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Graduate Education

Albert Einstein College of Medicine, United States of America 07/2013 - 05/2021

M.S. 05/2016

Ph.D., 09/2019

M.D./Ph.D., 05/2021

Undergraduate - Howard University, Washington, DC Biology

08/2007 - 05/2011

B.S., 05/2011

Membership and Honorary/Professional Societies

American Psychiatric Association

Student National Medical Association

Medical School Awards

2019 Montefiore Pediatric Research Day Outstanding Oral Presenter Award

2018 Montefiore Pediatric Research Day Outstanding Poster Presenter Award

2017 IDWeek Mentorship Program Travel Stipend Awardee

2010 Third Place Winner for Howard University's Graduate Research Symposium

2007-11 Laureate Scholarship (four-year, full tuition and mandatory fees, housing allowance, meal plan and book vouchers)

2007-11 National Achievement Scholarship

2007-2011 Howard Hughes Biomedical Research Scholar

2007-11 National Society of Collegiate Scholars member

2007-11 Joseph Tauber 1199/SEIU National Benefit Fund Scholarship and Incentive Award 2007-11
College of Arts & Sciences Honors Association, Howard University

Research Experience

07/2015 - 09/2019

Albert Einstein College of Medicine, Bronx, NY, United States of America Doctoral Research-MD/PhD

Candidate, Betsy Herold, MD

Over a period of four years of thesis research as an MD/PhD candidate I conducted translational research on immune correlates of protection of an HSV candidate vaccine in a murine model of ocular herpes. Through this work I found that a single-cycle viral vaccine candidate, deltaG-2, provided both active and passive protection against a lethal ocular HSV-1 challenge. These findings expand our understanding of the types of immune responses needed to protect the eye against HSV, a leading cause of corneal blindness worldwide. My thesis was entitled: Antibody Dependent Cellular Cytotoxicity Provides Greater Protection Against Ocular HSV-1 Compared to Neutralizing Antibodies in a Virulent Murine Model – Lessons from Vaccine Studies.

06/2011 - 05/2013

NIDDK-Diabetes Obesity & Endocrinology Branch/NIH, Bethesda, MD, United States of America

Study Coordinator and Research Trainee in the NIH Intramural Research Training Program, Anne Sumner, MD

For just under two years after completing my baccalaureate studies, I served as study coordinator for multiple clinical research projects investigating the risk of heart disease and diabetes in Africans and African Americans. As study coordinator and as a research trainee, I recruited study participants, performed data management, interpretation, and analysis. This work in the laboratory of Dr. Anne Sumner culminated in one second author paper and review article and multiple other publications.

06/2010 - 08/2010

Menzies Research Institute, Australia Summer Research Trainee in the HHMI International Research Scholars Program, Simon Foote, PhD

A nine-week summer internship in the laboratory of Howard Hughes Professor Simon Foote in Tasmania, Australia. This research-intensive summer entailed a Howard Hughes Medical Research Scholars Program student traveling independent of a formal program to a foreign country to perform research in the lab of an HHMI investigator. During this summer I performed translational work on uroporphyrinogen III synthase, an enzyme in the heme biosynthesis pathway, as a potential target for an antimalarial host-directed therapy. This work was presented orally in the final ceremony for this program and in poster format at the Annual Biomedical Research Scholar

06/2009 - 08/2009

NIDDK-Kidney Disease Branch/NIH, Bethesda, MD, United States of America Summer Research Trainee at the NIH Summer Internship Program, Robert Star, MD

A ten-week program in which 8 students are selected to conduct research in a laboratory in the National Institute of Diabetes and Digestive and Kidney Disease. In the laboratory of Dr. Robert Star, I participated in ongoing investigation into the abundance and chronology of activation of innate immune response factors during septic infection in the setting of kidney disease. This work was presented orally at the program's final ceremony and as a poster in the NIH Summer Student Poster Day.

06/2008 - 08/2008

Weill Cornell/Rockefeller/Sloan-Kettering, New York, NY, United States of America

Summer Research Trainee at the Tri-Institutional Gateways to the Laboratory Program, Kirk Deitsch, PhD

A ten-week program held at the Tri-Institutional Weill Cornell/Rockefeller/Sloan-Kettering MD/PhD program where 15 students are selected to conduct research in laboratories in one of their areas of interests. In the laboratory of Kirk Deitsch, PhD, under the direct supervision of Borko Amulic, PhD, I conducted research focused on the transcriptional regulation of Plasmodium falciparum's var gene family and, indirectly, regulation of PfEMP1 protein expression. This work identified insulators that potentially play a role in the regulation of this major gene group of the malaria parasite, Plasmodium falciparum. This work was presented orally at the Leadership Alliance Symposium in the summer of 2008.

Publications

Peer Reviewed Journal Articles/Abstracts

Burn, C., Ramsey, N., Garforth S.J., Almo S., Jacobs W.R., Herold B.C. A Herpes Simplex Virus (HSV)-2 Single-Cycle Candidate Vaccine Deleted in Glycoprotein D Protects Male Mice from Lethal Skin Challenge With Clinical Isolates of HSV-1 and HSV-2. *Journal of Infectious Diseases*. 2018, Feb; 21(5): 754-758. Pub Status: Published.

Castillo, D.C., Ramsey, N.L.M., Yu S.S.K., Ricks, M., Courville, A.B., Sumner, A.E. Inconsistent Access to Food and Cardiometabolic Disease: The Effect of Food Insecurity. *Current Cardiovascular Risk Reports*. 2012, Jun; 6(3): 245-250. Pub Status: Published.

O'Connor, M.Y., Thoreson, C.K., Ramsey, N.L., Ricks, M., Sumner, A.E. The Uncertain Significance of Low Vitamin D Levels in African Descent Populations: A Review of the Bone and Cardiometabolic Literature. *Progress in Cardiovascular Diseases*. 2013, Nov; 56(3): 261-269. Pub Status: Published.

Ramsey, N.L.M., Visciano, M., Hunte R., Loh, L. N., Burn-Aschner, C., Jacobs, W.R., Herold, B.C. A Single-Cycle Glycoprotein D Deletion Viral Vaccine Candidate, DeltagD-2, Elicits Polyfunctional Antibodies That Protect Against Ocular Herpes Simplex Virus. *Journal of Virology*. 2020, Jun; 94(13): e00335-20. Pub Status: Published.

Yu, S.S.K., Ramsey, N.L.M., Castillo, D.C., Ricks, M., Sumner, A.E. Triglyceride-Based Screening Tests Fail to Recognize Cardiometabolic Disease in African Immigrant and African-American Men. *Metabolic Syndrome and Related Disorders*. 2013, Jan; 11(1): 15-20. Pub Status: Published.

Poster Presentations

Ramsey, N.L.M.*, Jacobs, W.R., Jr., Herold, B.C. (October, 2017). Establishing Models of Herpes Simplex Virus Type 2 Superinfection of Herpes Simplex Virus Type 1 Seropositive Mice to Test the Efficacy of a Novel Vaccine Poster presented at: IDWeek; San Diego, CA, USA.

Ramsey, N.L.M.*, Jacobs, W.R., Jr., Herold, B.C. (April, 2018). Candidate Vaccine, deltagD-2, Protects Against Herpes Simplex Virus Type 1 (HSV-1) Corneal Infection and HSV-2 Skin Superinfection Poster

presented at: Pediatric Research Day at Montefiore; Bronx, NY, USA.

Ramsey, N.L.M.*, Smith, C., Foote, S. (November, 2010). Uroporphyrinogen III Synthase as a Potential Target for a Host-Directed Therapy Poster presented at: Annual Biomedical Research Conference for Minority Students; Charlotte, NC, USA.

Ramsey, N.L.M.*, Yuen, P., Star, R. (July, 2009). Relationship Between Innate Immune Response Factors Poster presented at: NIH Summer Student Research Day; Bethesda, MD, USA.

Yu, S.S.K*, Ramsey, N.L.M., Castillo, D.C., Ricks, M., Sumner, A.E. (June, 2012). Hypertriglyceridemic Waist Does Not Predict Metabolic Triad in Men of African Descent Poster presented at: American Diabetes Association; Philadelphia, PA, USA.

Oral Presentations

Ramsey, N.L.M. (April, 2019). DeltagD-2, A Single Cycle Herpes Simplex Viral Vaccine Candidate, Elicits Antibodies that Trigger Cell-Mediated Cytotoxicity and Protect Mice from Lethal Corneal Disease Oral Presentation presented at: Pediatric Research Day at Montefiore; Bronx, NY, USA.

Ramsey, N.L.M. (November, 2018). Candidate Vaccine, DeltagD-2, Protects Against Herpes Simplex Virus Type 1 (HSV-1) Corneal Infection and HSV-2 Skin Superinfection Oral Presentation presented at: SNMA Region IX Regional Research Symposium; New York, NY, USA.

Ramsey, N.L.M.. (July, 2008). Identification of Insulators in the Malaria Parasite Plasmodium falciparum Oral Presentation presented at: Leadership Alliance Symposium; Hartford, CT, USA.

Volunteer Experience

06/2020 - 08/2020

Bronx Health Opportunities Partnership- Einstein, Bronx, NY, United States of America
Volunteer/Mentor at Bronx HOPE Virtual Summer Mentorship Program, Alicia Martinez, MPH

The Bronx HOPE Virtual Summer Program is a collaborative project being offered to students who normally participate in one of several experiential summer programs offered at Einstein. The Bronx HOPE Summer mentors lead small group discussions during educational sessions and host a minimum of one additional weekly group mentoring session each week with their assigned students.

05/2020 - 06/2020

Montefiore Staff Emotional Support Center, Bronx, NY, United States of America Volunteer, Audrey Walker, MD

The Montefiore Emotional Support Centers (ESC) are an in-hospital resource for all hospital workers during the COVID-19 crisis. The ESCs offer care for employees' physical and emotional needs including food, relaxation, peer support, conversation, onsite mindfulness tools, connection to resources, and mental health referrals. Medical students volunteer in the ESCs welcoming staff to the space, directing traffic, and

connecting visitors to on- and offsite resources as appropriate. Students also received an introduction to principles of psychological first aid and mental health interventions used in disaster response through readings and other didactic content.

04/2018 - 04/2019

Student National Medical Association, Washington, DC, United States of America Diversity Research Committee Co-Chair

As DRC co-chair, I assisted any officer or Committee with the creation, distribution, and collection of surveys on any topic of interest in order to gather member opinion on specified goals, events, and/or strategies; worked to increase membership awareness of academic medicine and health care research programs and grant opportunities; identified potential funding sources for the implementation of the SNMA/David E. Satcher MD PhD Research Fellowship; assist the National Vice-President by planning the Annual Dr. Wilbert C. Jordan Research Forum at the National Medical Education Conference and subsequent publication of the winning abstracts in the Journal of the Student National Medical Association; serve as the research assessment committee for the SNMA.

08/2016 - 08/2017

Einstein MSTP Continuity Clinic-Jacobi, Bronx, NY, United States of America Volunteer, Lisa Rucker, MD

The Einstein MSTP Continuity Clinic is a yearlong experience on Thursday evenings running from 4-8pm where participating MSTP students see patients in a primary care adult outpatient setting under the direct supervision of an attending. In the year-long experience, students are able to gain clinical exposure while completing their PhD, working directly with attendings to serve as the primary care provider for underserved populations seeking care at Jacobi Medical Center.

08/2016 - 08/2016

Albert Einstein Introduction to Clinical Medicine, Bronx, NY, United States of America Student Facilitator-Faculty Development Implicit Bias Workshop

During a half-day session, I facilitated faculty debriefing following taking the Implicit Association Test (IAT). I also facilitated faculty development exercises centered on implicit bias.

06/2016 - 06/2016

ReseauDocteur, Inc, New York, NY, United States of America Invited Speaker

As an invited speaker, I delivered a 40-minute webinar on the Importance of Mentorship to the pre-health membership of this organization, which is dedicated to increasing minority representation across the spectrum of healthcare professions.

05/2016 - 05/2017

Space in Prisons for Health Education for Re-Entry, New York, NY, United States of America Volunteer

Einstein SPHERE volunteers provide health education at the Edgecombe Correctional Facility in Washington Heights. As a medical student volunteer in SPHERE I worked with the Social Medicine residents at Montefiore to design and lead health workshops directly relevant to the inmate population, including HIV prevention, hepatitis C awareness, nutrition and how to navigate the healthcare system in New York.

05/2016 - Present

White Coats for Black Lives-Einstein Chapter, Bronx, NY, United States of America Board Member

As board member for WC4BL I help plan events like teach-ins, general body meetings, and working to advocate for the institution to explicitly denounce anti-Black racism and have that reflected in the curricula, institutional culture, and in the recruitment and retention of students and faculty. The chapter also participates in nation-wide actions organized by the national organization founded in 2014 with the mission of dismantling racism in medicine and promote the health, well-being, and self-determination of Black and Indigenous people, and other people of color.

04/2016 - 07/2017

Einstein Diversity & Inclusion Steering Committee, Bronx, NY, United States of America Committee, Diversity and Inclusion Oversight Subcommittee, & Retention Subcommittee member

As a member of the student-led impetus for a diversity town hall and retreat that culminated in the forming of the Diversity and Inclusion Steering Committee (DISC), I served on this committee in an advocacy and leadership role. After a year of work, the Diversity and Inclusion Committee Strategic Plan was finalized and submitted to leadership for implementation.

08/2015 - 04/2018

Einstein Minority Scientists Association (EMSA), Bronx, NY, United States of America Board Member

The EMSA serves as a formal support system for underrepresented students in the Sue Golding Graduate Division of Medical Sciences. As a board member I helped plan events including a popular mock qualification exam program for graduate students and aided in program implementation for Einstein's post-baccalaureate PREP program.

07/2015 - 07/2018

Einstein Student Orientation Implicit Bias Session, Bronx, NY, United States of America Implicit Bias Small Group Facilitator, Cristina Gonzalez, MD

Facilitated and co-facilitated small group discussions for incoming first year medical students on the topic of implicit bias during their orientation week in 2015, 2016, and 2018. This program is run by Dr. Cristina Gonzalez and involves a large group presentation followed by small group de-briefing sessions facilitated by students and/or faculty.

07/2015 - 09/2016

Student National Medical Association-Einstein, Bronx, NY, United States of America Einstein Chapter Co-

President

As chapter co-president, I worked with my co-president to plan and execute chapter events at Einstein, communicate regional and national initiatives and meetings to the chapter members, and to support and direct the chapter's executive board. As chapter presidents, we planned monthly events which included a gala celebrating SNMA's 50th Anniversary and a series of Black history month events.

04/2015 - 04/2017

Student National Medical Association, Washington, DC, United States of America Physician Researcher Initiative (PRI) Coordinator

To help achieve the goals of the PRI (educate the SNMA membership about careers in academic medicine, enhance the membership's research experiences, and to establish a network of mentors), an educational track is offered each year during the national SNMA conference (Annual Medical Education Conference), which the PRI coordinator, an appointed position, plans and executes. In addition to planning research tracks at two consecutive AMECs, during my time as PRI coordinator I worked with other SNMA leaders to draft and submit a R13 grant aiming to acquire independent funding for the PRI.

08/2014 - 08/2015

Student National Medical Association-Einstein, Bronx, NY, United States of America Einstein Chapter Treasurer

As treasurer, I managed the finances of the Einstein SNMA Chapter including funds allocated by the Einstein Student Governing Board and the Office of Diversity Enhancement. As chapter treasurer I was able to apply for and obtain an increase in these allocated SGB funds of 30% (\$300).

01/2014 - 02/2016

Student National Medical Association Region 9, New York, NY, United States of America Regional Research Liaison

The SNMA Regional Research Liaison (RRL) for each of SNMA's 10 regions works in tandem with the National Research Diversity Committee; researches and assesses research opportunities for minority premedical and medical students; and, promotes SNMA's research programs among the region: the Dr. Wilbert C. Jordan Research Forum and the SNMA David E. Satcher, MD, PhD Research Fellowship. In my first term I created a webpage to broadcast opportunities within the region to high school, premedical, and medical students and in my second term as Region 9 RRL, I planned the first annual region 9 research symposium.

09/2013 - 06/2015

For Here & For Haiti (FHFH), Bronx, NY, United States of America
Board Member of FHFH and Einstein Student Affiliate of Partners in Health

Served as board member for FHFH helping to develop fundraising ideas (such as the "Culinary Throwdown"), plan fundraising events, and host general body meetings to support the mission of PIH Engage and donate funds raised to nonprofit organizations supporting communities in the Bronx and in Haiti.

Hobbies & Interests

My hobbies are centered on food, travel, and shared experiences with loved ones. They include finding the best cupcakes in NYC, brunching with friends, and traveling with friends. Also, I enjoy celebratory family outings to Broadway shows and group fitness classes with friends. Recently, I've also found a guilty pleasure in watching chiropractic adjustment videos on Youtube.