

# Cobb Research Lab News

A quarterly newsletter brought to you by the W. Montague Cobb Research Laboratory, Howard University

VOL. 3 ISSUE 2

EDITOR, Dr. Fatimah Jackson, ASSISTANT EDITOR, Ms. Jayla Harvey

WINTER 2015

## CRL Outreaches to K-12 to promote STEM disciplines

One of the most important missions of the CRL is to promote STEM careers through all ages. After engaging with our lab, we prepare young researchers to become esthetic about research. **J'Aron Heard**, (pictured below) a recent graduate of the Howard University Biology Department, has returned home to Louisville, KY to speak with 7th and 8th graders at Western Middle School, about connecting music and science. In this demonstration, he was able to encourage art magnet students to engage in singing, dancing, and even extracting DNA! The presentation covered lab protocol, interdisciplinary research, funding college, applying to college, the importance of higher education, creating a research project, and how to create a career in art and science. Through our work in the CRL, we hold the key to the past, and the future. \*\*\*



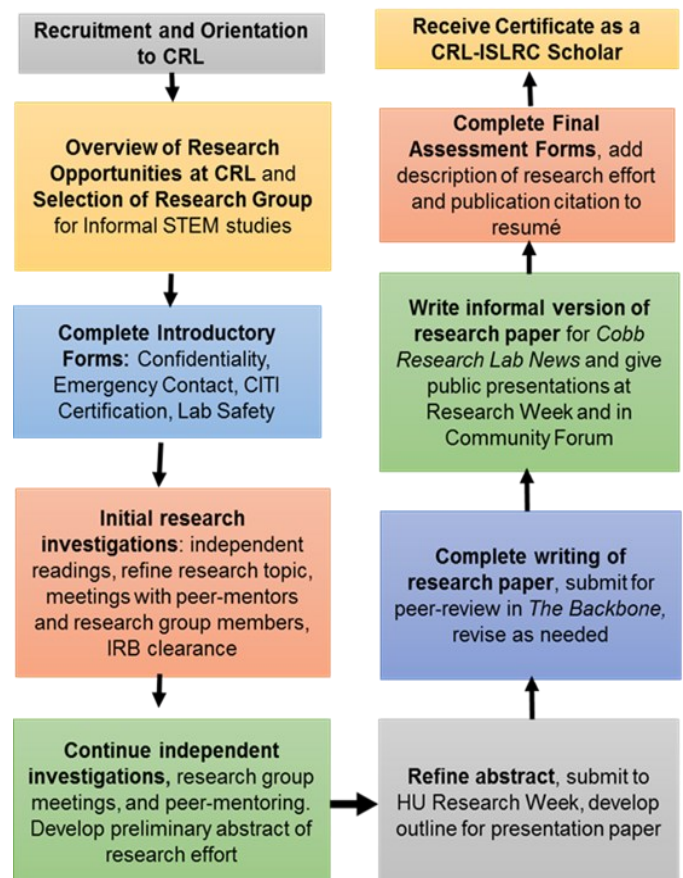
Post-bac Research Associate J'Aron Heard, pictured in the center, guides middle school students through an exercise on DNA .

## HIGHLIGHTS OF THIS ISSUE .....

- ◆ Developing the Cobb Research Laboratory as an Informal STEM Learning Resource Center
- ◆ CRL Research Assistants and Research Associates on the move
- ◆ New publication from the CRL in the *American Journal of Human Biology*

## Schedule of Student Activities at the CRL becomes systematized

We have developed a well-defined activity schedule for newly recruited students that provides them with a solid orientation to the CRL, introduces them to the research opportunities available, and encourages them to join teams of fellow researchers, led by a peer-mentor. Recently we have systematized this schedule: Initially joining the CRL, completing a research project, writing their results, presenting at both professional and public forums, and receiving a certificate for their informal STEM learning experience. This sequence is consistent with the interventions recommended by the Meyerhoff Scholarship Program at UMBC (Maton et al 2009) .\*\*\*\*



# Revitalized Website, Publications, and Workshops from the Cobb Research Lab

By Nicholas Guthrie

The CRL maintains an active, regularly updated website, [www.cobbresearchlab.com](http://www.cobbresearchlab.com). CRL Website traffic since November 2014 has been notable. **Over the past year our readership has grown 3 fold to an all-time audience size of 1568 unique users.** We average 187 visits per month from 130 average users per month. Over 50% of our web traffic in October originates from a Google search, while over 25% of users are navigating directly to the site. The final 25% of traffic can be attributed to Social Media, comprising promotional email, Facebook, Twitter, Tumblr, Instagram, and LinkedIn. These numbers are typical for a month where the *CRL News* is released. Over the past year, the userbase for our website has originated from 72 countries with the largest hits coming from the USA, Thailand, UK, Netherlands, Canada, India, Kenya, and South Africa. This metric does not include automated hits, because our analytics platform screens for bots and crawlers.

We publish a quarterly newsletter, the *Cobb Research Lab News* ([Cobbresearchlab.com/newsletter](http://Cobbresearchlab.com/newsletter)) with an international email and hardcopy distribution of over 2000. The email campaign statistics for the Fall 2015 *CRL News* were taken 10 days after delivery, giving a sample ranging from Oct 15 to Oct 26, 2015. The Fall 2015 *CRL News* was delivered to 1231 addresses, and has been opened by 22% of those inboxed, and the items inside the email were clicked by 4% of the total cohort sent. These stats are promising; as MailChimp's Industry averages for those in Education are a 14% open average and 2% click average.

We also publish a biannual online journal, *The Backbone* ([Cobbresearchlab.com/backbone](http://Cobbresearchlab.com/backbone)). In our first issue (Spring 2015) of *The Backbone*, we published 8 articles and 11 abstracts from a national group of faculty and student authors. CRL has also developed mini-workshops on genetics, basic anatomy, scientific ethics, research methods, and basic statistics for student researchers.

The table of contents for the latest issue of *The Backbone* is now available online and in this issue of the *CRL News*. \*\*\*\*

# CRL Research Assistants and Research Associates make broad use of the CRL facilities

Both training and research currently occur at the CRL. In terms of training (of professionals and students): In 2013, 33 students and 2 faculty members and in 2014 87 students and 8 faculty members have used the CRL facilities. Faculty researchers working in collaboration with students have included Dr. Carlina De la Cova, Dr. Antonio De la Cova (University of South Carolina), Dr. Georgia Dunston (Howard University), Dr. Kathy Marshall (Howard University), Dr. Rachel Watkins (American University), Dr. Shomarka Keita (American University), Dr. Joseph Jones (William and Mary University), and Dr. John Harvey (Meharry Medical). Collaborative faculty-student presentations have included 19 presentations on such diverse research topics as:

- *Mental Health Phenotypes and their underlying Genetics in African Americans using an in silico approach.* (C. Cross et al.)
- *Prevalence and anatomical evidence of Treponema Infection in the Cobb Collection.* (N. Guthrie)
- *Research Priorities and Direction for the Cobb Research Laboratory.* (F. Jackson)
- *Arthritis in the Cobb Collection.* (R. Bruce)
- *Autism in the Cobb Collection.* (J. Harvey)
- *Effects of Different Environmental Storage Conditions on aDNA Degradation: Implications for aDNA extraction from the Cobb Collection.* (J. Heard et al.)
- *mtDNA variation in African Americans across four centuries.* (B. Johnson)
- *Osteological Markers of Advanced Pulmonary Tuberculosis in the Cobb Collection.* (A. Libutsi)
- *Comparative lower limb anatomy in the Cobb collection among contemporary age and sex-matched individuals.* (E. Mayes and A. Pryce)
- *Hypertension genotypes in an historic African American population: Comparisons with contemporary hypertension genomics.* (B. Wilson and L. Jackson).

The current cohort of CRL research assistants and research associates are actively engaged in preparing abstracts, oral, and poster presentations for the upcoming Howard University Research Week 2016. As they become available, we will publish them in the *CRL News*.

JOIN US AT THE 2ND ANNUAL COBB RESEARCH LABORATORY

OPEN HOUSE

THURSDAY, FEBRUARY 25, 2016 DETAILS ON OUR WEBSITE: [COBBRESEARCHLAB.COM](http://COBBRESEARCHLAB.COM)

# Transforming the Cobb Research Laboratory into an Informal STEM Learning Resource Center

Dr. Fatimah Jackson, Director

We are making a sincere effort to transform the CRL into an informal STEM Learning Resource Center. The rationale for this effort and our current capabilities are outlined in this article.

**The Underrepresentation of African Americans in the STEM-disciplines.** The deficiency of ethnic minorities and women in science, technology, engineering, and mathematics (STEM) disciplines is a critical national concern (Hernandez et al 2013). Among women and underrepresented minorities (URMs), African Americans (AAs) disproportionately leave the STEM disciplines. While a number of underlying reasons have been proposed for this recurring and disturbing pattern, there is a paucity of data on the key obstacles to successful recruitment, retention, and sustained commitment in AA students to the STEM fields. The 6-yr degree-completion rate of undergraduate STEM majors at U.S. colleges and universities is less than 40% (Toven-Lindsey et al 2015) and AA students leave the STEM disciplines at even higher rates. Increasing the success of URMs and particularly AAs in the STEM fields translates into greater individual rewards, economic reimbursement (Museus et al 2011), societal stability, and social justice. Strategies to reverse this inequality are critically needed. Informal STEM learning opportunities can serve as an essential stopgap for some of this loss. In this regard, facilities such as the W. Montague Cobb Research Laboratory (CRL) at Howard University can play a major role in reversing this trend.

**The Cobb Research Laboratory.** Founded in 1931 by distinguished professor of anatomy and biological anthropology Dr. William Montague Cobb, the Cobb Research Laboratory (CRL) is an interdisciplinary research unit at Howard University. The CRL currently occupies 3000 square feet in Frederick Douglass Memorial Hall and provides offices, archives, and two laboratories housing two major collections of human skeletal, dental, and bioarchaeological materials. The CRL serves as a research magnet for students from the College of Arts and Sciences, the College of Dentistry, the College of Nursing, and the College of Engineering and Computer Sciences. The CRL is emerging as an informal STEM learning facility offering diverse research opportunities for self-directed learning, incidental learning, and socialization, or tacit learning (see Merriam et al., 2007), three of the four major forms of informal STEM learning. The CRL also serves as an important community outreach site for public access to science.

**Research Collections of the CRL.** The two major collections housed at the CRL are the New York African Burial Ground remains and the Cobb Collection, representing 400 years of African American biological history. Our 17<sup>th</sup> and 18<sup>th</sup> century samples are derived from the New York African Burial Ground (NYABG) remains currently housed at Howard University and on loan from the National Park Service. The NYABG is the nation's earliest and largest African burial ground (LaRoche and Blakey, 1997). These previously buried samples reflect African/African American biological diversity from the late 17<sup>th</sup> to late 18<sup>th</sup> centuries in New Amsterdam/New York. While there are over 400 burials, we have well-documented, archived biological remnants from 250 individuals. Our 19<sup>th</sup> and 20<sup>th</sup> century samples come from the Cobb Collection (CC). The CC contains 699 individuals from the mid to late 19<sup>th</sup> and early to mid 20<sup>th</sup> centuries. It is the nation's third largest collection of human skeletal remains and is the largest containing a majority of African American individuals (83%).

**Scientific and Educational Value of Collections.** Combined, the NYABG and the CC represent 400 years or approximately 20 generations of African and African American biological history. This timeframe has been understudied in the academy yet holds the key to providing evidence for key processes in human evolutionary biology (e.g., evidence of past selective sweeps, changes in mutation rates, evidence of gene flow [admixture], and opportunities for genetic drift). These collections also serve as **major inspiration** for the students who have affiliated themselves with the CRL. This unique collection is highly relevant (both socially and biologically) for many of our recruited students and access to these materials for study serves as a **stimulus** for student engagement in STEM-affiliated disciplines.

**Past Student Recruitment Efforts and Activities.** Based largely on the research appeal of our collections, the CRL has recruited over 100 undergraduate and graduate students to study various aspects of either the NYABG or the CC since August 2013. All of these students were URMs and 97% of these students were ethnically African American. Their academic majors have included biology, chemistry, history, sociology, anthropology, English, and computer sciences. Since August 2014, the Cobb Research Laboratory has mentored 87 undergraduates, graduate students, post-doctoral fellows and post-bacs and provided professional research opportunities for over a half-dozen faculty members from diverse colleges at Howard University as well as from external institutions. Additionally, for the second year in a row, we have hosted the research component of the SMDEP program.

*(Continued on page 6)*



# From Washington, DC to Washington State: CRL Research Assistants participate in 15th Annual ABRCMS Conference in Seattle

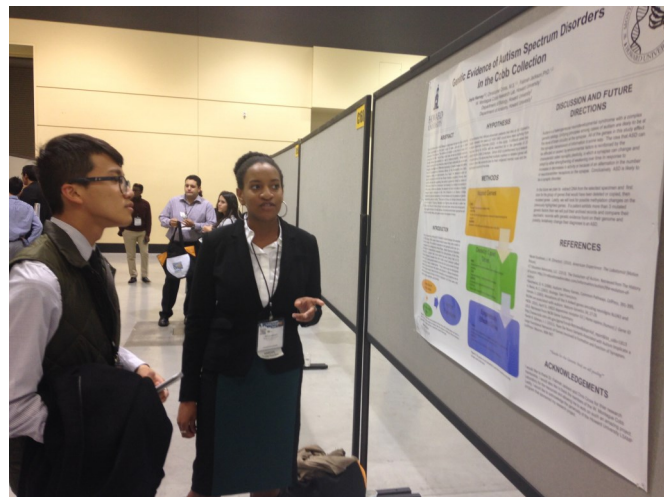
By Jayla Harvey

The 15<sup>th</sup> Annual Biomedical Research Conference for Minority Students (ABRCMS) in Seattle, Washington was held at the Washington Convention Center and is dedicated to “strengthening diversity and enhancing minority students in STEM Research”. Two seniors of the Cobb Research Laboratory, **Nicholas Guthrie** and **Jayla Harvey**, received the travel award to attend the five day event full of seminars and meetings. In an effort to cater to the wide variety of interests and possible career paths the world of research has to offer in a short amount of time, there were sessions divided up for the attendees to choose from. Sessions ranged from ‘Picking the right Ph.D Program,’ ‘Community College Students; Tips for transitioning to a 4 year institution,’ and ‘M.D.-Ph.D. - Is it Right for Me?’ All of these sessions were lead by professionals in the field that gave riveting lectures about how to prepare and apply for the next steps in life and who also answered personal questions and were available for counseling the students. Along with the preparatory sessions, there were plenary scientific sessions that were geared to expose the ABRCMS participants to new discoveries being made. Topics like ‘Unraveling Smell,’ given by Nobel Prize winner Dr. Linda Buck, speaking on newly identified families of receptors in the olfactory system and the pathways they generate that ultimately leads to our individual perceptions and responses, and ‘Ebola and Beyond: Emerging Viruses in a Globalized World,’ where Dr. David Quammen discussed zoonotic disease and their effect worldwide. The nucleus of ABRCMS is the Exhibits and Poster Sessions, where colleges, businesses and students all come together. This was a unique opportunity for students to network and closely interact with future employers or mentors. The poster disciplines included Cell Biology, Neuroscience, Immunology, Chemistry, Developmental Biology and Engineering. The conference was closed out by the keynote speaker Nontombi Naomi Tutu. She gave an inspiring speech urging minorities to continue to excel and prosper in the scientific disciplines because our points of view are vital to the STEM World. \*\*\*\*

## Social Media Efforts Expanded

The CRL maintains important active Social media links that are used to keep our followers abreast of developments at the lab and to recruit student researchers. Our links are:

**Twitter:** @CobbResearchLab  
**Facebook:** The W. Montague Cobb Research Lab  
**Instagram:** CobbResearchLab  
**LinkedIn:** W. Montague Cobb Research Laboratory  
**Tumblr:** CobbResearchLab.tumblr.com



Jayla Harvey, presents her work at ABRCMS in the Neuroscience Section, “Genetic Evidence of Autism Spectrum Disorders in the Cobb Collection.”

## COBB’S CORNER:

### Research Assistant Alexis Payne

*Cobb’s Corner is a reoccurring feature of the CRL News-letter featuring a brief interview about the lab experience of a current researcher. In addition to learning more about their research, we learn how Dr. Cobb’s vision and mission is carried on through our efforts in the CRL today. See More, including a Video Companion, at [Cobbresearchlab.com/CobbsCorner](http://Cobbresearchlab.com/CobbsCorner)*

Our researcher is Ms. Alexis Payne, who recently graduated in May 2015 from Howard University with a B.S. in Biology. Originally from Shaker Heights, Ohio, a suburb of Cleveland, Ms. Payne was interviewed by Nicholas Guthrie, the current webmaster at the CRL.

**Nicholas Guthrie (NG):** How long have you been with the CRL and how did you get involved?

**Alexis Payne (AP):** I’ve been working in the CRL since the spring semester of my senior year, and I originally heard about it through Dr. Fatimah Jackson, who was my professor at the time. She proposed a dental project, and, because I have an interest in dentistry, I was very excited to hear about the opportunity. So, I have been working here for about 8 months!

**NG:** So, can you tell me about your dental project?

**AP:** This summer, I was trained by Dr. John Harvey, the chair of periodontics at Meharry Medical College, and Christopher Cross, the assistant curator, where we learned some dental techniques for extracting cementum from the skeletal remains in the Cobb Collection. Since then, I have been extracting cementum from selected individuals within the Cobb Collection, which have been screened for use in projects across the lab. We are currently optimizing a method to extract the DNA from the cementum and we hope to successfully sequence that DNA. If we are successful, we want to extend this protocol to the entire collection.

(Continued on Next Page)

## COBB'S CORNER: (CONTINUED)

**NG:** *What has your experience been like working alongside our research associates, like Dr. John Harvey?*

**AP:** It was a wonderful experience learning all of the dental techniques with Dr. Harvey this summer. He was very informative and knowledgeable, which fed my passion for dentistry. Dr. Muneer Abbas has allowed us to use his lab, at the National Human Genome Center, to do our DNA extractions from the cementum, which has been a wonderful resource to the CRL.

**NG:** *You sent the CRL readership a message about a T-Shirt Campaign, Would you like to talk about that and the other things you are doing here at the CRL?*

**AP:** Yes! I chose to be the fundraising chair for the CRL and I started a t-shirt campaign to raise funds for our student researchers. Other projects I have worked on, have been peer mentoring our Summer Medical and Dental Educational Program (SMDEP) students where we pioneered a new research component to the program.

**NG:** *What makes the research so "pioneering"?*

**AP:** SMDEP is a national program offered at select schools around the country but not all have research components. Here at Howard, we decided to grant the students access to the Cobb Collection where they sketched historical backgrounds on select individuals and collected data on the contextual information around those individuals. Furthermore, the students were offered an opportunity to become published with their writing in *The Backbone*, which is coming out this December.

**NG:** *That sounds wonderful! How has your participation with the CRL aligned with your future goals?*

**AP:** The dental projects I'm working on have continued to fuel my passion for dentistry, as I plan to attend dental school in the fall of 2016. Learning about anthropological dentistry and other information in this in the field has been a wonderful learning experience. Peer mentoring, is another huge aspect that I love about the CRL because I have a passion for giving back and helping others. The connections that I've made with professionals (physicians, dentists, PhDs, and other people who are like me!) has really opened a lot of doors for me and my other peers. It has been a real blessing to receive their support and encouragement.

**NG:** *I'm thrilled you are having such a wonderful time with us. Thank you for taking the time to talk with us!*

**AP:** Thanks Nick!\*\*\*

## CRL Research Associates attend Bioinformatics Symposium in San Juan, Puerto Rico

By Christopher Cross and Dr. Latifa Jackson

For two and half days, Christopher Cross, CRL Associate Curator, Graduate Trustee, and Ph.D. student and Dr. Latifa Jackson, Post-Doctoral Fellow at the NHGC and Research Associate at the CRL attended the Symposium of Health Informatics in Latin America and the Caribbean (SHILAC) held in Puerto Rico. The objective of this important conference was to spur innovation in healthcare through five main aims: To identify common issues that can be addressed with informatics, particularly in issue of public health, to identify the importance of collaborative interdisciplinary solutions, to showcase the health informatics research and industry in Latin America and the Caribbean and describing the challenges and lessons learned, to brainstorm how to bridge the gaps among disciplines to develop more collaborative and diverse research and industry teams for more efficient solutions to health informatics issues in developing countries, to solve healthcare problems and implement computational and informatics solutions for developing and developed countries using mobile technology.

The conference was an important opportunity to develop new skills in bioinformatics and bring these back to Howard University. We look forward to the application of these skill in the context of ongoing research in the CRL. \*\*\*\*



Research Associates Christopher Cross and Latifa Jackson pose in front of the SHILAC poster.



## CRL Digitization Team publishes first report on 4Cs Database in *American Journal of Human Biology*

*What could you do with 400 years of biological history on African Americans?* The CRL digitization team of Dr. Fatimah Jackson, Dr. Latifa Jackson, Research Associate Christopher Cross, and Research Assistant Cameron Clarke have just received word that their manuscript will be published in the leading journal the *American Journal of Human Biology* this winter. The goal of the paper is to evaluate the potential scientific benefit of systematic studies of dental and skeletal materials on African Americans from the 17th through 20th centuries. In this publication they ask: How important is it to be able to reconstruct the lives of a highly diverse, historically recent macroethnic group over the course of 400 years? How many insights into human evolutionary biology and disease susceptibilities could be gained, even with this relatively recent window into the past? In the paper, they explore the potential ramifications of a newly constructed dataset of Four Centuries of African American Biological Variation (4Cs). Their research provides initial lists of digitized variables formatted as SQL tables for the 17th and 18th century samples and for the 19th and 20th century samples. The database is dynamic and new information is added monthly. As is, the database provides novel opportunities for significant insights into the past biological history of this group and three case study applications are detailed for comparative computational systems biology studies of: 1) hypertension, 2) the oral microbiome, and 3) mental health disorders. These are all research projects currently “in progress” at the CRL. The 4Cs dataset is ideal for interdisciplinary “next generation” science research and these data represent a unique step toward the accumulation of historically contextualized Big Data on an underrepresented group known to have experienced differential survival over time. Congratulations to the team for this accomplishment!\*\*\*

### EAST MARSHALL STREET WELL PROJECT

*It was recently brought to our attention at a lively Cobb Research Lab General Meeting that human bones and artifacts from the 19th century were discovered in an abandoned well uncovered during construction on Virginia Commonwealth University's MCV Campus in Richmond, VA. The well's contents, deemed “medical trash”, are believed to have been discarded in the 1800s by the university's medical staff. The contents of the well consist mainly of human skeletal remains from local African Americans. The CRL hopes to work in collaboration with Research Associate Dr. Joseph Jones (William and Mary) to assist in the research of these remains, including conducting DNA assessments of these individuals. \*\*\*\**

## TRANSFORMING THE CRL

(continued from page 3)

### Current Goals and Working Hypotheses.

With this record of accomplishment in mind, we would like to now take the CRL the next level to become an Informal STEM Learning Resource Center. This effort entails the following goals and working hypotheses:

**1. Increase Recruitment and Retention.** We aim to double our recruitment and retention of underrepresented ethnic minority students to STEM-related investigations at the Cobb Research Laboratory. As in the past, this will be done using the lab's unique collection of four centuries of African American biology and history as a sustainable enticement to student interest and participation and our interdisciplinary approach to the study of these materials. We will also use our connections in social media to attract additional students from a broad cross-section of disciplines. Our working hypothesis is that: **Successful commitment to STEM is enhanced by accentuating the cultural and historical ties of students to the research materials.**

**2. Develop a culturally supportive climate.** We know from past experience that student retention and knowledge transfer is facilitated in a reinforcing and nurturing environment, particularly one in which their innate talents are recognized, rewarded, and encouraged (see Leslie et al 2015). We seek to maintain an informal STEM learning setting that promotes student investment in the conceptualization and implementation of research-associated activities, including data generation and analysis, hypothesis testing, interpretation, presentation, and publication of research results, peer-mentorship, and self-reflection on their role as an emerging research scientist. The rationale for this goal is our working hypothesis that: **A proactive environment free of prejudice and discrimination promotes student investment in STEM learning.**

**3. Develop diverse pathways for student engagement in STEM.** When students have research options, student commitment to the STEM disciplines is strengthened. We want to expand the research opportunities currently available at CRL to include aDNA analysis, 3D and X-ray imaging, SQL database, oral microbiome evaluations, and facial reconstruction. This strategy will enhance increase the chances of finding a “good fit” between the student researchers and a specific research project. Our working hypothesis is that: **Providing multiple opportunities for student engagement in STEM research topics optimizes student interest and commitment in STEM learning.**

**4. Define measurable assessments at critical junctures.** We want to provide multiyear quantitative and qualitative assessments of student engagement in informal STEM learning at the CRL for comparative evaluations. This will allow us to determine which steps in our Schedule of Student Activities (page 1) are most effective and why.\*\*\*\*

REFERENCES CITED AVAILABLE ON OUR WEBSITE

CRL News, 3(2) [Winter 2015], Page Six

# Welcome to Our New Research Associates at the CRL

**Dr. Marcus Lambert** is currently Director of Diversity and Student Services at Weill Cornell Graduate School of Medical Sciences and Adjunct Professor of Microbiology at New York City College of Technology. Dr. Lambert serves as an advisor on education policy and science, technology, engineering, and mathematics (STEM) mentoring programs to a number of organizations in New York City and around the United States. Dr. Lambert has spoken at conferences on STEM education, advocated for science at the U.S. Capital, and was honored by the U.S. Department of State as a "Generation Changer." He completed his doctorate in biomedical science at New York University (NYU) School of Medicine, and was a postdoctoral research fellow in the laboratory of Dr. Michael Garabedian at NYU School of Medicine. His doctoral research focused on the bidirectional crosstalk between stress hormones and neurotrophins in the brain, which may lead to a better understanding of the pathophysiology of mood disorders such as depression. He is an alumnus of W. D. Mohammed High School in Atlanta, GA and Howard University in Washington, DC where he obtained a bachelor's of science degree in biology. Dr. Lambert resides in Brooklyn, NY with his wife and four children. His association with the CRL will expand our molecular biology capabilities with respect to the skeletal and dental collections on site. \*\*\*\*

*Dr. Lambert is pictured on the right of Dr. Fatimah Jackson.*



**Dr. Latifa Jackson** is currently a post-doctoral fellow at the National Human Genome Center at Howard University. Her research is highly integrative, incorporating aspects of human genetics, evolutionary biology, bioinformatics, modeling, and functional genomics. She is interested in how complex multi-genic traits arise, in

whether the co-morbidities in certain complex traits within populations are a result of evolutionary processes and how long term environmental modifiers contribute of modulating trait expression. During her dissertation work at Drexel University, she developed a novel bioinformatics algorithm to identify functional regions of the genome enriched for sets of genes underlying a single or multiple complex traits. This algorithm takes a systems biology approach, interrogating functional, metabolic, and expression datasets to build a bioinformatics portrait of candidate genomic regions of interest. To date she has applied this algorithm to study the underlying genomic connection between opiate/ dopamine/ GABA driven substance addiction, to identify what infectious disease processes might be driving addiction phenotypes in African Americans and Central Chinese to identify candidate schizophrenia/bipolar disorder/ depression variants relevant for a historical population of Washington DC area African Americans. Each of these projects has deepened her understanding of how genomic hotspots participate in complex traits, but in order to make more relevant models of real gene interactions, she plans to incorporate more environmental data. At Howard University, she has begun to expand my analyses to incorporate epidemiological and behavioral data that can serve as a proxy for direct association analysis and begin to describe environmental factors. We welcome Dr. Jackson and her expertise in computation and evolutionary biology to the CRL. \*\*\*\*

## Dates for Spring CRL General Meetings

**Thursday, 10:00 am—12:00 Noon**

Thursday, January 7, 2016

Thursday, January 21, 2016

Thursday, February 4, 2016

Thursday, February 18, 2016

Thursday, March 3, 2016

Thursday, March 17, 2016

Thursday, March 31, 2016

Thursday, April 14, 2016

Thursday, April 28, 2016

Thursday, May 12, 2016



## Table of Contents for Upcoming Issue of *The Backbone*, Vol 1, Issue 2 (2015)

### Full Length Research Papers:

- ***Chronic Kidney Disease and its Sequelae within the Cobb Collection: Osteological Manifestations and Clinical Record of Evidence***  
By Amanda Strong, Matthew Calhoun, Fatimah Jackson, Ph.D., Christopher Cross, M.S., and Uzoamaka Nwaogwugwu, M.D
- ***Analysis of Potential Treatments for Sickle-Cell Anemia, Or Drepanocytosis, in Adults***  
By Cameron Clarke
- ***How Commensal Organisms Help Illuminate Human Phylogenetics***  
By Jade Shepherd
- ***Average Cranium/ Brain Size of Homo neanderthalensis vs. Homo sapiens***  
By Keely Clinton
- ***How Might the Genetic Identification of Mental Disorders Vary Across Geographical Spaces, Cross Culturally and Through Time?***  
By Sedera Moore
- ***How does Environmental Calcium Affect the Amount of Melanin Available in Certain Populations and What are the Evolutionary Implications?***  
By Earyn McGee
- ***Genetic Evidence for Autism in the Cobb Collection***  
By Jayla Harvey
- ***Prevalence and Anatomical Evidence of Treponemal Infection in the Cobb Collection***  
By Nicholas Guthrie
- ***Acculturation impact in the Polymorphic Mexican-American Population's High Susceptibility to Diabetes***  
By Diana Elizando
- ***A Review of the Evolution of the Pathogenesis of Schizophrenia***  
By Nichelle Jackson

### Short Reports from SMDEP Scholars:

#### ***The Story Of Willie Mae Mitchell***

By Jordan Mitchell & Jordan Howard

#### ***The Story Of Sarah Bowles***

By Christine Okaro & Christopher Wilson

#### ***The Story Of James Williams***

By Jermaine Robertson & Theodore Meadough

#### ***The Story Of Mamie Holmes***

By James Byrne & Lopriela Seabrook

#### ***The Story Of Mary Anna Carroll***

By Jasmine Mack & Ambra Palushi

#### ***The Story Of John Jackson***

By Whitley Hatton & Tourquosia McNabb

#### ***The Story Of Alice Mahoney***

By Rachel Davalos & Mariela A. Martínez-Lebrón

## Mr. Norman Francis Donates Original Dr. W. Montage Cobb Reprints to Dr. Jackson and the CRL



The CRL recently acquired valuable original reprints or publications from Dr. W. Montage Cobb through Mr. Norman Francis (pictured above with Dr. Jackson) who had been a student of Dr. Lafayette Frederick, a close associate of Dr. Cobb. These documents represent over 100 pages on the “physical anthropology of the Negro”, several book reviews including one book by the distinguished cell biologist and founder of epigenetics, Dr. E. E. Just. The collection included a major article published in the *Journal of Negro Education* that discusses the importance of establishing physical (biological) anthropology at Howard University.

These reprints have been scanned and the originals will become part of our archives stored in the CRL while the electronic copies will be broadly distributed to our Research Associate, Research Assistants, and Advisory Board members. Dr. Cobb’s insights and vision for the Cobb Research Laboratory are a foundation for our ongoing efforts at the lab. Thank you Mr. Francis! \*\*\*\*