Promoting health advocacy through policy change among students of color: The Health Disparities Summer Internship Program Nicole A. McLean, MPH

Intro to Research	 Scientific Method/ Types of Variables Health Disparities Research Literature Review
Research Methodology	 Surveys Interview, Focus Groups Mapping Informed Consent
Data Analysis	 Quantitative vs. Qualitative Data Entering Data, Cleaning Data, Analyzing Data, Creating tables & graphs
Preparing a Research Poster	 Structure of a scientific poster: Introduction, Methods, Results, Discussion Appropriate use of figures

Figure 1: Research Curriculum Taught to High School Students

Promoting health advocacy through policy change among students of color: The Health Disparities Summer Internship Program

Nicole A. McLean, MPH

Figure 2: Typical Summer Schedule for HDSIP Students					
Monday	Tuesday	Wednesday	Thursday	Friday	
AM: Program Orientation	AM: Literature Review	AM: Introduction to Health Disparities, Professional Development	AM: Cultural Competency and Wellness, Developing Culturally Relevant Health Promotions	4 th of July Holiday	
PM: Research Methodology (Pt.1)	PM: Research Methodology (Pt.2)	PM: CBO Participation	PM: Field Research/CBO experience		
AM: Social Determinants of Health & Mental Health	CBO Experience/ Field Research	AM: Designing Policy Toolkits	AM: Social Determinants of Health & Chronic Illness	AM: HIV/AIDS & Social Determinants of Health	
PM: CBO Experience/ Field Research	-	PM: CBO Experience/ Field Research	PM: CBO Experience/ Field Research	PM: Field Trip	
AM: Career Panel	CBO Experience/ Field Research	AM: Clinical Shadowing	AM: Healthcare Reform	AM: Social Media & Public Health, Poster Design Using Powerpoint	
PM: CBO Experience/ Field Research		PM: CBO Experience/ Field Research	PM: CBO Experience/ Field Research	PM: Field Trip	
AM:, Computer Lab (Poster Development)	CBO Experience/ Field Research	AM: Computer Lab (Poster Development)	AM: Computer Lab (Poster Development)	AM: Final Revisions	
PM: CBO Experience/ Field Research		PM: CBO Experience/ Field Research	PM: CBO Experience/ Field Research	PM: Ice Cream Party, Poster Submissions	
AM: Public Speaking PM: CBO Experience/ Field Research	CBO Experience/Field Research	Oral Presentations/Practice	Oral Presentations/Practice	Borough Hall Closing Ceremony	

Promoting health advocacy through policy change among students of color: The Health Disparities Summer Internship Program Nicole A. McLean, MPH

Figure 3: HDSIP Research Projects

Figure 5. IIDSIF Research Flojects			
Community-Based Organization	Summer Project Titles		
African American Coalition Against AIDS	2013: Educating and Empowering Communities on HIV/AIDS: Emphasizing the Importance of Prevention and Testing		
American Cancer Society	2014: Advancing Primary Care Systems to Eliminate Health Inequities 2012: Access to Cancer Care Among Minorities		
Arab-American Family Support Center	2013: Perceptions of Hookah Smoking on Health		
	2012: Accessibility to Cancer Services for Arab-Americans		
Arthur Ashe Institute for Urban Health	2012: Receptivity to Health Messages on Public Transportation		
Brooklyn Center for the Independence of the Disabled	 2014: Promoting Accommodations for Individuals with Disabilities to Ensure Equality 2013: An Assessment of Accessibility for Individuals with Disabilities (Flatbush 		
	Ave. Brooklyn 2012: Barrier Busters		
Brooklyn Partnership to Drive Down Diabetes	2012: Linguistic Barriers to Healthcare in Brooklyn		
Brooklyn Perinatal Network, Inc.	2014: Evaluating Preconception Health Literacy Among Generations 2012: What's Your Emergency? Overuse of the Emergency Room		
Caribbean Women's Health Association	2014: Perceptions about Alcohol Consumption During Pregnancy and Fetal Alcohol Syndrome		
CAMBA, Inc.	 2014: Factors Affecting Dietary Choices in Low Income Households 2013: Hydroponic Farming as an Alternative Method of Food Production in Urban Communities 2012: Choice Pantry vs. Traditional Food Pantry 		
Community Counseling & Mediation	2014: Gender Differences in Condom Use Self-Efficacy 2013: Perceptions Regarding the Impact of Early Sexual Activity on STDs/STIs & Mental Health in Adulthood 2012: Why Stress?		
Diaspora Community Services	2014: Assessing Correlates of Self-Perceived Health 2013: Assessment of Health Resources in Brownsville and Coney Island 2012: Friend Me For Health		
Haitian-American Community Coalition	2013: Fitness for Flatbush: A Collaborative Effort to Address Fitness Barriers in Central Brooklyn		
	2012: Incarceration Amongst Inner City Youth and Supportive Efforts to Reduce Recidivism		
Health & Education Alternatives for Teens	2012: HIV Can't Happen to Me		
Make the Road New York, Inc.	2012: Promoting Healthier Options to Food Stamps		
NYC Dept. of Transportation's Y.E.S. Program	2012: Youth & Adolescent Awareness of Transportation Safety		
NYU College of Nursing Mobile Health Van Program	 2014: A Study to Improve a Health Literacy Course for Urban Adolescents 2013: Oral Health Disparities in Low-Income Brooklyn Neighborhoods 2012: Language Barriers in Adolescent Health in Brooklyn 		

Nicole A. McLean, MPH

Figure 4: Examples of HDSIP Survey Questions 1. On a scale of 1 to 10 rate each factor as you think it may potentially affect people's health (0 = no effect and 10 = very strong effect) a. A person's childhood experiences b. Racial Discrimination c. A person's genetic makeup d. A person's income e. The physical environment (quality of air and water) f. How safe a person's community is (the safety of someone's environment) g. The quality of a person's housing h. A person's access to affordable health care i. A person's educational level j. Whether a person has a job k. A person's stress level I. A person's personal health practices (e.g. diet, exercise, smoking) m. Having easy access to healthy foods, parks, and sidewalks in one's neighborhood n. A person's knowledge about health o. Whether a person has health insurance p. The amount of social support a person has 2. Indicate next to each policy issue, the level of priority (High, Medium, Low) that the government should place on it in order to improve health. a. Reducing poverty b. Reducing unemployment c. Reducing violence d. Provide health insurance to more people e. Improving housing quality f. Increasing number of high school graduates g. Improving social supports/networks h. Improving health practices (e.g. diet) i. Improving access to early childhood programs (e.g. teen pregnancy, exercise, nutrition classes) Improving neighborhood (e.g. safety, access to healthy foods) j.

Promoting health advocacy through policy change among students of color: The Health Disparities Summer Internship Program Nicole A. McLean, MPH

Table 1: Distribution of Selected Characteristics of HDSIP Participants (2012, 2013, 2014)
Number of Participants	57
Age, Years (Mean ± SD)	16.2 ± 0.983
Male, % (n)	29.8 (17)
Female, % (n)	70.2 (40)
Grade Level *, % (n)	
Sophomore	5.4 (3)
Junior	46.4 (26)
Senior	48.2 (27)
Self-reported Ethnicity	
Black	77.2 (44)
Hispanic/Latino	10.5 (6)
Asian	5.3 (3)
Other	7.0 (4)
US born	
Yes	89.3 (50)
No	10.7 (6)
Are you interested in attending college?	
Yes, % (n)	100 (55)
No, % (n)	0 (0)
Are you interested in a health research or medical career?	
Yes, % (n)	90.9 (50)
No, % (n)	1.8 (1)
Undecided, % (n)	7.3 (4)
Do you agree with the statement "Because of what I learned through	
the Health Disparities Summer Internship Program, I believe that my	
confidence to pursue a research or medical career has increased?"	
Yes, %(n)	55.8 (29)
No, % (n)	32.7 (17)
Not Sure, % (n)	11.5 (6)
Do you agree with the statement "Because of what I learned through	
the Health Disparities Summer Internship Program, I am more	
determined to apply to medical school?"	
Yes, %(n)	55.8 (29)
No, % (n)	23.1 (12)
Not Sure, % (n)	21.2 (11)
What is your overall satisfaction with the Summer program?	
Satisfied, %(n)	88.5 (46)
Neutral, % (n)	11.5 (6)
Not Satisfied, %(n)	0 (0)

*Students are not recruited into the HSA until sophomore year of high school

(Participants were asked to rate each factor on its	s potential to affect p	people's health.)	
	Pre-HDSIP Post-HDSIP		P-value l
	Median (Range)	Median (Range)	
A person's childhood experiences	8.00 (10)	8.00 (9)	0.411
Racial Discrimination	6.00 (9)	8.00 (7)	0.009**
A person's genetic makeup	6.50 (11)	7.00 (10)	0.645
A person's income	6.00 (10)	7.00 (8)	0.122
The physical environment (quality of air and	9.00 (9)	8.50 (7)	0.625
water)			
How safe a person's community is (the safety of	7.00 (9)	8.00 (8)	0.058*
someone's environment)			
The quality of a person's housing	1.00 (3)	1.00 (4)	0.890
A person's access to affordable health care	8.50 (10)	9.00 (9)	0.142
A person's education level	5.50 (10)	6.00 (10)	0.183
Whether a person has a job	6.00 (10)	5.50 (10)	0.474
A person's stress level	8.00 (7)	8.00 (7)	0.967
A person's personal health practices (e.g. diet,	10.00 (8)	9.00 (8)	0.977
exercise, smoking)			
Having easy access to healthy foods, parks, and	8.00 (10)	8.00 (8)	0.443
sidewalks in one's neighborhood			
A person's knowledge about health	8.00 (10)	8.00 (8)	0.786
Whether a person has health insurance	8.00 (10)	6.00 (8)	0.885
The amount of social support a person has	7.00 (10)	7.00 (10)	0.148

+ from Wilcoxon signed rank test

* marginally significant at the 0.05 alpha level

** significant at the 0.05 alpha level

Promoting health advocacy through policy change among students of color: The Health Disparities Summer Internship Program Nicole A. McLean, MPH

Table 3: Prioritizing Policy Issues

(Participants were asked to indicate the level of priority that the government should place on each policy issue in order to improve health.)

	Pre-HDSIP	Post-HDSIP	P-value t
	Median (Range)	Median (Range)	
Reducing poverty	1.00 (1)	1.00 (4)	0.491
Reducing unemployment	1.00 (1)	1.00 (4)	0.059*
Reducing violence	1.00 (3)	1.00 (4)	0.074*
Provide health insurance to more people	1.00 (2)	1.00 (3)	0.683
Improving housing quality	1.00 (3)	1.00 (4)	0.580
Increasing number of high school graduates	1.00 (2)	1.00 (4)	0.178
Improving social supports/networks	2.00 (3)	2.00 (4)	0.180
Improving health practices (e.g. diet)	1.00 (2)	1.00 (4)	0.101
Improving access to early childhood programs (e.g. teen pregnancy, exercise, nutrition classes)	1.00 (2)	1.00 (4)	0.273
Improving neighborhood (e.g. safety, access to healthy foods)	1.00 (2)	1.00 (2)	0.074*

[‡] from Wilcoxon signed rank test

* marginally significant at the 0.05 alpha level

** significant at the 0.05 alpha level

Table 4: Students' Self-Rated Skills					
(Participants were asked "after interning at your assigned CBO, do you think it improved your:")					
	Strongly Agree	Agree	Neutral	Disagree	Strongly
	% (N)	% (N)	% (N)	% (N)	Disagree
					% (N)
Oral presentation skills	32.7 (17)	40.4 (21)	19.2 (10)	5.8 (3)	1.9 (1)
Communication skills	48.1 (25)	30.8 (16)	13.5 (7)	5.8 (3)	1.9 (1)
Analytical skills	48.0 (24)	36.0 (18)	10.0 (5)	4.0 (2)	2.0 (1)
Knowledge of CBPR*	36.5 (19)	46.2 (24)	11.5 (6)	1.9 (1)	3.8 (2)
Interest in advocacy	53.8 (28)	26.9 (14)	11.5 (6)	5.8 (3)	1.9 (1)
Knowledge and awareness	73.1 (38)	17.3 (9)	5.8 (3)	1.9 (1)	1.9 (1)
of social problems					

*CBPR = community-based participatory research