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# Gulf States Health Policy Center Community Research Fellows Mobile, AL Evaluation Report

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# Gulf States Community Research Fellows Mobile, AL Spring 2017 Evaluation Report

Project funded by NIH-NIMHD grant #U54MD008602 at Gulf States Health Policy Center, BayouClinic, Inc.



#### **Report Introduction**

The Gulf States Community Research Program (GSCRP) program took place in Mobile between January 10<sup>th</sup>, 2017 and May 9, 2017. This report reflects the implementation and evaluation of a community based participatory training (CBPR) program for this cohort of community members. The report provides data on the assessment of the program's effectiveness in promoting the role of underserved populations in research by enhancing the capacity for CBPR. In assessing the social network development of the cohort, we seek to understand effectiveness in bridging many community roles to serve the purpose of addressing health disparities. Specifically, the report assesses if the Mobile GSCRP program has met its specific aim: To enhance community knowledge and understanding of research.

The following individuals played an instrumental role in the implementation of the program:

Emily Blejwas Program Director Gulf States Health Policy Center

Isiah Lineberry Senior Program Manager Gulf States Health Policy Center

Danny Patterson Coalition Coordinator Gulf States Health Policy Center

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#### I. Baseline Assessment

#### Introduction

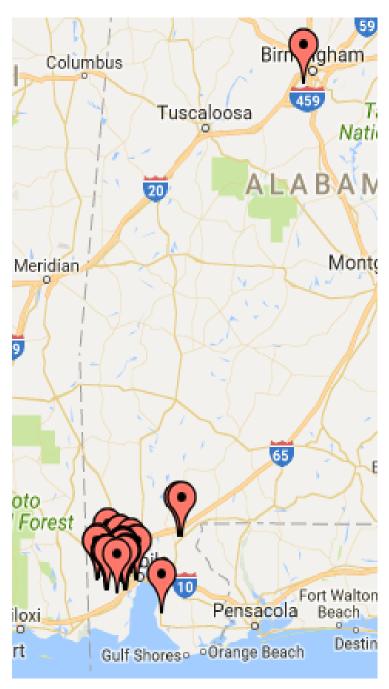
The Gulf States Community Research Program (GSCRP) baseline assessment survey was completed by program fellows (n=27) prior to the beginning of the Community Research Program Courses. All baseline assessments were completed prior to January 10, 2017. The purpose of the assessment questionnaire was to evaluate the fellows' understanding of key research concepts to be addressed throughout the program course in weekly modules. Many of the questions were repeated in a post-GSCRP assessment after the 16-week program to assess growth. The post assessment results will be provided in Section III of this report.

#### Demographic Characteristics

As provided in Table 1, a majority of the Mobile GSCRP cohort were female (n= 23, 85.2%) and African American (n=17, 62.9%). The remaining fellows reported their race as Caucasian (n=9, 33%) or Asian/Pacific Islander (n=2, 7.4%), and one fellow reported other (3.7%). All but three fellows identified as Non-Hispanic (n=24, 88.9%). Almost all fellows were born in the United States (n=23, 85.2%), with the remaining four fellows' birthplace listed as El Salvador, Argentina, Vietnam, and Canada. Most fellows lived in Mobile, AL (n=23, 85.2%) (see Figure 1), with the other cities of residence listed as Birmingham, AL (n=1, 3.7%), Semmes AL, (n=1, 3.7%), Bay Minette, AL (n=1, 3.7%), and Fairhope, AL (n=1, 3.7%). Fellows were between 18 and 74 years of age (Mean 45.2 years, SD 15.5 years). Nearly all fellows had attended college (n=26, 96.3%), with approximately 85.2% receiving a college degree (n=23) and nearly half reporting a completed graduate degree (n=13, 48.1%). The fellows' experience with research classes varied, with over half (n=15, 55.5%) having never taken a research class prior to their participation in GSCRP. Nine respondents reported that they had taken 1-2 research classes (33.3%), one had taken 3-4 research classes (3.7%), and the remaining fellows reported

that they had taken 5+ research classes (7.4%). The majority of the cohort worked full time (n=23, 85.2%), one fellow (3.7%) worked part time, and three (11.1%) were unemployed. Additionally, 14.8% (n=4) of fellows were students, 7.4% (n=2) were retired, and none were disabled.

Figure 1: Map of Fellows' Zip Codes



**Table 1: Demographic Characteristics of Mobile GSCRP Fellows (n=27)** 

Characteristics	N (%)
Gender	
Female	23 (85.2)
Race	
African American	17 (63.0)
White	9 (33.0)
Asian/Pacific Islander	2 (7.4)
Other	3 (11.0)
Ethnicity	
Non-Hispanic	24 (88.9)
Country of Origin	
United States	23 (85.2)
El Salvador	1 (3.7)
Argentina	1 (3.7)
Vietnam	1 (3.7)
Canada	1 (3.7)
City of Residence in Mobile	
Mobile	23 (85.2)
Birmingham	1 (3.7)
Semmes	1 (3.7)
Bay Minette	1 (3.7)
Fairhope	1 (3.7)
Highest level of Education	
Some college or Associates Degree	3 (11.1)
College degree	10 (37.0)
Graduate degree	13 (48.1)
Number of Research Classes Completed	
5 or more	2 (7.4)
3-4	1 (3.7)
1-2	9 (33.3)
None	15 (55.5)
Current Employment Status	
Full time	23 (85.2)
Part time	1 (3.7)
Unemployed	3 (11.1)

Fellows were asked to define key terms and concepts that were considered essential components to understanding the Mobile GSCRP learning objectives (see syllabus in Appendix A). The data were coded without reference to any identifiers to the respondent. The frequencies of the coded responses are provided in Table 2.

Table 2: Knowledge of Key Terms and Concepts (n=27)

Question	0: I don't	1: Incorrect	2: Somewhat	3: Demonstrates	No Response
	know	Answer	familiar	Clear	n (%)
	n (%)	n (%)	n (%)	Understanding	,
				n (%)	
What is informed consent?	2 (7.4)	3 (11.1)	9 (33.3)	13 (48.1)	0
What is the Belmont Report?	16 (59.3)	2 (7.4)	1 (3.7)	8 (29.6)	0
What is the Tuskegee experiment?	4 (14.8)	0	4 (14.8)	19 (70.4)	0
Define Health Literacy.	1 (3.7)	6 (22.2)	10 (37.0)	10 (37.0)	0
Define evidence based public health.	5 (18.5)	3 (11.1)	7 (25.9)	12 (44.4)	0
Define cultural competency.	5 (18.5)	7 (25.9)	6 (22.2)	8 (29.6)	1 (3.7)
What role does the IRB play in research?	8 (29.6)	2 (7.4)	2 (7.4)	15 (55.5)	0
What is HIPAA?	2 (7.4)	1 (3.7)	6 (22.2)	18 (66.7)	0
Explain the difference between qualitative and quantitative research methods.	2 (7.4)	5 (18.5)	6 (22.2)	15 (51.9)	0
What is the difference between primary and secondary data?	6 (22.2)	7 (25.9)	4 (14.8)	10 (37.0)	0
Explain the difference between Community Based Participatory Research and Traditional Research.	13 (48.1)	3 (11.1)	1 (3.7)	10 (37.0)	0
What is epidemiology?	6 (22.2)	4 (14.8)	5 (18.5)	12 (44.4)	0
What is a clinical trial?	3 (11.1)	6 (22.2)	4 (14.8)	14 (51.9)	0
What is the mixed methods approach?	12 (44.4)	2 (7.4)	0	13 (48.1)	0
What is photovoice?	16 (59.3)	3 (11.1)	0	8 (29.6)	0
What is the purpose of a focus group?	3 (11.1)	7 (25.9)	4 (14.8)	13 (48.1)	0
What is a family health history?	2 (7.4)	1 (3.7)	1 (3.7)	23 (85.2)	0
What type of information should you expect to get from a community health assessment?	3 (11.1)	4 (14.8)	3 (11.1)	16 (59.3)	1 (3.7)
Describe the health promotion planning model that you believe is best to prevent and reduce substance abuse in an African American community?	17 (63.0)	0	0	10 (37.0)	0
What are the social determinants of health?	7 (25.9)	3 (11.1)	2 (7.4)	13 (48.1)	0
List three social determinants of health?	7 (25.9)	1 (3.7)	0	19 (70.4)	0

Table 2 (Cont.)

What is research?	1 (3.7)	4 (14.8)	5 (18.5)	17 (63.0)	0
Define racial health disparities.	3 (11.1)	2 (7.4)	5 (18.5)	17 (63.0)	0
What are the components of a SMART goal?	12 (44.4)	1 (3.7)	4 (14.8)	10 (37.0)	0
What is the Odds Ratio?	13 (48.1)	2 (7.4)	3 (11.1)	9 (33.3)	0
What is a p value?	11 (40.7)	1 (3.7)	2 (7.4)	13 (48.1)	0
List an effective method to advocate for a specific health issue in your community.	9 (33.3)	0	0	18 (66.7)	0
How is research used to develop health policy?	7 (25.9)	0	1 (3.7)	19 (70.3)	2 (7.4)

Fellows were also asked to rate their agreement with twelve statements regarding perceptions of research (Table 3), their level of agreement with statements related to the role of the community (Table 4), and how involved the community should be in the research process (Table 5). Fellows were then asked questions designed to gain insight into their knowledge of genetics in health (Table 6). Finally, Table 7 provides the frequency of responses regarding the need for assistance with completing medical forms.

**Table 3: Perceptions of Research (n=27)** 

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
a. To get people to take part in a study, medical researchers usually do not explain all the dangers about participation.	9 (33.3)	8 (29.6)	4 (14.8)	5 (18.5)	1 (3.7)	2.3
b. Participants should be concerned about being deceived or misled by medical researchers.	6 (22.2)	6 (22.2)	6 (22.2)	5 (18.5)	4 (14.8)	2.8
c. Usually, researchers who make mistakes try to cover them up.	6 (22.2)	8 (29.6)	10 (37.0)	2 (7.4)	1 (3.7)	2.4

Table 3 (Cont.)

Table 3 (Cont.)						
d. Medical researchers act differently toward minority participants than white participants.	2 (7.4)	7 (25.9)	10 (37.0)	6 (22.2)	2 (7.4)	3.0
e. Medical researchers unfairly select minorities for their most dangerous studies.	4 (14.8)	6 (22.2)	14 (51.8)	3 (11.1)	0	2.6
f. Some medical research projects are covertly designed to expose minority group diseases like AIDS.	8 (29.6)	11 (40.7)	5 (18.5)	2 (7.4)	1 (3.7)	2.1
g. Medial researchers are generally honest in telling participants about different treatment options available for their conditions.	3 (11.1)	2 (7.4)	5 (18.5)	14 (51.8)	3 (11.1)	3.4
h. Usually, medical researchers tell participants everything about possible dangers.	3 (11.1)	5 (18.5)	9 (33.3)	8 (29.6)	2 (7.4)	3.0
i. All in all, medical researchers would not conduct experiments on people without their knowledge.	2 (7.4)	5 (18.5)	5 (18.5)	12 (44.4)	3 (11.1)	3.3
j. Most medical researchers would not lie to people to try and convince them to participate in a research study. 2 (7.4)	2 (7.4)	4 (14.8)	8 (29.6)	11 (40.7)	2 (7.4)	3.3
k. In general, medical researchers care more about doing their research than about the participants' medical needs.	2 (7.4)	11 (40.7)	12 (44.4)	2 (7.4)	0	2.5
1. Researchers are more interested in helping their careers	4 (14.8)	14 (51.9)	7 (26.0)	2 (7.4)	0	2.3

than in learning about			
health and disease.			

**Table 4: Community Influence (n=27)** 

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
a. By working together,	0	0	0	12 (44.4)	15 (55.5)	4.6
people in my community						
can influence decisions						
that affect the						
community.						
b. People in my	1 (3.7)	2 (7.4)	11	7 (26.0)	6 (22.2)	3.6
community work together			(40.7)			
to influence decisions at a						
local, state, or national						
level that affect the						
community.						
c. I am satisfied with the	2 (7.4)	10 (37.0)	5 (18.5)	8 (29.6)	2 (7.4)	2.9
amount of influence that I						
have on decisions that						
affect my community.						

Table 5: Perception of Community's Role in Research (n=27)

Question	Not at all involved (0)	A little bit involved (1)	Somewhat involved (2)	Quite a bit involved (3)	Extremely involved (4)	Mean
a. Defining the	3.7%	3.7%	11.1%	25.9%	55.6%	3.3
problem.						
b. Deciding on	7.4%	3.7%	18.5%	29.6%	40.7%	2.9
issues of research.						
c. Developing	0%	33.3%	25.9%	29.6%	11.1%	2.2
research						
questions.						
d. Designing	7.4%	25.9%	33.3%	22.2%	11.1%	2.0
interviews and/or						
survey questions.						
e. Collecting data.	18.5%	14.8%	29.6%	22.2%	14.8%	2.0
f. Recruiting	7.4%	18.5%	29.6%	22.2%	22.2%	2.3
study						
participants.						

g. Analyzing collected data.	22.2%	29.6%	25.9%	18.5%	3.7%	1.5
h. Disseminating	18.5%	14.8%	14.8%	29.6%	22.2%	2.2
and sharing						
findings.						
i. Grant proposal	14.8%	18.5%	44.4%	7.4%	14.8%	1.9
writing.						
Table 5 (Cont.)						
j. Choosing	25.9%	18.5%	3.7%	14.8%	3.7%	1.5
research methods.						
k. Developing	22.2%	18.5%	3.7%	14.8%	7.4%	1.7
sampling						
procedures.						
l. Implementing	7.4%	11.1%	18.5%	33.3%	29.6%	2.7
the intervention.						
m. Collecting	11.1%	25.9%	29.6%	18.5%	14.8%	2.0
primary data.						
n. Interpreting	29.6%	29.6%	25.9%	7.4%	7.4%	1.3
study findings.						
o. Writing reports	25.9%	22.2%	33.3%	14.8%	3.7%	1.5
and journal						
articles.						
p. Giving	1.11%	14.8%	29.6%	25.9%	18.5%	2.3
presentations at						
meetings and						
conferences.						

**Table 6: Knowledge of Genetic Health** 

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
a. I know how to	25.9%	25.9%	22.2%	25.9%	0	2.5
assess the role of						
genes for health.						
b. I know how to	18.5%	11.1%	22.2%	37.0%	11.1%	3.1
assess my genetic						
risk for disease.						
c. I can explain	14.8%	22.2%	18.5%	40.7%	3.7%	3.0
genetic issues to						
people.						

**Table 7: Frequency of Need for Assistance with Medical Documents (n=27)** 

Question	Always	Often	Sometimes	Rarely	Never	Mean
	<b>(4)</b>	(3)	(2)	<b>(1)</b>	<b>(0)</b>	

a. How often do you have someone like a family member, friend, hospital/clinic worker, or caregiver help you read hospital materials?	7.4%	7.4%	11.1%	14.8%	59.2%	0.9
b. How often do you have problems learning about your medical condition because of difficulty understanding written information?	3.7%	3.7%	11.1%	40.7%	40.7%	0.9

#### Health Information

Fellows were then asked how frequently they found health information through various sources, such as magazines and newspapers, television, and the Internet (Table 8). Fellows were also asked to rate how frequently they talked to friends and family members about health. Some fellows indicated that they "Always" talked to friends and family members about health (n=6, 22.2%), but most fellows (n=15, 55.6%) reported "Often." Additionally, four fellows (14.8%) reported "Sometimes," one reported "Rarely" (3.7%) and two fellows did not provide a response (7.4%).

**Table 8: Frequency of Sources for Health Information (n=27)** 

Question	Everyday (6)	Several days per week (5)	2-3 times per month (4)	About once per month (3)	5-10 times per year (2)	Less than 5 times per year (1)	Not in the last year (0)	No Response	Mean
a. Some newspapers or general magazines publish a special section that focuses on health. In the past 12 months, about how often have you read such health sections?	0%	14.8%	14.8%	37.0%	11.1%	7.4%	11.1%	3.7%	2.8
b. Some local television news programs include special segments of their newscast that focus on health issues. In	3.7%	14.8%	22.2%	25.9%	0	7.4%	18.5%	3.7%	3.1

the past 12 months, how often have you watched health segments on local news?									
c. Some people notice information about health on the internet, even when they are not trying to find out about a health concern they have or someone in the family has. About how often have you read this sort of health information in the past 12 months?	11.1%	11.1%	29.6%	22.2%	14.8%	7.4%	0%	3.7%	3.3
Table 8 (Cont.)									
d. In the past thirty days, how often would you say that you have looked for information about ways to stay healthy or to feel better?	11.1%	48.1%	29.6%	7.4%	_1	-	-	3.7%	4.3

## Calculation Skills Self-Assessment

Finally, fellows rated their ease of number use. The mean and standard deviations for these statements are provided in Table 9.

**Table 9: Ease of Number Usage (n=27)** 

Answer	Scale 0-6	Averag e value	Standard Deviation
a. How good are you at working fractions?	Not at all good—	3.96	1.45
	Extremely good		
b. How good are you at working percentages?	Not at all good—	4.27	1.08
	Extremely good		
c. How good are you at calculating a 15% tip?	Not at all good—	4.88	0.97
	Extremely good		
d. How good are you at figuring out how much	Not at all good—	4.92	0.80
a shirt will cost if it is 25% off?	Extremely good		

<sup>&</sup>lt;sup>1</sup> For the last question (In the past 30 days, how often would you say that you have looked for information about ways to stay healthy or to feel better?), three of the question options were not provided since the responses were not applicable due to the time frame asked in the question (30 days).

e. When reading the newspaper, how helpful	Not at all helpful-	4.35	1.32
are tables and graphs that are part of a story?	Extremely helpful		
f. When people tell you that there is a chance	Always prefer	3.88	2.12
of something happening, do you prefer they	words—Always		
use words (e.g. it rarely happens) or numbers	prefer numbers		
(e.g. there's a 1% chance)?			
g. When you hear the weather forecast, do you	Always prefer	2.00	2.30
prefer predictions using percentages (e.g. there	percentages—		
is a 20% chance of rain today) or predictions	Always prefer		
using words only (e.g. there is a small chance	words		
or rain today)?			
h. How often do you find numerical	Never—Very	4.77	1.31
information to be useful?	often		

#### **II. Baseline Social Network Analysis**

The GSCRP Social Network Analysis Survey was also conducted with 25 Mobile GSCRP fellows prior to the first meeting of the cohort. This was important for ensuring that network connections reflected in the baseline social network data were not influenced by the GSCRP program. The social network survey was repeated at the end of the program to assess: 1) the network that had formed resulting from the program, 2) how empowered individuals feel to improve the health of their community, and 3) if there is a relationship between network position and individual characteristics. This section presents the baseline data, and Section IV will provide the results for the end of the course, as well as assess the three aforementioned objectives.

GSCRP fellows were asked about their potential contributions to improving community health. When asked to check all that apply, most fellows felt they could contribute through leadership (76.0%), community connections (68.0%), providing objectives to my organization (68.0%), connections to communities that are experiencing health disparities (56.0%), broad activity for community health priorities (56.0%), and specific health expertise (52.0%). When asked to indicate their single most important contribution, "connections to communities that are

experiencing health disparities" was the most selected (32.0%). These responses indicate that fellows recognize the importance of social networks, both between those seeking to improve communities and these individuals' connections to the communities they seek to improve.

The fellows were provided with a list of potential GSCRP outcomes and asked to indicate all outcomes that they consider critical to improving community health. All items were selected by the majority of fellows, with public awareness (96.0%), increased knowledge sharing (92.0%), and increased access to services (92.0%) being most selected. When asked to select the main reason they participate in GSCRP, creating healthier environments (24.0%), and reduction of health disparities (24.0%), were the dominant answers.

**Table 10: Contribution to Improving Community Health (n=27)** 

Response:	Please indicate what you can potentially contribute to improving community health. (Choose all that apply).	What is your single most important contribution to improving community health? (Select one).
Data resources, including data sets,	11 (44.0%)	3 (12.0%)
collection and analysis		
Providing objectives to my organization	17 (68%)	1 (4.0%)
Specific health expertise	13 (52.0%)	3 (12.0%)
Expertise other than in health	7 (28.0%)	0
<b>Community connections</b>	17 (68%)	2 (8.0%)
<b>Connection to communities that are</b>	14 (56.0%)	8 (32.0%)
experiencing health disparities		
Facilitation	12 (48.0%)	1 (4.0%)
Leadership	19 (76.0%)	1 (4.0%)
Broad activity for community health	14 (56.0%)	4 (16.0%)
priorities		
Other (please specify)	1 (4.0%)	1 (4.0%)

**Table 11: Reasons for Participating in GSCRP (n=27)** 

	Which of the following GSCRP results are critical to community	Which of the following is the main reason you participate in
Response:	health improvement? (Choose all that apply.)	GSCRP? (Select one.)

Improving resource sharing	21 (84.0%)	2 (8.0%)
Increased knowledge sharing	23 (92.0%)	2 (8.0%)
Coordinated communication	20 (80.0%)	1 (4.0%)
Networking with individuals that do similar things	19 (76.0%)	1 (4.0%)
Networking with individuals that do different things	22 (88.0%)	1 (4.0%)
Data and information available through the program	17 (68.0%)	1 (4.0%)
Coordinated health assessment	17 (68.0%)	0 (0%)
Table 11 (Cont.)		
Increased access to services	23 (92.0%)	1 (4.0%)
Improved health outcomes	20 (80.0%)	4 (16.0%)
Reduction of health disparities	20 (80.0%)	6 (24.0%)
Public awareness	24 (96.0%)	0 (0%)
Creating healthier environments (e.g., schools, worksites, community)	22 (88.0%)	6 (24.0%)
Policy, law, and/or regulation	17 (68.0%)	0 (0%)

Fellows indicated that, to date, they had on average only been somewhat successful (52.0%) in improving community health. However, in the next year, they felt that on average, they would be successful (60.0%) in impacting the health of their community. When asked which aspect of GSCRP the fellows believe would help them achieve these goals, all items were selected by a majority of fellows (>50%), and relationships created (96.0%), bringing together diverse individuals (84.0%), exchanging information/knowledge (84.0%), and research skills (88.9%) emerged as the most important skills for making an impact in community health.

**Table 12: Success in Community Health Impact (n=27)** 

	To date, how successful have you been at impacting	In the next year, how successful do you feel you
Response:	health in the community?	will be at impacting health in the community?

Very Successful	2 (8.0%)	4 (16.0%)
Successful	5 (20.0%)	15 (60.0%)
Somewhat Successful	13 (52.0%)	3 (12.0%)
Not sure	2 (8.0%)	3 (12.0%)
Not Successful	3 (12.0%)	0 (0%)

**Table 13: GSCRP Skills for Improving Community Health (n=26)** 

Response:	What aspects of GSCRP do you think will help you achieve these goals? (Choose all that apply)
Bringing together diverse individuals	21 (84.0%)
Meeting regularly	13 (52.0%)
Exchanging information/knowledge	21 (84.0%)
Relationships created	24 (96.0%)
Grant writing skills	19 (76.0%)
Research skills	21 (84.0%)
Having a shared vision and goals	18 (72.0%)
Collective synergy	16 (64.0%)
Research partnerships	19 (76.0%)

Prior to the beginning of GSCRP, the network cohesion metrics reflected macrocharacteristics of the GSCRP network as one that is a quite unconnected network (see Table 14 and Figure 2). All but one individual was connected to the network. That means that 25 of the 26 fellows either knew another fellow, or were known by another fellow prior to GSCRP. The data provides that the average fellow is connected to 2.1 other fellows. Only 8.1% of the possible connections among fellows existed, which indicates that there is a low overall level of connection in the network. The diameter of the network (the largest geodesic distance within the connected network) is six. This indicates that no fellows are more than six steps away from another fellow in the connected network (which excludes the one fellow who is not connected). The average distance of the baseline GSCRP network is 2.5, meaning on average it would take fellows 2.5 steps to reach all other fellows. These measures provide meaning to the ability of the program to foster collaboration when compared with the final assessment.

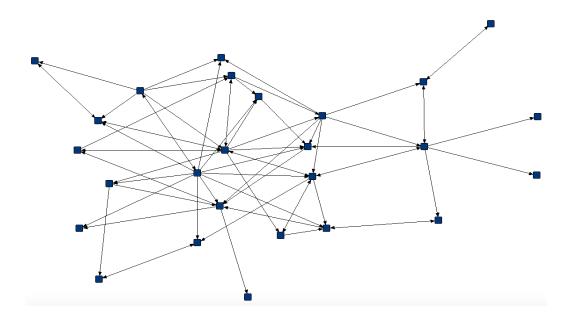
**Table 14: Social Network Measures of Cohesion (n=26)** 

Network Measure	Statistic
Average Degree	2.615
H-Index	4
Density	0.105
Components	8
Component Ratio	0.280
Table 14 (Cont.)	
Connectedness	0.682
Fragmentation	0.318
Closure	0.225
Average Distance	3.081
SD Distance	1.503
Diameter	7
Breadth	0.704
Compactness	0.296

Figure 2: Baseline GSCRP Sociogram (n=26)<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> In Figure 2, each of the blue squares represents a Mobile GSCRP fellow and the lines between the blue squares indicate relationships existing at the time of the survey. The numbers associated with the lines indicate the strength of the relationship where "5" is a strong working relationship and "1" indicates the fellow only knows the other by name. The arrows are bi-directional to demonstrate the direction of the relationship. If both individuals indicate a reciprocal relationship, then the line will have arrowheads at both ends.



#### III. Final Assessment

The Mobile GSCRP final assessment survey was completed by community research fellows (n=20) after the final class of the Community Research Training course. All final assessments were completed between May 2, 2017 and June 2, 2017. The final assessment questionnaire paralleled the preliminary assessment for the purpose of evaluating Mobile GSCRP fellows' understanding of key research concepts that were assessed throughout the training course in weekly modules.

#### Defining Key Terms and Concepts

The first section of the survey assessed key terms and concepts that were considered essential components to understanding research items, and were covered during the training courses. Fellows were first asked to define the key terms. The answers were coded without reference to the identity of respondent. Frequencies of the codes for each section are provided in Table 15. Table 16 provides the frequencies for responses regarding the fellow's level of knowledge regarding the role of genetics in health.

Table 15: Evaluation of fellows' knowledge of key terms and concepts (n=20)

Question	0: I don't know n (%)	1: Incorrect Answer n (%)	2: Somewhat familiar n (%)	3: Demonstrates Clear Understanding n( %)
	0	0	2 (10%)	18 (90%)
What is Informed Consent? What is the Belmont	2 (10%)	1 (5%)	2 (10%)	15 (75%)
Report?		` ′		
What is the Tuskegee experiment?	0	2 (10%)	0	18 (90%)
Define Health Literacy.	0	0	10 (50%)	10 (50%)
Define evidence-based public health.	2 (10%)	1 (5%)	1 (5%)	16 (80%)
Define Cultural Competency.	0	3 (15%)	4 (20%)	13 (65%)
What role does the IRB play in research?	0	2 (10%)	1 (5%)	17 (85%)
What is HIPPA?	0	1 (5%)	0	19 (95%)
Explain the difference between qualitative and quantitative research methods.	0	0	3 (15%)	17 (85%)
What is the difference between primary and secondary data?	1 (5%)	2 (10%)	1 (5%)	16 (80%)
Explain the difference between Community Based Participatory Research and Traditional Research.	1 (5%)	2 (10%)	1 (5%)	16 (80%)
Table 15 (Cont.)			,	
What is epidemiology?	2 (10%)	0	1 (5%)	17 (85%)
What is a clinical trial?	1 (5%)	0	6 (30%)	13 (65%)
What is the mixed methods approach?	3 (15%)	2 (10%)	2 (10%)	13 (65%)
What is photovoice?	1 (5%)	0	3 (15%)	16 (80%)
What is the purpose of a focus group?	1 (5%)	0	2 (10%)	17 (85%)
What is a family health history?	1 (5%)	1 (5%)	0	18 (90%)
What type of information should you expect to get from a community health assessment?	3 (15%)	0	8 (40%)	9 (45%)
What is the overarching goal for Healthy People 2020?	5 (25%)	1 (5%)	6 (30%)	8 (40%)
Describe the health promotion planning model that you believe is best to prevent and	7 (35%)	0	0	13 (65%)

reduce substance abuse in an African American community?				
	(721)	0	1 (2021)	
What are the social determinants of health?	1 (5%)	0	4 (20%)	15 (75%)
List three social determinants of health.	1 (5%)	1 (5%)	1 (5%)	17 (85%)
What is research?	1 (5%)	0	5 (25%)	14 (70%)
Define racial health disparities.	1 (5%)	0	2 (10%)	17 (85%)
What are the components of a SMART goal?	2 (10%)	0	1 (5%)	17 (85%)
What is the Odds Ratio?	5 (25%)	0	0	15 (75%)
What is a p value?	2 (10%)	1 (5%)	4 (20%)	13 (65%)
List an effective method to advocate for a specific health issue in your community.	2 (10%)	0	0	18 (90%)
How is research used to develop health policy?	4 (20%)	0	0	16 (80%)

Table 16: Fellows' Level of Knowledge Related to Genetics in Health (n=20)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	No response	Mean
I know how to	1 (5%)	1 (5%)	3 (15%)	8 (40%)	6 (30%)	1 (5%)	3.7
assess the role of							
genes for health							
I know how to	0	2 (10%)	1 (5%)	9 (45%)	8 (40%)	0	4.15
assess my genetic							
risk for disease							
I can explain	0	2 (10%)	2 (10%)	10 (50%)	6 (30%)	0	4
genetic issues to							
people							

When asked to rate their confidence when filling out medical forms by themselves, most of the fellows reported being "extremely confident" filling out medical forms by themselves (70.0%); whereas 20.0% reported that they were "quite a bit confident", and one fellow (5%)

reported that he/she was "somewhat confident." These results were consistent with two additional questions in relationship to health literacy noted below in Table 17.

**Table 17: Frequency of Need with Medical Forms** 

,	Always (4)	Often (3)	Sometimes (2)	Rarely (1)	Never (0)	Mean
How often do you	0	0	1 (5%)	6 (30%)	12 (60%)	0.4
have someone (like						
a family member,						
friend,						
hospital/clinic						
worker or						
caregivers) help you						
read hospital						
materials?						
How often do you	0 (0%)	0 (0%)	1 (5%)	8 (40%)	11 (55%)	0.5
have problems						
learning about your						
medical condition						
because of difficulty						
understanding						
written						
information?						

#### Health Information

Fellows were then asked to comment on how frequently they have received health information through various sources, such as magazines and newspapers, television, and the internet (see Table 18). Additionally, respondents were asked, "In the past 30 days, how often would you say that you have looked for information about ways to stay healthy or to feel better?" Four (20%) respondents had looked every day, seven (35%) had looked several days per week, five (25%) had looked two or three times per month, three (15%) had looked about once a month, and one (5%) had never looked.

**Table 18: Frequency Fellows Review Sources for Health Information (n=19)** 

Everyday S	Several	2 or 3	About	5 to 10	Less than	Not in the Mean
(7)	times a	times a	once a	times per	5 times a	last year
W	veek (6)	week (5)		year (3)	year (2)	(1)

				month (4)				
Some newspapers or general magazines publish a special section that focuses on health. In the past 12 months, about how often have you read such health sections?	3 (15%)	2 (10%)	3 (15%)	7 (35%)	1 (5%)	3 (15%)	1 (5%)	4.3
Some local television news programs include special segments of their newscast that focus on health issues. In the past 12 months, how often have you watched health segments on local news?	3 (15%)	3 (15%)	4 (20%)	3 (15%)	4 (20%)	2 (10%)	1 (5%)	4.4
Some people notice information about health on the internet, even when they are not trying to find out about a health concern they have or someone in their family has. About how often do you read this sort of health information in the past 12 months?	3 (15%)	4 (20%)	4 (20%)	5 (25%)	2 (10%)	1 (5%)	1 (5%)	4.7

#### Calculation Skills Self-Assessment

Finally, fellows were asked to rate their ability to work with numbers in various situations (see Table 19).

Table 19: Fellows' Rating of Ease of use of Numbers (n=19)

Answer	Scale 0-6	Average Value	Standard Deviation
How good are you at calculating a 15% tip?	Not at all good- Extremely good	4.3	1.53
How good are you at working with fractions?	Not at all good- Extremely good	4.3	1.53
How good are you at working with percentages?	Not at all good- Extremely good	5.05	0.94
How good are out at figuring out how much a shirt would cost if it is 25% off?	Not at all good- Extremely good	4.7	0.97
When reading a newspaper, how helpful are tables and graphs that are part of the story?	Not helpful at all- Extremely helpful	4.75	1.25
When people tell you the chance of something happening, do you prefer that they use words (e.g it rarely happens) or numbers (e.g there is a 1% chance)?	Always prefer words- Always prefer numbers	4.35	1.35

When you hear the weather forecast, do	Always prefer	1.7	1.95
you prefer predictions using percentages	percentages-		
(e.g there is a 20% chance of rain today) or	Always prefer		
predictions using words only (e.g there is a	words		
small chance of rain today)?			
How often do you find numerical	Never- Very often	5.1	1.02
information to be useful?			

#### Program Assessment

The following questions were used to assess the Mobile GSCRP program. As indicated in the final column of Table 20, all means were between 4 and 5, indicating the respondents, on average, agreed or strongly agreed with all statements relating the success of the program.

**Table 20: Program Evaluation (n=19)** 

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
a. An appropriate amount of material was covered during this training.	0	0	1 (5%)	10 (50%)	9 (45%)	4.4
b. The facilitators have been prepared and well organized	0	0	4 (20%)	7 (35%)	9 (45%)	4.25

#### Table 20 (Cont.)

0	0	3 (15%)	5 (25%)	12 (60%)	4.45
0	0	1 (5%)	8 (40%)	11 (55%)	4.5
0	0	2 (10%)	10 (50%)	8 (40%)	4.3
0	0	3 (15%)	3 (15%)	14 (70%)	4.55
0	0	1 (5%)	9 (45%)	10 (50%)	4.45
	0	0 0	0 0 1 (5%) 0 0 2 (10%) 0 0 3 (15%)	0       0       1 (5%)       8 (40%)         0       0       2 (10%)       10 (50%)         0       0       3 (15%)       3 (15%)	0       0       1 (5%)       8 (40%)       11 (55%)         0       0       2 (10%)       10 (50%)       8 (40%)         0       0       3 (15%)       3 (15%)       14 (70%)

h. I was satisfied with the training facilities (classroom, meeting scopes, furniture, parking, etc.)	0	0	1 (5%)	2 (10%)	17 (85%)	4.8
i. Homework assignments were useful	0	0	1 (5%)	10 (50%)	9 (45%)	4.4
j. The amount of homework was appropriate	0	0	2 (10%)	8 (40%)	10 (50%)	4.4
k. Homework assignments helped me to better understand the lecture material presented to me	0	0	3 (15%)	6 (30%)	11 (55%)	4.4
I. Small group activities and discussion were helpful and beneficial to my learning	0	0	1 (5%)	5 (25%)	14 (70%)	4.65

#### **IV. Final Social Network Analysis**

The GSCRP Social Network Analysis Survey was conducted for a second time with the Mobile GSCRP fellows following the last meeting of the cohort for the purpose of measuring the growth in the relationships between the fellows over the 16 weeks of the course. This section compares the network statistics collected at the beginning of the course to those collected at the end.

GSCRP fellows were asked about their potential contributions to improving community health. When asked to check all that apply, the majority of respondents (>50%) feel they can contribute through leadership (62.5%), facilitation (58.33%), providing objectives to my organization (54.17%), community connections (54.17%), and broad activity for community health priorities (54.17%). Five of the ten options were selected by a majority of respondents. When asked to indicate their single most important contribution, "connection to communities that are experiencing health disparities" was the most frequently selected (29.17%). These responses indicate that respondents recognize the importance of social

networks, both between those seeking to improve communities and these individuals' connections to the communities they seek to improve.

**Table 21: Contribution to Improving Community Health** 

Table 21. Contribution to in	Please indicate	•	What is your sin	ngle most		
	potentially cont	•	important contribution to improving community health?			
Response:	improving com					
	(Choose all that		(Select one).			
	Pre-GSCRP	Post-GSCRP	Pre-GSCRP	Post-GSCRP		
Data resources, including	11 (44.0%)	7 (29.17%)	3 (12.0%)	2 (8.33%)		
data sets, collection and						
analysis						
Providing objectives to my	17 (68%)	13 (54.17%)	1 (4.0%)	2 (8.33%)		
organization						
Specific health expertise	13 (52.0%)	12 (50.00%)	3 (12.0%)	3 (12.50%)		
Expertise other than in	7 (28.0%)	10 (41.67%)	0	1 (4.16%)		
health						
<b>Community connections</b>	17 (68%)	13 (54.17%)	2 (8.0%)	4 (16.67%)		
<b>Connection to communities</b>	14 (56.0%)	12 (50.00%)	8 (32.0%)	7 (29.17%)		
that are experiencing health						
disparities						
Facilitation	12 (48.0%)	14 (58.33%)	1 (4.0%)	0		
Leadership	19 (76.0%) 15 (62.50%)		1 (4.0%)	3 (12.50%)		
Broad activity for	14 (56.0%) 13 (54.17%)		4 (16.0%)	2 (8.33%)		
community health priorities						
Other (please specify)	1 (4.0%)	2 (8.33%)	1 (4.0%)	1 (4.75%)		

Higher levels of confidence were reported after GSCRP than before in the ability to achieve success in impacting the community (see Table 22). When asked which aspect of GSCRP the fellows believe will help them achieve these goals, all items were selected by a majority of respondents (>50%) (see Table 23).

**Table 22: Success in Community Health Impact** 

Response:	(Pre- Survey) To date, how successful have you been at impacting health in the community?		
	Pre-GSCRP	Pre-GSCRP	Post-GSCRP
Very Successful	2 (8.0%)	4 (16.0%)	10 (41.67%)
Successful	5 (20.0%)	15 (60.0%)	8 (33.33%)
Somewhat Successful	13 (52.0%)	3 (12.0%)	5 (20.83%)

Not Successful	2 (8.0%)	3 (12.0%)	0
Not Sure	3 (12.0%)	0	1 (4.17%)

Table 23: GSCRP Skills for Improving Community Health

Table 25. GSCKI Skins for improving community Health		
D	What aspects of GSCRP do you think will help you achieve these goals? (Choose all that apply)	
Response:		
	Pre-GSCRP	Post-GSCRP
Bringing together diverse	21 (84.0%)	19 (79.17%)
individuals		
Meeting regularly	13 (52.0%)	13 (54.17%)
Exchanging	21 (84.0%)	22 (91.67%)
information/knowledge		
Informal relationships created	24 (96.0%)	22 (91.67%)
Grant writing skills	19 (76.0%)	16 (66.67%)
Research skills	21 (84.0%)	15 (62.50%)
Having a shared vision and goals	18 (72.0%)	18 (75.00%)
Collective synergy	16 (64.0%)	14 (58.33%)

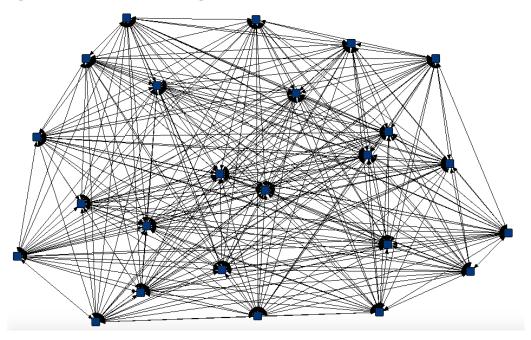
After completing the GSCRP course, the network cohesion metrics reflect macro-characteristics of the GSCRP network as one that is quite connected (see Table 24 and Figure 3). All individuals have connections in the network, with the average respondent having 22 connections. The data shows that the average fellow is connected to 22 other fellows after completing the course, whereas fellows were connected to 2 others in the network prior to the course. The diameter of the network (the largest geodesic distance within the connected network) is two. This indicates that no fellow is more than two steps away from another fellow in the connected network. The average distance of the post GSCRP network is 1.018, meaning on average it would take fellows one step to reach all other fellows. These measures are provided next to the baseline statistics in the table below to demonstrate growth attributed to the program.

Table 24: Post-GSCRP Social Network Measures of Cohesion (n=24)

Network Measure	<b>Pre-GSCRP Statistic</b>	Post-GSCRP Statistic
Average Degree	2.615	22.583
H-Index	4	22
Density	0.105	0.982
Components	8	1

Component Ratio	0.280	
Connectedness	0.682	1
Fragmentation	0.318	
Closure	0.225	0.983
Average Distance	3.081	1.018
SD Distance	1.503	0.133
Diameter	7	2
Breadth	0.704	0.009
Compactness	0.296	0.991

Figure 3: Post GSCRP Sociogram (n=23)



#### **V. Summary of Program Outcomes**

Notable differences include the following:

- Of the 27 fellows who began the program, 24 completed the program
- Prior to participating in GSCRP, on average, 50.8%% of fellows had mastery of the health-related terms assessed. Post-GSCRP, on average 76.0% of fellows had mastery of the health-related terms assessed.
- After completing the GSCRP program, the fellows have developed a strong network, with the average fellow having a relationship with 22 of 24 other graduating fellows.

#### **Appendix A: Course Syllabus**



# Course Syllabus

January 10 – May 9, 2017 Tuesdays 6:00-9:00 PM

# Sessions held at: University of South Alabama Faculty Club 6348 Fincher Rd. Mobile, AL 36688

#### **Gulf States Health Policy Center Staff**

Emily Blejwas, Director	334-590-3814	emily@bayouclinic.org
Isiah Lineberry, Senior Program Manager	251-656-5009	isiah@bayouclinic.org
Danny Patterson, Coalition Coordinator	251-490-9781	danny@bayouclinic.org



#### January 10 Orientation

#### January 17 Evidence Based Public Health

Define evidence based public health.
 Identify public resources available for public health.

#### Jennifer Langhinrichsen-Rohling, PhD

Director, Gulf Coast Behavioral Health & Resiliency Center University of South Alabama jlr@southalabama.edu

#### Kelly Warren, MPH

Director of Prevention and Wellness Mobile County Health Department kwarren@mchd.org

#### January 24 Research Methods & Data

#### Research Methods

- Define research.
   Describe the steps of the research process.
   Identify and explain research methodology.
- Identify appropriate research methods and techniques.

#### Data

 Define data.
 Compare and contrast quantitative and qualitative data.
 Compare and contrast primary data and secondary data.
 Describe strengths of mixed methods approaches.

#### Candace Forbes Bright, PhD

Associate Scientist

Department of Political Science, International Development, and International Affairs

The University of Southern Mississippi candace.forbes@usm.edu



# January 31 Health Disparities HW 1: Windshield survey Due

Define health disparities.
 Identify major health disparities in Alabama including those by gender, race/ethnicity, geographic location, and socioeconomic status.
 Discuss the social determinants of health.
 Describe public health strategies and interventions for reducing health disparities.

#### Tanya Funchess, DHA, MPH, MSM

Director, Office of Health Disparity Elimination Mississippi State Department of Health tanya.funchess@msdh.ms.gov

# February 7 Cultural Competency

• Define culture and cultural competency. • Describe the need for culturally competent research and practice based on a historical perspective. • Identify skills associated with culturally competent practices.

#### Heather A. Finnegan, PhD

Postdoctoral Fellow Gulf Coast Behavioral Health and Resiliency Center University of South Alabama hfinnegan@southalabama.edu

#### Candice Selwyn, PhD

Postdoctoral Fellow Gulf Coast Behavioral Health and Resiliency Center University of South Alabama cnselwyn@southalabama.edu

# February 14 Family Health History & Health Literacy HW 2: Family History Due

#### Family Health History

 Understand importance of collecting and maintaining a family health history.
 Understand the role of family health history in healthcare.
 Complete a family history chart.

#### **Health Literacy**

 Define health literacy.
 Understand the limited literacy perspective.
 Describe the association between literacy and health.
 Describe health literacy on a national scale.

#### Selena Coleman McCord, MPH

Program Specialist, Coastal Resource and Resiliency Center University of South Alabama scoleman@southalabama.edu

#### Janel Lowman, MHA

Associate Manager of Outreach Mitchell Cancer Institute University of South Alabama ilowman@health.southalabama.edu

# February 21 Introduction to Epidemiology

 Define epidemiology.
 Identify major contributions of epidemiology.
 Identify frameworks for understanding disease processes.
 Compare and contrast observational studies vs. clinical trials.

#### Casey L. Daniel, PhD, MPH

Assistant Professor of Oncologic Sciences Mitchell Cancer Institute University of South Alabama cldaniel@health.southalabama.edu

#### February 28 NO CLASS

# February 21 Introduction to Epidemiology

 Define epidemiology.
 Identify major contributions of epidemiology.
 Identify frameworks for understanding disease processes.
 Compare and contrast observational studies vs. clinical trials.

#### Casey L. Daniel, PhD, MPH

Assistant Professor of Oncologic Sciences Mitchell Cancer Institute University of South Alabama cldaniel@health.southalabama.edu

#### February 28 NO CLASS



# March 7 Community Health

Define community health.
 Identify contributing factors
that impact the health of a community.
 Describe community
health activities.
 Discuss principles for community based
prevention.
 Assess the need for a community program.

Eric Baumgartner, MD, MPH
Senior Community Health Strategist (Retired)
Louisiana Public Health Institute
etbaumgartner@bellsouth.net

## March 14 Quantitative Methods HW 3: Grocery Audit Due

- Identify strengths and weaknesses of quantitative methods.
- Describe strengths of mixed methods approaches.
   Describe stages of questionnaire design.
   Identify sampling methods.
   Understand usefulness of statistics in health research.
   Understand p-values and odds ratios.

#### Hosik Min, PhD

Assistant Professor
Department of Sociology, Anthropology, and Social Work
University of South Alabama
hmin@southalabama.edu

# March 21 Community Based Participatory Research HW 4: Community Park Audit Due

• Describe history and principles of CBPR. • Critically evaluate fellows' position within their community (ies) and their potential roles within CBPR projects. • Describe methods to ensure that CBPR benefits all partners.

#### Roma Hanks, PhD

Professor and Chair
Department of Sociology, Anthropology, and Social Work
University of South Alabama
rhanks@southalabama.edu



## March 28 Qualitative Methods

- Define basic principles of qualitative research methods.
   Describe the strengths and weaknesses of qualitative methods.
   Discuss different types of qualitative approaches.
- Discern when a qualitative research design is desirable.

#### Chris Freed, PhD

Associate Professor of Sociology Department of Sociology, Anthropology and Social Work University of South Alabama cfreed@southalabama.edu

# April 4 Photovoice and Health Policy HW 5: Photovoice Due

#### Photovoice

- Define and discuss concepts of Photovoice.
   Understand focus groups and Photovoice qualitative research methods.
- Discuss the usage of Photovoice in public health.

#### Health Policy

- Define health policy and health services research.
- Identify and develop relevant, well framed health policy research questions.
   Describe public use and other common data sources for health policy research.

#### Susan Mayfield-Johnson, PhD, MCHES

Assistant Professor The University of Southern Mississippi susan.johnson@usm.edu

#### Jammie Hopkins, DrPH, MS

Project Director

Transdisciplinary Collaborative Center for Health Disparities Research Morehouse School of Medicine jhopkins@msm.edu

## April 11 Program Evaluation

Develop SMART objectives for programs and projects.
 Compare and contrast goals and objectives.
 Identify culturally competent evaluation approaches.
 Understand the importance of evaluation.

#### Stephen Young, PhD, LCSW

Assistant Professor of Social Work University of South Alabama smyoung@southalabama.edu

# April 18 Research Ethics and Human Subjects

#### Research Ethics Certification

Define research ethics and bioethics.
 Compare and contrast clinical ethics vs research ethics.
 Identify examples of unethical practices in research.
 Understand ethical theories and professional ethical duties.

#### **Human Subjects Certification**

 Participants will understand the importance of Human Subjects' Certification.

#### Leo Mundy, PhD

Professor, Department of Sociology, Anthropology, and Social Work University of South Alabama mundy@southalabama.edu

# April 25 Clinical Trials HW 6: Final Photovoice Due

• Understand clinical trials research. • Describe the role of clinical trials research in advancing medical practice. • Discuss the impact of minority participation in clinical trials research.

#### Austin Cadden, MBA, MPH

Senior Manager, Cancer Control & Prevention Mitchell Cancer Institute University of South Alabama jcadden@health.southalabama.edu

# May 2 Grant Writing

• Understand grant guidelines and requirements. • Understand the power of collaboration for grant writing. • Develop SMART goals and specific Aims. • Understand components of a good grant proposal.

#### Kimberly P. Littlefield, PhD

Asst. Vice President for Research Development and Learning Office of Research and Economic Development University of South Alabama kplittlefield@southalabama.edu

# May 9 Graduation Ceremony