







# EARLY LESSONS LEARNED: THE JACKSON HEART KIDS STUDY

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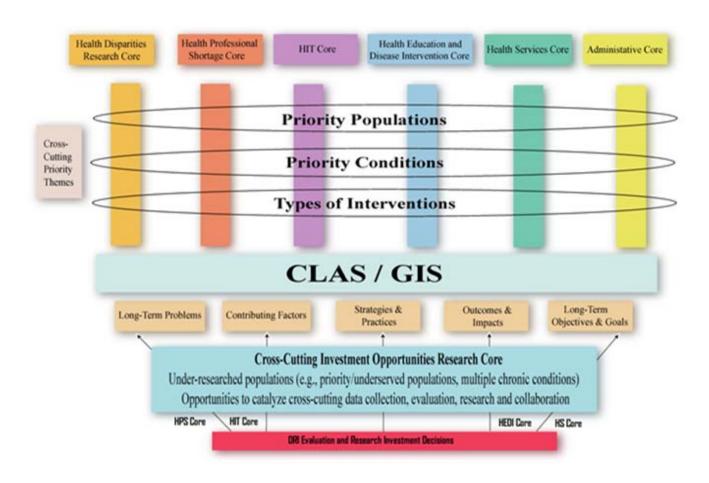
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#### **OVERVIEW**

- Brief Overview of MIGMH/DRI
- Obesity prevalence rates in Mississippi
- Brief background of the Jackson Heart Study
- Overview of the JHS KIDS Study
  - Funding partnership for the KIDS Study
  - Organizational structure
- Top Ten Lessons Learned (to date)
- Questions and Discussion



### OVERVIEW OF THE DELTA REGIONAL INSTITUTE



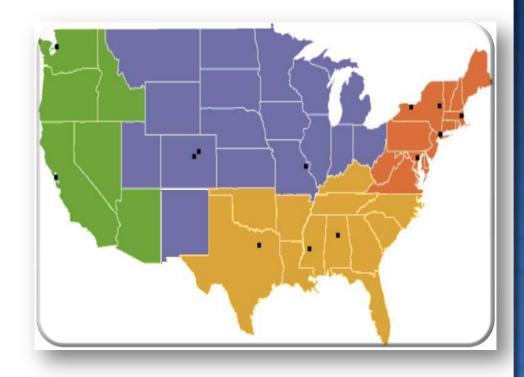


### MISSISSIPPI STD/HIV PREVENTION TRAINING CENTER (MSPTC)

#### Goals

Increase the knowledge and skills of health professionals in the areas of sexual and reproductive health

State-of-the-art educational opportunities, including experiential learning with an emphasis on prevention



Funded by the Centers for Disease Control



### SNAPSHOT OF OBESITY AND RELATED DISEASES IN MISSISSIPPI

- 34.9% of adults in Mississippi (MS) are obese compared to 20.7% in Colorado
  - 42.6% of AA adults obese/30.4% White adults
  - Combined obese/overweight rate in MS
    - 54.3% 15 years ago
    - 61.1% 10 years ago
    - 68.8% 2011
- Diabetes prevalence rates in MS
  - 6.5% 1995
  - 34.8% 2011
- Hypertension prevalence rates in MS
  - 29.9% 15 years ago
  - 34.8% 2011

F as in Fat 2012. Trust for America's Health



#### CHILDHOOD OBESITY RATES IN MS

- 40% of children/adolescents in MS overweight/obese
  - 21.9% obese
  - Highest childhood obesity prevalence rate in the US



### PROGRESS, NOT JUST PROBLEMS IN MISSISSIPPI

- School meal standards that are stricter than the U.S. Department of Agriculture (USDA) requirements.
- Limitations when and where competitive foods (foods and beverages sold outside of the formal meal programs, through à la carte lines, vending machines and school stores) may be sold beyond federal requirements.
- MS Healthy Student's Act 2007
  - Minimum health and physical activity education standards
  - Physical activity coordinator
  - Local school health counselors



#### THE JACKSON HEART STUDY

The Jackson Heart Study (JHS) is a single-site, longitudinal cohort study of the risk factors and causes of heart diseases and other hypertension-related diseases in African American adults. The JHS built upon some of the successes of the ARIC study with a focus on a specific community of African Americans.



#### JHS OVERALL STUDY DESIGN

- 5,301 African Americans residing in the three counties surrounding Jackson, MS were recruited and examined at baseline between 2000-2004.
  - Participants are between 21-84 years of age
  - Women make up 65% of participants
- Baseline examination had three components:
  - At home interview
  - Self-administered questionnaires
  - Clinic visit
- Clinic visits and interviews occurred approximately every 3 years



### ANCILLARY STUDY OF THE JACKSON HEART STUDY JHS KIDS

#### **Specific Aims**:

- Consent, recruit and enroll 200 12-19 year old offspring (children and grandchildren) adult participants in the JHS.
- Collect behavioral and psychosocial measures (dietary intake, physical activity, sleep, stress), anthropometric measures (height, weight, and waist circumference), and biologic measures (non-fasting blood glucose) to estimate the prevalence of specific lifestyle factors which may influence risk for cardiovascular disease.
- Use the resultant data from this pilot study to determine the practicability of, and to estimate the parameters required to size, a prospective, longitudinal cohort study of African American youth.



#### STUDY MEASURES COLLECTED

- Anthropometry (ht, wt, waist circumference)
- Blood pressure
- Blood glucose (10% of the sample)
- Psychosocial questions
  - Dietary intake/SSB intake/F&V
  - Sleep
  - Internet experiences/cyber-bulling
  - TV viewing/eating while watching TV
  - Religiosity
  - Stress



# DRI FUNDING IN SUPPORT OF JHS KIDS (CPIMP091054-03)

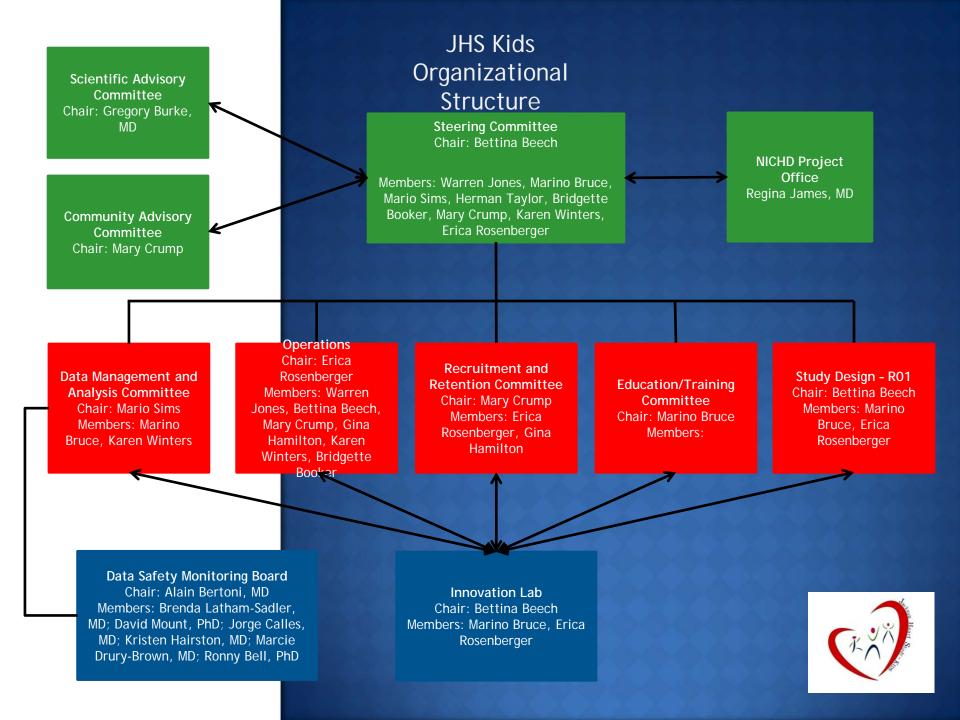
- Unique, new partnerships
  - Funding:
    - NICHD and Office of Minority Health
  - Research:
    - University of Mississippi Medical Center
      - Mississippi Institute for the Improvement of Geographic Minority Health (MIGMH)
      - Delta Regional Institute (DRI)
      - Mississippi Prevention Training Center
      - Jackson Heart Study (JHS)
    - Wake Forest School of Medicine



#### **TIMELINE**

- Grant funded 12/11
- IRB approved
  - Wake 1/27/12
  - UMMC 2/20/12
- Recruitment letters sent 2/27/12
- First participant visit 3/7/12





## TOP 10 LESSONS LEARNED





### #10-CHALLENGES ARE MADE TO BE OVERCOME

- Stage of the Jackson Heart Study
  - Exam 3 ending during recruitment for the KIDS Study
  - Community confusion
- Extending adult study, to a family study
- Creating a virtual team



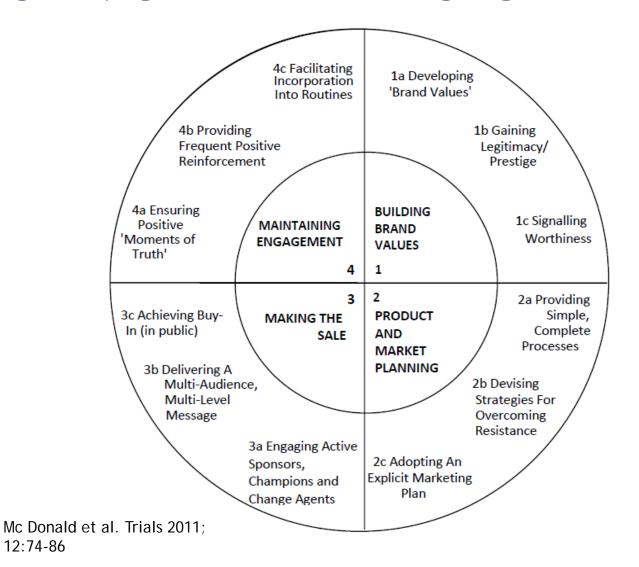


### RECRUITMENT STRATEGIES FOR PILOT STUDY

- Recruitment Strategies
  - Letters mailed to JHS participants
  - Word-of-mouth
  - Community Advisory Board
    - Study Ambassadors
    - Flyers
  - Church announcements
  - Baptist Convention



#### MARKETING MODEL FOR CLINICAL TRIAL RECRUITMENT



12:74-86



### **#9 - TECHNOLOGIC ADVANCES SOMETIMES CREATE SETBACKS**

- New electronic IRB submission system implemented at UMMC
  - Challenges with the new system
  - Mandatory training before system could be used
  - Review delays because of the new system



### #8 -COLLABORATION IS AN ACTION, NOT JUST A SIGNED AGREEMENT

- Virtual team to functional team
  - Research team largely unfamiliar with each other
    - Needed to quickly establish working relationships
  - Tools used
    - Face-to-face meetings
    - Conference calls
    - DropBox
- Community Advisory Board
  - 7 members
  - Chair: Rev. Thadeus Williams
  - Monthly meetings (Saturdays 1.5-2 hrs)
  - Extremely active group



#### **COMMUNITY ADVISORY BOARD**





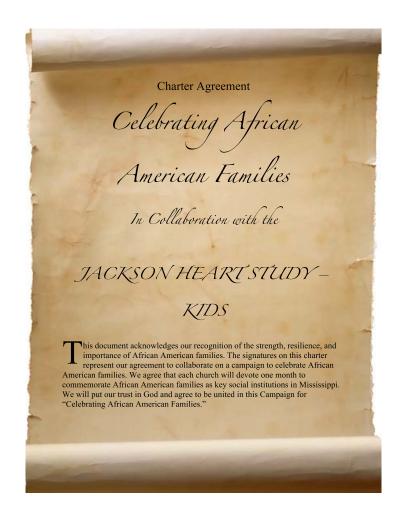
### #7 - COMMUNITY INVESTMENT CAN ENHANCE COMMUNITY ENGAGEMENT

- Community engagement -
  - "Process of inclusive participation that supports mutual respect of values, strategies, and actions" (Community Engagement at NIH)
- Community investment -
  - Extends engagement by:
    - "Stopping by when you don't want something"
    - Acknowledging the mutuality of "community"
    - Potential "ripple effect" extended to community members indirectly engaged through activities



### COMMUNITY INVESTMENT ACTIVITIES

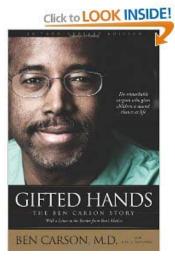
- Celebrating African American Families
  - Collaboration with 20 African American churches
  - Each church selects a month to celebrate
    - Photos sent to the KIDS team to create calendar
  - Dinner held with the Pastors
  - Public signing ceremony held at the Jackson Medical Mall





### COMMUNITY INVESTMENT ACTIVITIES (CONTINUED)

- Read Well Campaign
  - Goal: Increase family reading
  - Rationale:
    - Literacy levels in MS
    - Importance of reading to research participation
    - Partner with schools to encourage parents to read assigned books with their children





### COMMUNITY INVESTMENT ACTIVITIES (CONTINUED)

- Family Health Fair July 15, 2012
  - 25 vendors
  - Approximately 300 people attended
  - Exercise for Seniors
  - Mall wall for children
  - Exercise for children
  - Sign-up tables for KIDS Study
  - Covent signing for Pastors
  - Raffle drawings
  - Kick-off of Read-Well Campaign
  - Media Coverage
    - Jackson Advocate
    - Local NPR station interview
    - TV interviews



#### YOU'RE INVITED TO THE...

### Family-A-Fair

#### **Kick-Off Event!**

Wednesday, July 25, 2012 | 10am - 2pm

Jackson Medical Mall | 350 West Woodrow Wilson, Jackson, MS

Join the Jackson Heart Study – Kids in launching two new campaigns: "Celebrating African American Families" and "Reading for Wellness".

Health Equity, Health Literacy, & Wellness is a Family-A-Fair!

Free food & beverages
Freebies and live entertainment
Free health screenings & information
Raffle prizes

Fun activities for the family

For more information Call 601.815.9003



#### **FAMILY -A-FAIR**











### #6 - CREATIVITY IS THE MOTHER OF INVENTION

- Staffing Challenges
  - Created Student Research Team (SRT)
  - 5 graduate students at Jackson State University
- Created Field Methods course (CJ 580)
  - Year-long course (didactic and interactive)
  - Taught by Dr. Marino Bruce
  - Trained in:
    - Applied Research Methods
    - Development of research protocols
    - IRB submissions
    - Responsible Conduct of Research
    - Data collection Certified in measures below
      - Anthropometrics
      - Blood pressure
      - Psychosocial measures
  - Pre-course assessment on Research Self-Efficacy (12/15/11)



#### STUDENT RESEARCH TEAM

- 5 students all committed to careers in CJ
  - Two are planning to apply for doctoral programs health-related fields
- APHA Student Memberships provided
  - Personal, not grant dollars used
- Two abstract submissions
  - APHA abstract wait listed
  - NIH Disparities Conference abstract accepted
    - Primary data collection study
    - Perception of research participation of Millenials
      - IRB submission process, data collection, data entry, and analysis (Epi Info)
      - Manuscript in progress



#### STUDENT RESEARCH TEAM





### ADDITIONAL STUDENTS INVOLVED IN JHS KIDS

- Emily Fowler MPH Student (Lenoir-Rhyne College)
- Kim Garza MS/PhD Student (University of Illinois-Chicago)
  - Contacted through NIH study announcement
  - Obtained funding through the Provost's Office to come to Wake and work on study for the summer
  - Planning Master's thesis related to JHS KIDS
- Connor TeVault
  - Was a high school student senior practicum
  - Developed an APP for the KIDS study
  - Now college freshman Elon College



### #5 - "MEET THE PEOPLE WHERE THEY ARE" (PAULO FRIERE)

- Importance of the medical mall
  - Trusted community location
  - Tenets (selected)
    - MIGMH/DRI
    - KIDS Study Office
    - Hinds County Health Department
    - Jackson Heart Study
    - Jackson State University College of Public Service
    - UMMC Cancer Center
- Mobile Clinic Plans (full study)
  - Temporary KIDS Study clinics in community locations (e.g. Churches)
  - Able to bring clinic to homes and other convenient locations



### #4 - YOU WILL ALWAYS BE A CHILD TO YOUR PARENTS

- Grandparents were our most important recruiters!
  - Typically first point of contact
- Used an intergenerational approach that spanned households
  - Initial contact with grandparents required additional follow-up with parents
    - 15% of appointments had to be rescheduled



#### #3 - THERE IS NO "I" IN TEAM

- Using the principle of "doing life together" helped to build a strong team
  - Recognition of birthdays, anniversaries, births, accomplishments, health challenges, etc.
  - Demonstrated commitment to overall academic development of students
    - "The Great Debaters"
  - Conscious creation of "community" within the study



### #2 - PILOT GRANTS CAN LIGHT A FLAME

- Participant Enrollment to date
  - ■101 children/adolescents completed baseline assessments
    - •23 (additional) scheduled for visits
    - 25 (additional) called and waiting to be scheduled
  - 23 grandparents/55 parents
  - 58 finger sticks (28 fasting; 30 non-fasting)
- Study is on-going (seeking no-cost extension)
  - Early demographics
    - •Mean age 15.1
    - •Gender 52% males
    - Mean BMI 25.3 (kids)/35.3 parents/34.9 grandparents)
- Calls from interested participants continue!
- Community interest in opening study to non-JHS participants
  - JHS PI invited to every event
  - Community Advisory Board strong recommendation
  - Interest demonstrated at Family-A-Fair
  - JHS has a waiting list



#### **#1 - "THE AUDACITY OF HOPE"**

- Planned full-scale R01 application 2013
  - Inclusion of families within and outside of the JHS
  - Overall goal:
    - To analyze the intertwined biological, behavioral, and social transmission of obesity and obesity-related risk factors across generations and to test intergenerational, exposure-disease associations by linking data from JHS and JHS-KIDS data.



#### JHS KIDS RESEARCH TEAM

- Bridgette Booker, PhD
- Marino Bruce, PhD, MSRC, MDiv
- Shirley Collins, BS (SRT)
- Mary Crump, RN, MS
- Brittany Fells, BS (SRT)
- Erica Hale, MS
- Gina Hamilton, BS (SRT)
- Katrena Harris, BS (SRT)
- Regina James, MD (Project Officer)
- Mario Sims, PhD
- Herman Taylor, MD, MPH
- Robert Wentworth, BS (SRT)



#### **THANK YOU!**

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