Student National Medical Association

DAVID E. SATCHEL, M.D., PH.D

RESEARCH FELLOWSHIP

Fellow Compendium

Classes I-VIII (2006-2013)
Satcher Fellowship recipient and Brooklyn, N.Y. native Oluwakemi Awopetu, 26, has been busy since she won her fellowship. Awopetu and four other Student National Medical Association medical student members received grants to research obesity or other ethnic health disparities in line with former Surgeon General David Satcher, M.D.’s “Healthy People 2010” initiative established in 2000. Since Satcher’s announcement, SNMA and Pfizer have partnered to fund the Satcher Fellowship, which provides a stipend to SNMA members who wish to research ethnic health disparities and applied for the fellowship.

Awopetu is a third year medical student at the University of Medicine and Dentistry of New Jersey – New Jersey Medical School.

“My research is focused primarily on the growing epidemic of obesity in the African-American community, particularly low-income African-American women,” Awopetu said. “The aims of my study are to examine the prevalence and correlates of eating patterns in two subset groups of overweight, low-income African-American women with stress associated eating patterns and similar women with eating patterns unrelated to stress; and to examine associations between stress-eating statuses.”

Awopetu will conduct focus group sessions with her subject groups, develop questionnaires and surveys and distribute free weight loss pamphlets at these focus groups.

“This is my first experience with such a task and I am definitely learning a lot as I prepare for the sessions,” Awopetu said.

Dr. Mark Johnson, Chair of the Department of Family Medicine at UMDNJ-NJMS is Awopetu’s adviser. The research is being performed at UMDNJ-NJMS/University Hospital in Newark, N.J.
Satcher Fellowship recipient and University of North Carolina School of Medicine student Kimberly Gardner, 24, has been busy since she won her fellowship. Gardner and four other Student National Medical Association medical student members received grants to research obesity or other ethnic health disparities in line with former Surgeon General David Satcher, M.D.’s “Healthy People 2010” initiative established in 2000. Since Satcher’s announcement, SNMA and Pfizer have partnered to fund the Satcher Fellowship, which provides a stipend to SNMA members who wish to research ethnic health disparities and applied for the fellowship.

Gardner’s research focus was to investigate the predicative value of different measures of obesity on the presence of left ventricular diastolic dysfunction, or, the affect an improperly functioning resting left ventricle of the heart has on obesity.

Dr. Luther T. Clark supervised Gardner’s work, which was completed at Kings County Hospital Center in Brooklyn New York, a public hospital affiliated with State University of New York at Downstate Medical Center. Gardner met with Dr. Clark weekly to discuss her progress.

“I would like to work with minority populations in the long run, so I was fortunate to work in a place where I was able to focus on these populations,” Gardner said.

Gardner is currently in her second year of medical school at UNC. Gardner is unsure of what she will specialize in after graduation, but she has found some interesting options while working in cardiology this summer and learning more about oncology and infectious diseases during school.

All of the Satcher Fellows will present their findings at the 42nd Annual Medical Education Conference. The theme for this year’s San Francisco, Calif. conference is “Achieving Wellness: Building Bridges to the Future”.
Satcher Fellowship recipient and Seattle student Meghan Curry O’Connell, 27, has been busy since she won her fellowship. O’Connell and four other Student National Medical Association medical student members received grants to research obesity or other ethnic health disparities in line with former Surgeon General David Satcher, M.D.’s “Healthy People 2010” initiative established in 2000. Since Satcher’s announcement, SNMA and Pfizer have partnered to fund the Satcher Fellowship, which provides a stipend to SNMA members who wish to research ethnic health disparities and applied for the fellowship.

O’Connell won her fellowship with a proposal to research the cultural and familial motivators of American Indian mothers who give birth to infants with Fetal Alcohol Syndrome.

Dr. Susan Astley, Director of the Fetal Alcohol Syndrome Diagnostic and Prevention Network Partnership at the University of Washington in Seattle, is O’Connell’s mentor and adviser for this research project.

O’Connell is performing secondary research on data that Dr. Astley has collected. Astley completed a ‘lifetime survey’ of a large group of women of many ethnic backgrounds, asking questions about family background, religion, how long the women had been alcoholics and when and if they tried to stop drinking.

O’Connell is using this research to compare groups of American Indian mothers who deliver babies with FAS to other groups of mothers prone to giving birth to babies with FAS, particularly Caucasian women.

“My study examines existing data of birth mothers of children with Fetal Alcohol Syndrome (FAS) in order to measure how factors that influence their ability to stop drinking differ between American Indians/Canadian Natives and Caucasians.”, O’Connell said.

All of the Satcher Fellows will present their research findings at the 42nd Annual Medical Education Conference, April 4-8, 2007 in San Francisco, Calif. The theme of this year’s conference is “Achieving Wellness: Building Bridges to the Future”. 
Having been an SNMA member a leader for more than six years, it was a pleasure to receive an award in the name of Dr. David Satcher. He is someone I greatly admire and I hope to follow in his footsteps in bridging the health disparities gap. This year has been very busy. For my Satcher Fellowship, I worked on the effect of high fat on carcinoembryonic antigen-related cell adhesion Molecule 1 (CEACAM-1) in rat hepatoma cells. In the United States, over 300,000 deaths annually are attributed to obesity and its co-morbid complications such as Type 2 diabetes Mellitus (T2DM), cardiovascular disease and renal disease. More than 80-90% of patients with T2DM also suffer from obesity. Furthermore, epidemiological studies have shown that African Americans are two to three times more likely to have T2DM than their Caucasian counterparts and there is also an earlier age of onset of the disease. This research is another piece of the puzzle in understanding the racial disparities in obesity and diabetes at the genetic level.

In addition to my research, I am also serving as president for the University of Toledo Chapter of the Student National Medical Association. My involvement in this chapter for the past two years has been both challenging and rewarding. God used me to revive the Toledo chapter which has had limited activity for more than eight years. I wrote a proposal for initiatives in the areas of recruitment, retention, community and educational pipeline initiatives. To date, all of the initiatives in the proposal have come to fruition. I was also one of five people in the state of Ohio recently honored in January 2007 by the Ohio Civil Rights Commission for outstanding leadership and community service. The award was presented in Columbus, Ohio.

I am truly passionate about the mission of SNMA and view the organization as extremely instrumental in bridging the health disparities gap. My present mission is to continue serving SNMA in a leadership capacity. In terms of my future goals, I am interested in providing clinical care to the underserved, serving as a Dean of a medical school and conducting research related to medical education and diversity issues.
Satcher Fellowship recipient and Oahu, Hi. native Kara Wong, 23, has been busy since she won her fellowship. Wong and four other Student National Medical Association medical student members received grants to research obesity or other ethnic health disparities in line with former Surgeon General David Satcher, M.D.’s “Healthy People 2010” initiative established in 2000. Since Satcher’s announcement, SNMA and Pfizer have partnered to fund the Satcher Fellowship, which provides a stipend to SNMA members who wish to research ethnic health disparities and who applied for the fellowship.

Wong, a Kaneohe native, is a second year student at Harvard School of Medicine. Wong returns home during breaks in school, and plans to return to Hawaii permanently after graduation to practice medicine. Wong won the research fellowship by presenting a proposal to research the environmental factors affecting obesity in Native Hawaiian communities.

Wong’s research focus is to discover why Native Hawaiians as an ethnic group are prone to disproportionately high rates of obesity. Wong’s research investigates three different communities on the island of Oahu; one with a high Native Hawaiian population and two others with moderate and small Native Hawaiian populations.

“This research project has been really good for me because it suits what I would like to do with my life after medical school. I plan to return to Hawaii to continue work on issues affecting Native Hawaiian health,” Wong said.

Wong hypothesizes that in communities with a high Native Hawaiian population, environmental factors, in this case limited access to exercise facilities and an over abundance of fast food outlets is contributing to Native Hawaiian obesity.

Dr. Marjorie Mau, Chair of the Department of Native Hawaiian Health at the University of Hawaii’s John A. Burns School of Medicine, is Wong’s mentor as she researches in Hawaii.

“Dr. Mau has helped me design my research protocol,” Wong said. “We meet regularly to discuss my progress.”
Robert Drummond has been an active member of the Student National Medical Association since 2002. Drummond is currently in his fifth year of the MST program at Johns Hopkins School of Medicine. His thesis is focused on characterizing the role of Macrophage Scavenger Receptor-1 (MSR1) during the inflammatory response. MSR1 is a multiligand glycoprotein (expressed primarily on macrophages) that has recently been implicated as a candidate gene for prostate cancer. Macrophages have been shown to surround prostate tumors; however, the functional role of macrophage infiltration into tumors is not well characterized. As such, a major aim of Drummond’s project is centered on the characterization of macrophage infiltration into prostate tumors, the expression of MSR1 within various types of prostate carcinoma, as well as the identification and linkage of various polymorphisms of MSR1 to more or less aggressive prostate tumors.

Prostate cancer (PC) is the most common cancer among men in the United States and is the second leading cause of cancer mortality, accounting for approximately 30,000 deaths annually. Unfortunately, a great disparity exists between African-Americans and their majority counterparts in regards to both PC incidence and mortality. Our understanding of these disparities, however, remains rudimentary and the large gaps in our knowledge impede efforts to reduce the disproportionate burden borne by certain groups, particularly African-American men. Novel information regarding these disparities can only come from research, be it clinical, basic science or epidemiological.

Upon completion of medical and graduate school at Johns Hopkins, Drummond plans to pursue training in a medicine residency program, and later enter a Hematology/Oncology Fellowship program at the NIH/NHLBI.

“I look forward to a fulfilling career in academic medicine where I will continue working toward a more complete understanding of prostate cancer,” Drummond said. “It is my hope that my research, and the research of others in this field, will result in the identification of early markers for PC that may lead to earlier detection and treatment, and ultimately a better prognosis for not only African-American men, but all men afflicted by this disease.”

Drummond’s project advisor is Dr. Antonio DeMaio, Vice Chancellor of Research for the Department of Surgery at the University of California, San Diego. He will also be collaborating with Urologist Tracy Downs, M.D. at the UCSD VA hospital. Drummond’s research will be conducted at UCSD School of Medicine.
Ruth M. Morgan, originally from Memphis, Tenn., completed her A.B. in Sociology from Dartmouth College. Morgan continued her studies at Central Connecticut State University where she earned her M.S. in Educational Leadership. Morgan worked and taught for the next 10 years in the field of higher education and educational leadership before becoming a student once again. Morgan is currently pursuing her M.D. at Albany Medical College in New York.

Morgan’s research project will measure the impact of an organized education and exercise intervention program that incorporates cultural activities on the growing epidemic of childhood obesity. The R.E.A.D. (Rest, Exercise, Achievement and Diet) Program is a pilot study to evaluate the acceptability and feasibility of a new community based childhood obesity intervention program using the partnership of a community medicine clinic and a community health facility.

If this program is successful, Morgan hopes that it can be a model for other urban communities with limited access to exercise facilities to aid in combating childhood obesity. The success of this program will improve the quality of life for the children in the program and their families through education and behavior modification.

“I hope participants will make sustainable lifestyle changes so that they do not develop diseases later in life. I am sure that what I learn from this research will help me as a future physician,” Morgan said. “My professional goal is to become a primary care physician in a largely minority community in the south, most likely in Mississippi.”

Dr. Tyrone Bristol, Associate Professor of Pediatrics at Albany Medical Center will supervise Morgan’s research project. He has spent 11 years as a Pediatrician and clinical researcher in Albany, NY. Eight of these years have been spent at the Whitney M. Young Jr. Health Center, a clinic that accepts pay on an income based sliding fee scale. Bristol is currently completing a Masters in Public Health Policy and Management at the University of Albany, School of Public Health. In conjunction with the Albany YMCA, Dr. Bristol created the R.E.A.D. program as an intervention to decrease the obesity of children in his practice.

On a local level, Morgan is co-president of the Albany Medical College SNMA Chapter. She has worked extensively with her college’s administration to help recruit underrepresented minorities and make changes in the curriculum to increase cultural education opportunities.
Onyinye Offor was born in Onitsha, Nigeria in September 1983. Offor immigrated to the United States with her family at the age of seven, occasionally returning to Nigeria to spend holidays with relatives.

It was a trip to Nigeria in December 1995 that first sparked Offor’s interest in breast cancer. A month before her journey, she learned that her aunt and godmother, Miranda, had been diagnosed with breast cancer. Upon seeing her aunt, she was terrified by the grotesque nature of her aunt’s mastectomy wound. From that moment, Offor strived to learn more about cancer, its causes and potential cures. Offor’s aunt’s death in 1996 was a devastating blow but this incident convinced her that breast cancer was a problem that needed her attention.

Throughout her years at Harvard University, Offor was involved in cancer fundraisers and volunteer programs at Harvard’s oncology unit. Upon graduating from Harvard with a Bachelor of Arts in Biochemical Sciences, Offor left for an internship in breast cancer advocacy and research in Ibadan, Nigeria. Her advocacy efforts were carried out via the Breast Cancer Association of Nigeria (BRECAN). Offor, along with BRECAN’s President and founder, Betty Akeredolu, carried out projects designed to increase breast cancer awareness, improve breast cancer services and access to treatment as well as successfully lobby government for subsidized care for breast cancer patients.

During her internship in Nigeria, Onyinye also assisted with the first clinical trial of Xeloda, a chemotherapeutic agent, in the University College Hospital, Ibadan. In addition, she investigated the estrogen and progesterone receptor status as well as HER-2 overexpression of Nigerian women in the nation’s first immunohistochemistry laboratory. By studying these factors, physicians and scientists were better able to predict a patient’s prognosis and select appropriate treatment.

“My time in Nigeria was invaluable and the experiences I had with patients, healthcare workers, students and others has deeply influenced me and provided lessons that I will carry with me forever,” Offor said.

In August 2006, Offor matriculated in Yale’s School of Medicine. She is an active member of the Student National Medical Association and the Women’s Health Interest Group. Her current research project will explore the differences that exist within triple-negative breast cancers and whether these differences may be implicated in the poorer outcomes for African-American women with breast cancer. The results of this study have the potential to uncover subdivisions within triple-negative tumors and any links to minority status and health disparities in breast cancer. Offor looks forward to innovating and individualizing cancer therapeutics through a medical career in oncology.
Teresa M. Edwards is from Buffalo, NY and completed her Bachelor of Arts Degree in Biology at Washington University in 2004. She spent a year after graduation doing clinical research in the management of critical care patients at Buffalo General Hospital.

Edwards is currently a member of the Class of 2009 at Case Western Reserve University School of Medicine in Cleveland, Ohio. She is taking advantage of the opportunities present in medical school by doing research, mentoring, volunteering and actively participating in student groups. Edwards was the 2006-2007 Co-President of the Case SNMA chapter and a recipient of the 2006 SNMA Kaplan Scholarship.

Edwards’ research project investigates the relationship between metabolic syndrome and aerobic capacity in overweight pediatric patients. She is working with a program designed to combat the prevalence of pediatric obesity. While it is recognized that obesity is largely determined by lifestyle behaviors, fundamentally changing one’s lifestyle is a great challenge to many. Healthy Kids Healthy Weight is an intensive 12 week program that works with children and their families to alter behavior and subsequently their lifestyles.

Over the course of the program, families work with exercise physiologists, dieticians and behavioral psychologists. This program is provided at no cost to the families. The goal of the intervention is to gradually introduce sustainable changes to the child’s diet and activity level to reduce their weight and risks for obesity related complications in the future.

While the focus of Healthy Kids Healthy Weight is to reduce future complications of obesity, the goal of the project is to assess baseline cardiovascular aerobic capacity as a predictor for metabolic syndrome and in overweight pediatric patients. This project will allow for the quantification of the prevalence of metabolic syndrome in this population, and gain a better understanding of factors that mediate the development of adverse health consequences in obese youth.

Reducing the prevalence and affects of obesity is of the utmost importance to Edwards. It is apparent that ethnic minorities are disproportionately affected by obesity and its negative health consequences. It is her hope that the results of this research project will add greater insight to understanding the physiologic changes caused by obesity in childhood.

Dr. Naveen Uli, a Pediatric Endocrinologist and Medical Director of the Healthy Kids Healthy Weight program, is the advisor for Edwards’ research project.
Jacques Courseault is a 24-year-old native of Atlanta, GA, but calls New Orleans his home. He attended Tulane University for undergrad and has a bachelor’s degree in Psychology. During his undergraduate years, he worked as an Athletic Trainer for Tulane Athletics Program. He was also a volunteer Emergency Medical Technician, and a Personal Trainer. Currently, he is a second-year medical student at Tulane University School of Medicine.

Courseault’s research project, “Don’t Weight to Lose” is a church-based health program designed to prevent chronic diseases related to obesity. The structure of the program incorporates recommendations from previous studies in order to promote self-efficacy and long-term behavior change in terms of dieting and exercise habits. A few of the interventions include: (1) group discussions about challenges and obstacles confronted; (2) body composition analysis; (2) blood pressure screening; (3) fitness assessment; (4) cardiovascular screening; (5) flexibility screening; (6) lectures from experts in fitness and nutrition; (7) and counseling sessions based on each individual’s assessment. His hypothesis is that education combined with accountability and feedback will result in long-term healthy behavioral changes. At the conclusion of the program, an evaluation will be submitted for publication that will include obstacles overcome and recommendations for future church-based health programs. A 1-year follow up study will assess the effectiveness of the program in terms of long-term diet and exercise adherence.

Ultimately, Courseault intends to specialize in orthopedic surgery or physical medicine and rehabilitation.
Thomas Kofi Mensah Cudjoe is originally from Macon, Georgia. He has been a member of the Student National Medical Association since his junior year at Hampton University, where he worked to charter a local chapter of the Minority Association of Pre-Medical Students (MAPS). In 2006, he received a Bachelor of Science in Biological Sciences from Hampton University. Currently, he is a first year medical student at the University of Medicine and Dentistry of New Jersey (UMDNJ)- Robert Wood Johnson Medical School (RWJMS), where he has been an active member of SNMA. He has also served as an “Student Intern” during the past two Annual Medical Education Conferences (AMEC) held in San Francisco and New York respectively.

The incidence of obesity has reached epidemic proportions in both the United States and worldwide. The elucidation of the molecular pathways central to the etiology of obesity is critical for the treatment of this burgeoning medical problem. Thus, Cudjoe’s research aims to generate and purify recombinant secreted frizzled related protein 5 (sFRP5) \textit{in vitro}. This study will focus on obtaining purified sFRP5 on a large scale, with the goal of injecting purified sFRP5 into wild-type mice to determine the effects on body weight and adipose tissue mass. Ultimately, he hopes to demonstrate the feasibility of using sFRP5 as a therapy for obesity. Kiran Chada, Ph.D., Professor at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School and Director of the Genomics Center of New Jersey is the mentor for this research project.

Thomas is undecided on the specifics of what type of medicine he will pursue but hopes to have a career that couples clinical practice, research, education, and advocacy.
Jovana Martin is currently a second year medical student at Case Western Reserve University School of Medicine, in Cleveland, Ohio. She was born and raised in Amityville, New York and later received her Bachelor’s of Science in chemistry and biological anthropology at Emory University. Since her first year of medical school she has been very involved in her local SNMA chapter and served as SNMA co-president during the 2007 school year. She has always believed in the importance of service, giving back to the community and in working towards eliminating health care disparities.

Through the Student National Medical Association David E. Satcher M.D. Research Fellowship, this summer, Martin will examine the effectiveness of an educational video about organ donation as it relates to increasing the number of newly licensed drivers opting to sign donor cards at the Northeast Ohio Bureau of Motor Vehicle Departments. The ultimate goal of this project is to increase the number of newly licensed drivers opting to sign donor cards, thereby decreasing the disparity in wait times for minorities currently on transplant waiting lists. If the project is successful locally, Martin is hopeful that it will serve as an impetus to implement educational resources regarding organ donation at Motor Vehicle Departments nationwide.
Bryant Cameron from Fredericksburg, VA, received his Bachelors of Arts in 2005 from the University of Virginia in interdisciplinary studies. Currently a second-year medical student at Wake Forest University School of Medicine, Webb has been actively involved with the SNMA at the chapter, regional, and national level since arriving at Wake Forest in 2006. He currently serves as the SNMA Health Policy and Legislative Affairs Committee Co-Chairperson.

Webb’s research will explore the intersection between federal legislation and the state of minority health. In the summer of 2007, two major pieces of health disparities legislation were introduced into the 110th Congress, both seeking to reduce the burden of health disparities across racial, ethnic, and socioeconomic lines. Through his research, Webb hopes to evaluate the potential efficacy of these and other efforts to legislate health equity.

Three faculty advisors from Wake Forest University’s Maya Angelou Research Center on Minority Health have offered their expertise to help guide the project to successful completion. Kristen G. Hairston, M.D., MPH (Assistant Professor of Internal Medicine), David L. Mount, Psy.D. (Instructor in General Internal Medicine), and Ronny A. Bell, Ph.D. (Professor in the Division of Public Health Sciences, Epidemiology and Prevention) constitute the advisor team for the duration of the fellowship.

Upon completing his combined degree program (M.D./J.D) at Wake Forest, Webb plans to pursue residency training in internal medicine. He hopes to utilize his dual training in medicine and the law to help pursue novel solutions to the problems of patient access to care, healthcare quality and accountability, as well as the impact of the social determinants of health. Webb intends to commit his career to working with individuals across all walks of life to translate the body of existing research on health disparities into viable solutions for their elimination.
Dafina Wise is a native of Detroit, Michigan but was raised in Orlando, Florida. She obtained her bachelor’s degree at the University of Florida, in food science and human nutrition in 2004 and is now a M.D. candidate at Wayne State University School of Medicine in Detroit. Wise is the Region V Pre-medical Liaison as well as MAPS co-chair at Wayne State.

African-Americans, especially women, have lower vitamin D levels than whites. Wise’s project analyzes healthy, normotensive, non-diabetic African-Americans, 35-years of age and older. The focus will be linking Vitamin D and parathyroid hormone levels, along with dietary intake to the efficacy of weight loss when calories are restricted.

Her hope is that her research will help not only to educate those with health disparities about obesity intervention, but will also provide tools in obesity prevention. The underprivileged population of African-Americans have the highest prevalence of obesity and with her research, she hopes to do her part in attacking the problem of obesity and its related illnesses among the underserved.

Wise will be working with the principal investigator of the project, John Flack, MD, MPH, FAHA, Professor of Medicine and Physiology, Interim Chair and Chief, Division of Translational Research and Clinical Epidemiology, Department of Medicine at Wayne State University School of Medicine. Dr. Flack is also principal investigator of the NIH-funded Center for Urban and African American Health (CUAAH), a health disparities center, supported by the National Institute of Environmental Health Sciences (NIEHS).

Wise’s passion lies with helping underrepresented minorities matriculate through medical school and assisting them in finding the necessary resources for success. She is interested in the fields of family medicine, pediatrics and geriatrics and aspires to practice missionary medicine to provide aid to those in countries that do not have access to healthcare.
Reiesha Robbins
University of Virginia School of Medicine

Deoxyhypusine Synthase: A novel target for islet preservation in the setting of ER stress

Originally from Wilmington Delaware graduated Summa Cum Laude with a 4.0 GPA from the University of Maryland Eastern Shore. Reiesha is currently in her 5th year of the Medical Scientist Training Program at the University of Virginia School of Medicine. She has been actively involved at the chapter and regional levels of SNMA since 2004, serving as both Recording Secretary and Liaison to the Admission’s Committee/Recruitment Chair at the University of Virginia, Co-Chair of the Pipeline Mentorship Institute at Indiana University, and as the Region VI Corresponding Secretary. Reiesha was the recipient of the SNMA Excellence in Minority Recruitment Award a Ruth L. Kirchstein National Research Service Award from the NIDDK, and has been selected as a 2009 Endocrine Trainee by the Endocrine Society.

Diabetes is the 6th leading cause of disease in the US, and the Centers for Disease Control and the American Diabetes Association report that approximately 23.6 million people in the US have some form of diabetes with approximately 5.7 million of these cases being undiagnosed. Type 2 diabetes mellitus results from a combination of insulin resistance and progressive islet dysfunction, which often precedes clinical diagnosis of diabetes as early as 10 years. In addition, pivotal studies such as the United Kingdom Prospective Diabetes Study have even shown a continued decline in beta cell function despite treatment with current time honored therapies including insulin, metformin, and sulfonylureas. Therefore it is imperative that ongoing research be directed towards the preservation and enhancement of pancreatic islet function.
Paul-Michel Dossous

Weill Cornell Medical College

Assessment of the Risk of Low-Energy Fractures Due to Low Bone Density in African Americans

Paul-Michel is a first generation Haitian-American. He was born and raised on Long Island, New York. Paul-Michel obtained his Bachelor degree from Columbia University where he majored in Economics. After obtaining his undergraduate degree, he continued at Columbia University and obtained his Master's degree in Public Health at the Mailman School of Public Health. After completing that degree, he matriculated to Weill Cornell Medical College, Cornell University, where he is currently a second-year medical student.
Adam Iddriss

Johns Hopkins School of Medicine

**Gastric bypass surgery: treating morbid obesity and obesity related disease**

Adam is a native of Pennsylvania and an active member of the Student National Medical Association since 2002. He is a graduate of the University of Pittsburgh, where he studied Bioengineering, Chemistry and International Studies, with a concentration in artificial organs and biotechnology. Iddriss is currently a second-year medical student at Johns Hopkins University School of Medicine.

The goals of the research project are to investigate the association between race and weight loss following bariatric surgeries; and determining the impact of gastric bypass on obesity related medical disease in ethnic minorities.

Through the David M. Satcher Research Fellowship, I hope to further explore my interest in obesity and health disparities by investigating the effects of bariatric surgery on minority populations. Obesity is a challenging and intellectually stimulating issue with immense public health implications. As a Satcher Fellow, I will be able to combine my interest in surgery and health disparities to obtain vital preparation for my future career as an academic physician.

Iddriss’ project advisor is Dr. Thomas Magnuson, Chief of General Surgery at the Johns Hopkins Bayview Medical Center and Director of the Johns Hopkins Obesity Surgery Service.
Wanda Averhart

University of Illinois College of Medicine

**Fruit and vegetable consumption among WIC participants in Champaign County, Illinois**

Wanda is currently a first year medical student at the University Of Illinois College Of Medicine. As a native Illinoian, she felt it natural to complete her Bachelor's and Medical Degree at the University of Illinois. In 2007, she graduated with her B.S. in Molecular and Cellular Biology with a minor in Chemistry. While completing her Bachelor's degree, Wanda became Co-Vice President of the campus MAPS chapter and even now, this McNair Scholar, manages to remain active by serving as the Treasurer of the Urbana Medical Student Government and the Secretary of the campus SNMA chapter.

Under the guidance of Dr. Diana Grigsby-Toussaint, Wanda plans to correlate facilitators and barriers to healthy eating that might mediate risks factors for obesity to already established information on the environment regarding food retail store availability to children and families. The intended outcome is to discover and document salient predictors of and mechanisms through which individuals develop health related behaviors and beliefs; and to develop tailored prevention and intervention programs for families and children that promote healthy development, that are evidence based, and that are grounded in developmental theory. This will be accomplished by interviewing the parents of the children to gather, qualitatively, the influence of food retail stores on their daily eating behaviors and patterns. This can, in turn, be correlated to the incidence of obesity in the families.

Wanda's interests lie in primary care, specifically pediatrics and family medicine. It is her belief that primary care physicians are the first line of defense against many of the diseases and health issues that plague America. Gathering a wealth of knowledge on obesity and health care disparities topics and then being able to communicate this knowledge to the patient is the first step to putting an end to this epidemic. Like many Americans, Wanda has struggled to maintain a healthy weight and an exercise regime, in the midst of a busy life. This personal connection to the issues of obesity and health care disparities, combined with research experience, will enable her to better aid patients in reaching their health and weight goals; thereby, assisting to build a community free of obesity and helping to alleviate the disparities related to many diseases.
The Barbershop Effect: Determining How a Culturally Sensitive Booklet Affects Smoking Cessation Outcomes in African-American Men

Brian Freeman is currently a second-year medical student at the University of Louisville School of Medicine. Originally from Richmond, VA, he graduated in 2008 with a Bachelor of Science in Biomedical Engineering from the University of Virginia and in 2010 with a Master of Public Health from Virginia Commonwealth University. Brian has been an active member of the SNMA while at the University of Louisville, serving previously on the National Publications and Health Policy and Legislative Action committees. He is currently President of the University of Louisville SNMA chapter.

The current study is a randomized control, post-test design pilot. Proprietor interviews were conducted in ten African-American barbershops in Richmond, VA, and the barbershops were randomized to intervention or control groups. The control group consisted of five barbershops which received a non-culturally tailored National Cancer Institutes’ Cancer Information Service (CIS) bookmarker “Want to Quit?” while the intervention group consisted of five barbershops which received copies of both the culturally tailored Pathways to Freedom smoking cessation booklet and the bookmarker. From December 2008 to June 2009 the booklets and bookmarkers were checked on average every two weeks, counted, and refilled to 15 in each shop. Post intervention surveys of 193 volunteer customers were administered beginning November 2009 until June 2010. Data analysis explored the associations between reading the Pathways to Freedom booklet on 1) Reducing cigarette use and 2) Attempting to quit smoking altogether of African-American smokers who are clients of urban barbershops compared to those who read the bookmarker only. These associations were controlled for self-efficacy and intention to quit.

To date, very limited research has focused on how to effectively provide low-cost smoking cessation information to African-American men that will empower them to modify smoking behavior. The current project will provide very valuable information on some of the internal factors that contribute to the smoking cessation product utilization and poor health outcome disparities among African-American men. If successful, the information learned will be used along with a larger pilot study to apply for more funding to support another version of the Principal Investigator’s project involving larger numbers of barbershops. The ultimate goal is to replicate efforts in Richmond, VA to other urban centers across the country, thereby reaching broader numbers of African-American men with targeted, effective smoking cessation information.

Upon completion of medical school, Brian plans to enter a medicine residency program and later pursue a nephrology fellowship.
Latrice Goosby Landry, originally from Fort Washington, MD received her Bachelor’s of Arts and her Master’s of Science in Nutrition from Tufts University and is currently a MD/PhD student at the Tufts University Schools of Medicine and Nutrition. She has been active in her local SNMA, serving as historian and president of the Tufts Chapter. In addition, she is currently serving as the regional director of the SNMA for Region VII, representing the New England states.

Goosby’s research will explore the association between serum estrogen, homeostasis, dietary intake, obesity and diabetes in the Boston Puerto Rican Health Study. Studies show estrogen is protective against increases in alloastatic load (a measure of physiologic stress), obesity, insulin resistance and diabetes. The Boston Puerto Rican Health Study has found disproportionately high rates of obesity and diabetes in this population. This research can provide insight into prevention and clinical management of obesity and diabetes in this population.

Landry hopes that findings from this research will help elucidate the complex interactions between hormones and metabolic disease. Furthermore, Landry hopes to show the importance of physiologic stress and diet on obesity in this population. In doing this research, Landry hopes to come one step closer to eliminating this health disparity.

Three faculty members from the Boston Puerto Rican Study based at Northeastern and Tufts Universities will be serving as research mentors for this project. Dr. Katherine Tucker, Professor and Chair of Health Sciences at Northeastern University and professor of nutritional epidemiology at Tufts University is the principal investigator of the Boston Puerto Rican Health Study, an NIH funded Center. Dr. Carmen Castaneda-Sceppa is an Associate Professor at Northeastern University and is an expert on nutrition and metabolic disease. Dr. Josieler Mattei, is a visiting professor at Northeastern University and a research fellow in the Department of Nutrition at the Harvard School of Public Health. These three scientists will be serving as mentors for Landry through-out the fellowship.

Landry is passionate about health disparity research. She wishes to pursue a career in academic medicine; balancing her time between a clinical practice as an internist in preventative medicine and health disparity research. She intends to dedicate her career to the elimination of health disparities in the U.S. and abroad.
Growing up in Visalia, California, James C. Pendleton witnessed various health disparities in this economically challenged area of central California and which motivated him to pursue medicine as a profession. Seeking a cultural and academic foundation from which to build, he decided to attend Morehouse College where he earned a B.S. with honors in Biology in 2005. Pendleton is now a member of the Medical Scientist Training Program at the Johns Hopkins University School of Medicine.

In addition to his academic pursuits, he has held a variety of positions within SNMA since 2005 including the Johns Hopkins Chapter Vice-President, HPREP Coordinator, and BASE program mentor. Pendleton also serves as a Second Lieutenant in the Maryland Army National Guard.

Over the course of his matriculation, Pendleton has developed an interest in traumatic spinal cord injury (SCI) and regenerative medicine. His thesis focuses on investigating the manner in which the inhibitory cascade of molecules released following spinal cord injury creates an environment restrictive to neuroregeneration and identifying novel ways to limit and counteract this environment.

African-Americans are at higher risk than Caucasians for SCI and are three times more likely to have a SCI as a result of violence. Moreover, SCI provides a synergistic environment in which other health disparities are exacerbated. SCI patients are at higher risk for cardiovascular disease, obesity, metabolic syndrome and diabetes.

The goal of this research is to characterize the effect activity based restorative therapies (ABRT) such as functional electrical stimulation, assisted ergometry, strengthening exercises, and sensory stimulation have on cardiovascular disease in African-Americans with SCI. Pendleton’s project advisor is John W. McDonald, MD, PhD, Director of the International Center for Spinal Cord Injury at the Kennedy Krieger Institute and Associate Professor of the Departments Neurology and Physical Medicine and Rehabilitation at the Johns Hopkins University School of Medicine.

In the future, Pendleton aims to promote substantive advances within our health system and lessen the burden of health disparities through his clinical practice as a neuro- or orthopedic surgeon, scientific research in the area of SCI, and efforts to help shape health and public policy.
The Effects of Bilingual, Video-Assisted, Pre-Operative Retention and Satisfaction Anesthesia Education on Spanish-Speaking Hispanic Patient Anxiety Knowledge

Amy West is a native New Yorker of Puerto Rican decent and is currently a second-year medical student at Harvard Medical School. In 2006, Amy graduated from NYU’s Tisch School of the Arts with a Bachelor of Fine Arts degree in Film and Television Production. During her time at NYU, Amy worked at various television channels including ABC, MTV, Showtime, and directed live television segments at the BBC in London, U.K. Amy also worked at Columbia Presbyterian Medical Center as a surgical videographer, which inspired her to enter Columbia University’s post baccalaureate pre-med program, leading to her application to medical school in 2009.

After working as a surgical videographer, Amy has tried to find new and innovative ways to incorporate her filmmaking skills with medical education. The goal of her research project is to demonstrate how the use of video technology can help foster improved communications between English speaking medical staff and Spanish speaking patients. Also, she hopes to show how a video can better inform Spanish speaking patients about anesthetic procedures and how this knowledge can reduce their anxiety about surgery. She hopes that by proving the usefulness of this video, she can make others for various departments of the hospital, which can reduce the workload of staff translators as well as help alleviate health disparities that currently exist amongst Hispanic populations.

At Harvard, Amy is currently involved in leadership of both the SNMA and LMSA as well as several community service projects. She is also working with faculty and students to find different ways to bring effective video technology into medical school and hospital settings and using creative media to further educate doctors, students, and patients.

Amy’s project advisor is Dr. Vilma Ortiz, an anesthesiologist at Massachusetts General Hospital as well as the director of Harvard’s Medical Spanish course.
Molecular and Behavioral Roles of the Amygdala Prodynorphin /Kappa Opioid Receptor System in Drug Abuse

Sarah Ann Anderson is currently in the 5th year of the M.D./Ph.D program at Mount Sinai School of Medicine. She currently serves as the National Chairperson for the Journal of the Student National Medical Association. Previously, Sarah Ann held the position of Region IX Assistant Regional Director-MAPS from 2009-2011.

Currently, Sarah Ann’s research focuses on understanding comorbidity between drug addiction and mood disorders. Drug addiction and major depression are two of America’s most prevalent and disabling public health problems. The two disorders are often comorbid with up to 55% of patients with lifetime substance use disorder also suffering from major depression. With such alarming statistics regarding this comorbidity, it is essential that the neural mechanisms and neurocircuitry underlying the interaction between these two disorders are investigated. In order to study this, Sarah Ann’s research proposal focuses on the brain’s emotional circuitry, specifically the amygdala. Within the amygdala, the neuropeptide Prodynorphin (PDYN) is highly expressed and has implicated functions in regulating negative mood states. Preliminary data suggests that PDYN is disturbed in subjects with mood disorders and heroin abuse. As such, my study evaluates PDYN expression in an expanded population of post-mortem human brains of subjects with either major depression or heroin abuse. The goal of such study is to identify discrete PDYN amygdala changes that are specific and shared amongst addiction subjects and mood disorders. In order to investigate the behavioral role of these changes, PDYN viral manipulation in the amygdala of rats will recapitulate changes observed in the human population and observe its effect on addictive like and depressive like behaviors.

In the long term, Sarah Ann hopes to pursue child and adolescent psychiatry with a focus on addiction research in adolescents.
Moneika Owens
MD candidate, University of North Carolina School of Medicine

InShape: Reducing Cardiovascular Disease Risk in Women Accessing Family Planning Clinics

Moneika Owens is a second year medical student at the University of North Carolina at Chapel Hill School of Medicine. She is from the small, rural town of Roseboro, NC. She graduated with a Bachelor of Arts in Sociology from the University of North Carolina at Chapel Hill in 2003 and a Master of Science in Medical Science from Hampton University in 2010. She is the current Vice-President of the UNC SNMA Chapter and she held the position of Community Service Co-Chair for the previous school year. One project that she has helped spearhead this year through SNMA is entitled Zumba Girls! This program was conducted with middle school females with the intent of creating health awareness, reducing childhood obesity, promoting body image and self-esteem awareness, and building positive role models for the future. Her plan as a physician is to practice either pediatrics or family medicine, with a focus on preventative health. These future goals tie in to both the Zumba Girls! Program and the summer research that she performed with the Satcher Fellowship. The research focused on reducing the risk of cardiovascular disease for minorities and underserved populations by management of risk factors such as hypertension and obesity. The setting of the study is in Lenoir County, NC, an area that is one of the poorest among the state with significantly elevated levels of hypertension, obesity, and stroke. The goal of this research is to explore this underserved community and to build a longstanding relationships with the residents and community leaders so that the best information can be obtained to construct the most effective lifestyle interventions for this population as well as others.
Tiffany Chioma Anaebere
MD candidate, Duke University School of Medicine

Reproducibility of the Reactive Hyperemia Index Determined by Near-infrared Spectroscopy of Forearm Muscle

Tiffany Chioma Anaebere is from Inglewood, CA and is currently a 3rd year medical student at Duke University School of Medicine. A 2007 graduate of Stanford University, Tiffany majored in Anthropological Sciences and minored in Spanish, where she was able to explore how ethnicity, community, culture and language contribute to health outcomes and overall well-being in various populations. In Summer 2008, she participated in the Weill Cornell Medical College’s Travelers Summer Research Fellowship Program where she received an important introduction to clinical research. Under the guidance of Dr. Mary Jeanne Kreek of The Rockefeller University in New York City, she was able to compare stress hormonal response in U.S. born African-American and Caucasian adults to determine if there is a link to the disproportionate prevalence of heart disease and diabetes within the U.S black community. Following this experience, she spent the next year working in the community of South Los Angeles as the Community Education Coordinator for South Bay Family Health Care (SBFHC)’s Dr. Claudia Hampton Congestive Heart Failure (CHF) and Diabetes Clinic. At Duke SOM, she has volunteered at the Duke SNMA’s Morreene Road Morning Glory Clinics Free Clinics and worked with HS and college students interested in science and medicine. She serves as the Director of Duke SOM Medical Spanish Elective and this past spring, was a visiting medical student able to explore primary care in the Costa Rican Health System in San Jose, Costa Rica. Currently, she is a research fellow in the Clinical Research Training program at the National Institutes of Health in Bethesda, Maryland working in the laboratory of Dr. Hans Ackerman. She is researching blood vessel function in sickle cell anemia patients during and following acute pain crises to determine if there are acute and chronic issues in endothelial function in this patient population. Tiffany is interested in specializing in either Emergency Medicine or Obstetrics and Gynecology where she plans to work within a medically underserved community as a clinician, participate in clinical and public health research and contribute to health professional education.
Dahlia Raymond  
MD candidate, University of Pittsburgh School of Medicine

Endothelial dysfunction in obese African American and Caucasian women in pregnancy and preeclampsia.

Dahlia Raymond was born in Castries, Saint Lucia and immigrated to the United States in the late 1980s. She was raised in Brooklyn, New York and attended high school in Harlem. She received her Bachelor of Arts in Psychology from Cornell University in 2008 and her Masters of Science in 2009 from Tufts University. She is currently a second year medical student at Pitt and holds positions with a number of Pitt Med organizations including the Student National Medical Association, the American Medical Women Association, Operation Safety Net and the Obstetrics and Gynecology Interest Group. She is an Albert Schweitzer Fellow and volunteers with Shuman Detention Center, Operation Safety Net, East Liberty Soup Kitchen and the Women's Shelter.
SNMA – DAVID SATCHE, MD FELLOW - 2011-2012

Nisha Branch
MD candidate, Howard University School of Medicine

Factors in Staggering Bilateral Total Knee Arthroplasty in Minority Patients

Nisha Branch is a third year medical student at the Howard University College of Medicine (HUCM) in Washington, DC. She is also actively involved in the Student National Medical Association (SNMA) as the National President Elect 2011-2012, and formerly the Howard Chapter President, SNMA Region VI Research Liaison, and Region VI Corresponding Secretary. She also serves as the Student Trustee of the National Medical Association.

After graduating from The University of Virginia, Ms. Branch began working as a research associate for St Christopher’s Hospital for Children in Philadelphia, Pa. From there she began master's coursework in public health at the University of Medicine and Dentistry of New Jersey, and later transferred to the George Washington University (GWU) School of Public Health and Health Services (SPHHS) to complete her master’s coursework.

While attending George Washington Ms. Branch worked in the Graduate School of Education and Human Development, and held positions with the National Association of Community Health Centers, Children’s National Medical Center, the Metropolitan Washington Public Health Association, and Ward Health Strategies. Coupled with her academic pursuits Ms. Branch was active in student government at GWU serving as the Vice President of the Public Health Student Association and the Student Senator representative of SPHHS in the GWU Student Association.

Since matriculating at Howard in 2008, she has served on many committees including the HUCM Dean's Committee on Academic Standards and Compliance and the Evaluations Subcommittee of the Curriculum Committee. Ms. Branch has always been dedicated to volunteerism and service. Outside of the College of Medicine she was a Justice on the Policy Board of the Howard University Student Association, a member of the Finance Committee of the Medico-Chirurgical Society of the National Medical Association, a mentor for aspiring premedical students, and involved in the University of Virginia Alumni Assistance Network.

Ms. Branch is currently participating in an orthopaedic research fellowship at New York University’s Hospital for Joint Disease with a focus on musculoskeletal health disparities. Upon graduation in 2013 she hopes to become an orthopaedic surgeon training in an urban underserved area where she can also indulge in her research interests. She is currently involved in health disparities research in addition to orthopaedic and surgical outcomes research which she plans to continue into her residency.
Amber Robins

University of Rochester School of Medicine and Dentistry

Connecting Young Mothers to Young Mothers through Breastfeeding Social Media Network

Biography:

Amber Robins is a 24-year-old medical student at the University of Rochester School of Medicine and Dentistry located in Rochester, NY. She attended Xavier University of Louisiana where she graduated Magna Cum Laude as a Biology major and Chemistry minor and was elected Miss Xavier University of Louisiana 2009-2010. In medical school, Amber was elected Curriculum Committee member, University of Rochester’s SNMA Public Relations Chair 2010-2011, and OB/GYN Interest Group leader. She also currently holds the position of Medical Student Representative for ACOG District II. Amber has been active in various research projects that include studies involving gynecologic cancers, adolescent mothers, and minority medical students. She was recently awarded a position in the Medical Education Pathway at the University of Rochester in which she will participate in teaching medical students through lectures and small group sessions. In addition to her work in medical school, Amber is the founder of a community step team where she is the choreographer and was also an English teacher in Rabat, Morocco, over the summer between her first and second year of medical school. Amber is a writer for The Journal for Minority Medical Students in her own column entitled “Diary of a Medical Student”. Throughout her journey, Amber’s goal is to continue motivating others to achieve their own personal successes. She is constantly reminded that dreams do come true with faith in God and hard work.

Description of Research:

Young minority WIC/Medicaid eligible pregnant or non-pregnant English speaking mothers in the Rochester community will utilize a pilot breastfeeding and infant nutrition intervention deployed through a private social media online network used for research only.

Prior to participants’ access to the website, a pre-test survey will be given to assess breastfeeding knowledge which later will be compared to a post-test survey that will be given after the social media network intervention. On the social media website, literature will be provided to the young mothers concerning breastfeeding, infant nutrition, and women’s health. They will also be able to submit personal videos and photographs illustrating their experience as young pregnant or non-pregnant mothers. These videos and photographs will be screened as they are posted on the social media website. Young mothers will have access to chat rooms with other young mothers within the study on the private social media network. In addition, they will have access to practicing physicians and social workers at the University of Rochester School of Medicine and Dentistry and other Rochester community programs.
Rosie Kilgore is in her second year at the UNC School of Medicine in Chapel Hill, NC. As a first generation Liberian American, her sister, aunt, and grandmother emigrated from Liberia during the civil war when she was three years old. She witnessed disadvantage first-hand as her grandmother, being beyond retirement age, was forced to rely on government assistance. Her grandmother was also diagnosed with diabetes shortly after arriving in the U.S.

Partly due to her grandmother’s illness, Rosie became interested in becoming a doctor from a very young age. However, she did not become officially interested in combating health disparities until entering college at Duke University. It was there that she took an education course entitled, “Children, Schools, and Society.” One of the topics explored in this course was the black/white achievement gap. Health factors such as hunger and the lack of dental care, as well as differences in socioeconomic status and institutional racism were listed as significant contributors to this gap. This and other portions of the course peaked her interest in the social determinants of health.

While Rosie had a strong interest in becoming a primary care pediatrician, just before taking the course she became passionate about pursuing a fellowship in child abuse pediatrics. Although she had not experienced abuse or neglect as a child, through various avenues she came to understand that child abuse & neglect is a significant public health problem and that minorities are disproportionately represented in the child welfare system.

Before Rosie was accepted into UNC School of Medicine, she learned of a health disparities certificate in the School of Public Health. She began taking coursework towards the certificate in her first semester of medical school. Through her public health courses and discussions with various professors and physicians, she realized that in order to adequately address health disparities in America there needed to be a focus on primary, secondary, and tertiary prevention in both child and adult populations. Consequently, she developed an interest in Medicine-Pediatrics.

Over the course of the year, Rosie came to learn of the complex relationship between individual life events, family, neighborhood, and culture as well as the health outcomes that are heavily shaped by these factors. She is very excited to be able to combine her interests in child abuse and neglect, health disparities, and Medicine-Pediatrics with her research, which focuses on the modifying role of SES, race, and gender on health outcomes of young adults with adverse childhood experiences.

Outside of academics, Rosie is an active participant in SNMA, serving as the MAPS co-liaison and mentor for MAPS students. She is also a Guardian ad Litem, a court appointed advocate for a child in foster care. She is also an active member of her local church, and enjoys singing, dancing and painting. Rosie is also glad to say that she will be returning to Liberia for the first time in December 2012, participating in a global health elective at the University of Liberia College of Medicine.
After graduating from Duke University, I joined Teach for America with a drive to greatly influence the community that I grew up in, Brooklyn New York. I taught 9th and 10th grade Global History in Brooklyn during my two-year commitment before entering the University of Rochester School of Medicine. It was one of the most rewarding experiences of my life, yet it raised many unsettling issues that I saw pertinent to adolescents in urban communities. During my teenage years, I noticed many of my neighborhood friends and classmates adopting unhealthy behaviors and habits. From eating at the “fried chicken” stores that lined almost every other street corner to finding no motivation to play outside or fear of gang violence, adolescents in my community became overweight. But I had come to realize that some of them had no awareness that they were overweight or obese, and did not have the motivation or drive to prevent these changes from occurring.

Adolescent obesity continues to be a stark, yet growing epidemic in many inner city communities today. I know the harsh psychological, emotional, and health consequences of obesity during this crucial time period of personal and physical growth. I saw it in my high school students as they dealt with the realities of obesity in their everyday lives. My students that were overweight are just a few of our adolescents that have a trajectory in their weight, because obese adolescents usually become obese adults. I hope to work to make some changes in the lives of adolescents on this downward path. I have a strong desire to do work with populations that need help making changes in their everyday life, starting with their motivation and mindset of obesity. Measures need to be taken to address the impact of childhood obesity and interventions continue to be made so that our children will have opportunities to live longer healthier lives.

My research project focuses on evaluating the correlations of motivational factors within several behavioral survey instruments among inner city adolescents in Rochester, New York. These instruments are motivation questionnaires on eating healthy and physical activity. Many of these instruments and measures have never been used in disadvantaged, urban adolescents. Obesity is such an important issue especially as we prepare the next generation to live to their fullest potential. If significant steps can be made to understand the reasoning and motivation behind why adolescents sometimes fail to engage in behaviors beneficial to their health, then maybe measures and interventions can be created that are more in line with their thinking. In the future, I aspire to work in a low-income inner-city practice that serves those who have limited access to healthcare. I plan to go into the field of Pediatrics and eventually partake in a fellowship in Adolescent Medicine. I grew up in a low-income community in Brooklyn and know the hardships families and children have to go through to get decent medical services and care. I hope to be a community leader and serve adolescents that have to deal with being a child and sometimes being forced to grow up and be an adult by responsibilities put on them by their home environment and economic needs. As long as I can remember, I have always wanted to become a motivational speaker for inner city youth to help motivate them to strive for greatness despite their present situations and to be conscious of the decisions they make and the impact it has in their future.
This project will help connect my past and continued efforts as a teacher and mentor and direct my future vision and path into becoming a Pediatrician.
Milele L.K. Bynum, MPA
M.D. Candidate 2016
University of North Carolina School of Medicine

Born and raised in San Diego, California, Ms. Milele Bynum travelled to North Carolina to complete her post-secondary education. After graduating from Duke University with a Bachelor of Arts in Sociology and Public Policy, Ms. Bynum continued her studies at North Carolina Central University where she received her Master of Public Administration. In 1999, she entered University of North Carolina School of Medicine.

Her life as a person and a future doctor was forever changed on November 5, 2001. At 28 weeks pregnant, she gave birth to a little boy and girl, who together weighed less than five pounds. Faced with the challenges of caring for two premature infants, she withdrew from medical school. Although the circumstances leading to her withdrawal were life altering, they did not deter her from pursuing her goal of becoming a doctor.

Turning perceived obstacles into opportunities, Ms. Bynum continued to pursue her passion for medicine and public health. As a Study Manager with Social & Scientific Systems and a Clinical Research Associate with The Parkinson’s Institute, Ms. Bynum accumulated almost a decade of epidemiology research experience. In the Fall 2011, Ms. Bynum returned to UNC School of Medicine with an even deeper desire to reverse disparity trends by working with underserved, high-risk, and vulnerable populations to empower them to live healthier lives and have improved health outcomes.

Ms. Bynum’s project seeks use a community based participatory model to examine the effects of a faith-based intervention on weight management and healthy behaviors amongst church-going African Americans. Her interest in health disparity research is based on personal experiences and a genuine desire to empower and improve the health of underserved populations. As a person who has and continues to struggle with weight, Ms. Bynum understands the health consequences that are associated with being overweight. As a mother and future physician, Ms. Bynum wants to serve as a model for her children and patients. Her proposed intervention offers a culturally relevant approach to addressing obesity, changing health behaviors and improving health outcomes.
Satcher Fellow: Milele LK Bynum, MPA

Research Abstract

**Walking in Faith: Examining the feasibility of a faith-based community health project**

**Introduction:** African Americans continue to be disproportionately affected by obesity and obesity-related health problems. Innovative methods that tap into the strengths and resources of the African American community are needed. Partnering with an African American church, a community-based participatory research model could be applied to address the problem of obesity amongst African Americans.

**Purpose:** This study aims to examine the feasibility of a faith-based program that encourages participants to become more physically active and to eat more healthful foods.

**Methods:** Working with a partnering church, lay leaders were trained and participants were recruited. Participants attended 8 weekly nutrition education sessions coupled with a walking program. All sessions were co-facilitated by church recruited lay leaders. Height was collected at enrollment. Blood pressure, weight, physical activity as well as fruit and vegetable intake were collected at enrollment and 1 week after the 8-week program was completed.

**Results:** Eight lay leaders were recruited and completed a two-day training. By the conclusion of the program, seven lay leaders each co-facilitated at least four nutrition education sessions, attended multiple walking sessions and assisted with the collection of data from participants.

Thirty-five church members attended an orientation session to hear about the program, with 31 of these consenting to participate in the study. Twenty-two of them completed the study and provided follow-up data. By the end of the 8 week program, participants realized a slight reduction in BMI as well as reductions in systolic and diastolic blood pressures. The mean fruit and vegetable intake was increased by 0.58 servings/day and mean physical activity by 50.82 minutes/week with 61.90% of the participants meeting physical activity recommendations of 150 minutes/week.

**Conclusion:** It is feasible to conduct a faith-based nutrition education and physical activity intervention using trained lay leaders recruited from the partnering church.
Jerrine R. Morris, MPH
M.D. Candidate 2015
Virginia Commonwealth University School of Medicine

Jerrine R. Morris was born and raised in Brooklyn, New York but relocated to Richmond, Virginia to complete high school. After matriculating to Virginia Tech for post-secondary education, she developed an indubitable passion for maternal and child health, specifically within underserved populations. As a certified nursing assistant at a local free clinic, she met a young woman who needed a colposcopy with biopsy after being diagnosed with cervical dysplasia. This young woman cried incessantly not because of the pain or agony associated with her diagnosis but because she did not want her boyfriend to find out and leave her. The emotional journey experienced during that encounter has remained a key factor in Jerrine’s desire to serve as an advocate for women.

Upon completion of a B.S. in both Psychology and Biology with minors in Chemistry and Medicine & Society, Jerrine ventured to New Orleans, Louisiana to complete a Masters in Public Health in Epidemiology. While learning the foundations of survey methodology, biostatistics, and epidemiology, she began an internship with the Family Planning Office of the Louisiana Office of Public Health. Here she cultivated her interests in women’s health but more importantly, gained insight into public policy and health disparities. She cites her internship with the Family Planning Office as pivotal for her attainment of a subsequent internship with the Maternal and Child Health Program; during this second internship she investigated biologic mechanisms for excess fetal and infant mortality among women in Louisiana with race as a key determinant of adverse birth outcomes.

Since her matriculation to medical school at Virginia Commonwealth University School of Medicine, she has taken many lessons with her. She have an extensive repertoire in data analysis yet an undeniable passion for maternal and child health. After working in conjunction with her current mentor, Dr. Saba Masho, on several smaller projects using data from the Pregnancy Risk Assessment Monitoring System, she was offered an opportunity to serve as a coordinator on Masho’s Centering Pregnancy Project. Jerrine reflects on how this project was perfect for her as it combines her passion for women’s health, her recognition that disparities are best prevented in utero, and her fondness for data analysis in public health. Throughout the
past year, her Project Team has successfully recruited over 200 women and has been following them in this longitudinal study to identify how prenatal care influences postpartum behaviors. Specifically, she and her team are interested in how Centering Pregnancy, an innovative approach to prenatal care held in groups with facilitative leadership, affects breastfeeding initiation, postpartum attendance, rates of contraception usage and rapid repeat pregnancy, and weight gain. Developed in 1993, Centering Pregnancy has slowly risen as a lofty and essential approach to prenatal care. Despite its limited research, benefits have been shown in areas such as gestation and birth weight, two outcomes that have notoriously been influenced by health disparities. Jerrine’s ultimate goal is to show the importance of Centering Pregnancy in decreasing adverse postnatal outcomes especially within a racial and socioeconomically diverse population prone to health disparities.
Satcher Fellow: Jerrine R. Morris, MPH
Research Abstract

PRENATAL CARE TYPE ON INTENT TO BREASTFEED:
IS CENTERINGPREGNANCY® THE ANSWER?

Jerrine Morris, MPH; Dr. Saba Masho, MD, DrPH, MPH; Gillian Leibach, MS; Dr. Marilyn Stern, PhD; Brinn Crooke, BA, BS

Introduction: Although breastfeeding in the first six months postpartum has been shown to decrease adverse outcomes, breastfeeding rates remain low. CenteringPregnancy® is a novel mode of prenatal care that provides continuous knowledge on the importance of breastfeeding throughout pregnancy. This study aims to examine the association between type of prenatal care and intention to breastfeed especially among indigent populations.

Objectives:
1. Describe the characteristics of pregnant women who reported “high” breastfeeding intent during the third trimester of pregnancy
2. Evaluate the relationship between prenatal care type and breastfeeding intent among pregnant women

Methods: Pregnant women in their third trimester (N=212) were interviewed in an inner-city University Medical Center regarding their intent to initiate breastfeeding. The Infant Feeding Intention scale was used to assess intention to initiate and continue this behavior. Data on breastfeeding intent was dichotomized to represent “Low” vs. “High” intention. Logistic regression analyses were conducted to examine the relationship between type of prenatal care and breastfeeding intent.

Results: The majority of pregnant women surveyed were African American (47%), had an intended pregnancy (51%), and were married (51%). Of respondents, 75% reported high intent to breastfeed. Participants enrolled in CenteringPregnancy® were 2.5 times more likely to report high breastfeeding intent compared to those in routine prenatal care (CI: 1.2- 5.3). After controlling for age, pregnancy intent, race, education, marital status, Medicaid use, and support from baby’s father, the odds of having high breastfeeding intent was no longer affected by prenatal care type.

Conclusions: One of the purposes of prenatal care is to promote positive pre- and postnatal behaviors. This study underscores the importance of promoting breastfeeding practices throughout the prenatal period as this may be the only time providers can target and educate pregnant women, particularly the underserved with low intention to breastfeed.