalen, PI, TSU
Ms. Ketia Barnes, Senior Program Coordinator
Ms. Susan Mills, Former Senior Administrator, VICC
Mr. Wayne Green, Program Coordinator
Ms. Meggan Novotny, Program Coordinator
Ms. Anne Washburn

NIMHD:

5U54MD007593
(MeTRC & eMERGE
Supplement)
NIMHD Director
Dr. Rina Das
Dr. Regina Douthard
Capt Dr. Leslie Cooper
Dr. Sheila McClure
Grants Admin Staff

NHGRI:

NHGRI Director
eMERGE Program Officers
Dr. Rongling Li
Dr. Ken Wiley
Dr. Jyoti Gupta
Program Staff & Baylor Seq Lab
eMERGE Coordinating
Center Staff, Vanderbilt

Meharry Medical College/MeTRC:

Dr. James Hildreth (Current President)
MeTRC Admin Core Staff
MeTRC Core Directors
MeTRC Activity Leaders
MeTRC eMERGE Leaders/CTRC Staff
MeTRC Steering Committee
MeTRC EAC Members
Dr. Phil Lammers
Dr. John Murray
Dr. Rajbir Singh
MeTRC Investigators