# The 2015 Lee D. Baker Scholars



Naa Adorkor Allotey is a Duke University undergraduate student, a member of the Class of 2018. Studying in the Pratt School of Engineering, she currently pursues a major in Electrical and Computer Engineering. She is from Macon, Georgia. At Duke, she is a Reginaldo Howard Memorial Scholar, an executive board member of Duke's chapter of the National Society of Black Engineers, and a part of the Environmental Alliance.

# **Naa Adorkor Allotey**

**Research Project: Colorblind or Blind?** 

My project explores how and why ideas that link blackness to criminality have changed over time and have shaped—and in turn been shaped by—the disproportionate arrest and incarceration rates for African Americans. In particular, I will focus on identifying modes through which beliefs of minority criminality are perpetuated using "colorblind" discourse. "Colorblindness," which largely developed during Civil Rights Era of 1960s, pretends to ignore race and relies on appeals to objectivity through the use of statistics and purportedly factual information.

Using the Jimmy Carter Archives and modern day media sources, I will compare the discourse surrounding race and crime in the 1960s to that of today. I will focus on specific ideas, images, and rhetoric used in regards to topics American society often associates with minorities (crime, welfare, etc). Then I will investigate how these ideas shape what numbers are made readily accessible for public consumption and are generally accepted by the American people.

Faculty Research Mentor: Professor Adriane Lentz-Smith, History Librarian Research Consultant: Karen Jean Hunt

This research project was started in Writing 101 with Instructor Amanda Hughett



Anika Ayyar is a rising sophomore at Duke majoring in biomedical engineering. Although a native of Saratoga, California, her love of travel and the outdoors led her to attend a boarding high school in New Hampshire and spend a term abroad at the Island School in Cape Eleuthera, Bahamas. Anika's work volunteering at programming camps in Silicon Valley, and her own experiences as a female engineering student have inspired her passion for seeking ways to encourage more girls to pursue STEM degrees.

## **Anika Ayyar**

#### **Decoding the Technology Gender Gap**

The Bureau of Labor Statistics estimates that by 2020, a lack of qualified engineering and computer science graduates could cause one million jobs to go unfilled. Meanwhile, according to the same bureau, the number of female engineering and computer science graduates has declined to 12% in recent years, due in part to the high drop-out rate of females pursuing these degrees.

The goal of my project is to investigate why fewer women are choosing STEM majors in spite of a clear, pent up demand. Through my research, which will include in-person interviews, online surveys and questionnaires, and "first exposure" sessions, where individuals will be able to experience STEM projects involving engineering and technology firsthand, I will gather data that will allow me to better understand the origins and manifestations of the gender divide in science, technology, engineering, and mathematics fields.

Faculty Research Mentor: Professor Sarah Schott, Math Librarian Research Consultant: Melanie Sturgeon



Jack Bradford is a Trinity sophomore from Huntersville, North Carolina. He plans to major in American Studies through Program II. His academic interests include twentieth century American literature, political theory, religion, and urban planning. He is the recipient of the 2015 Louis J. Budd Award for Outstanding Work in American Literature at Duke University.

## **Jack Bradford**

#### Songs from Bartlett's Box:

#### Poetry in Durham, North Carolina, During the Mid- to Late Nineteenth Century

The goals of this research project are, first, to identify poets working in Durham, North Carolina, during the mid- to late nineteenth century and, second, to explicate select poems by drawing on their historical and literary contexts. As I study these poems, I will be exploring the role of literature in the development of a municipal identity – more specifically, the identity of a city in the American South incorporated in the wake of the Civil War. My analysis will be supplemented by secondary literature on the history of Durham and Durham County, in addition to works by major American poets of the nineteenth century. The poems that will be analyzed in this project will be found in special collections libraries in Durham and Chapel Hill, as well as in the Durham County Public Library system; they will be taken from independent publications, magazines and journals, and from collections of unpublished papers.

Faculty Research Mentor: Professor Victor Strandberg, English Librarian Research Consultant: Arianne Hartsell-Gundy

This research project was started in Writing 101 with Instructor Casey



Avery Brust is a Duke University student majoring in Economics and pursuing a certificate in Markets & Management Studies. His current research investigates how the economics and politics of prison privatization speak to scholarly narratives regarding the privatization of government services and, more broadly, the role of government. A true music lover, he writes program notes and assists with library management for the American Youth Symphony.

## **Avery Brust**

#### **Understanding the Genesis of California Prison Privatization**

This research clarifies the role of government through an investigation into the rise of private corrections in California. By tracing prison privatization from its roots in the 1980s overcrowding crisis, I construct a narrative that problematizes attitudes towards crime, backroom politics, and the profit motive. I put primary-source materials gathered from the California State Archives, newspapers, and published reports into conversation with existing scholarship to unearth the factors that allowed private corrections to poison the California prison system. Using these findings, I explore more broadly how corporate power distorts political landscapes to ascertain what role, if any, private enterprise should play in well-functioning government. My findings neither endorse nor preclude corporate involvement in government, but rather suggest a middle ground that aligns private efficiency with the public goal of enforcing the social optimum.

Faculty Research Mentor: Professor Jessica Namakkal, International Comparative Studies Program

Librarian Research Consultant: Linda Daniel

This research project was started in Writing 101 with Instructor Amanda Hughett



Riyanka Ganguly is a Sophomore from Seattle, WA interested in Global Health and Political Science. She is currently an Alice M. Baldwin Scholar and hopes to one day to use sexual health resources to empower women in communities around the world.

## Riyanka Ganguly

#### Creation of a Duke Sexual Health Resource Center

My project involves research on the creation of a Sexual Health Resource Center at Duke University. It continues research that I started in Writing 101: Queer Theories in Place and Space class, taught by Dr. Jennifer Ansley. In that work, I proposed the creation of such a center in order to challenge the gender and sexuality norms on campus. My additional research through this opportunity will take me to Stanford University where I will be shadowing the Stanford Sexual Health Peer Resource Center in order to gain a further understanding of how to propose the creation of such a center here at Duke University.

Faculty Research Mentor: Professor Robyn Wiegman, Literature and Women's Studies Librarian Research Consultant: : Hannah Rozear

This research project was started in Writing 101 with Instructor Jennifer Ansley



Kathy Johnson is a current sophomore at Duke University majoring in Medieval & Renaissance Studies. She plays the alto saxophone in the Duke University Marching Band and Pep Band. She is the Visual and Social Media Chair for Duke Students for Humane Borders, and during her freshman year she volunteered with the America Reads America Counts program.

## **Kathy Johnson**

### To Live in The House on Mango Street

My research project focuses on *The House on Mango Street* by Sandra Cisneros. This project focuses on the history which precipitated Sandra Cisneros' book, and how it influenced Cisneros' structure, themes and style. This research also closely analyzes how *The House on Mango Street* is relevant and inspiring in contemporary society. To analyze the importance of *The House on Mango Street* today, this project focuses on an art exhibit called *The House on Mango Street*: Artists Interpret Community in Chicago's National Museum of Mexican Art. This project analyzes the artists impressions of *The House on Mango Street* in their works to assess the impact this book has made on contemporary society.

Faculty Research Mentor: Professor Sarah Deutsch, History and Women's Studies Librarian Research Consultant: Holly Ackerman

This research project was started in Writing 101 with Instructor Kristen Neuschel



Sam Kelly is a rising sophomore majoring in Mechanical Engineering. He is a Robertson Scholar from New Zealand, who previously studied briefly at the University of Auckland before attending Duke. He is currently interning at the Audubon Zoo in New Orleans, where he is interested in finding ways to intersect skills learnt from studying engineering with his deep interest and love for the environment.

## Sam Kelly

#### **Privatizing Single Species Conservation**

In New Zealand, a large part of the conservation landscape is targeted single-species conservation efforts. However, there are not enough resources to protect and restore every endangered species individually. An option often spoke about in conservation circles is to privatize many conservation efforts. This has been done successfully with the Kiwi – a national symbol, but a few other species such as the Whio (Blue Duck) and Kakapo have been able to leverage private investments in their conservation efforts. I use three major research strategies: (1) observation and interview of those in a variety of single-species conservation efforts (2) consultation with experts in the New Zealand conservation research and (3) secondary study of research findings. This study not only investigates the impact of privatizing conservation, but also indirectly considers the impacts of the current philosophical conservation model in New Zealand.

Faculty Research Mentor: Professor Emeritus Norman Christensen, Environmental Sciences & Policy

Librarian Research Consultant: Michael Peper

This research project was started in Writing 101 with Instructor Daniel Ahlquist



Sara Yuen is a member of the class of 2018 at Duke University. She is currently considering centering her undergraduate studies on Neuroscience, Dance, and Education. Her research is inspired by her 13 years of training in classical ballet, her work in improvisational techniques, and her past semester's work in Writing 101- Listening to Sounds and Silence.

### Sara Yuen

#### If a Tree Falls in the Forest:

the Relationship between Improvisation and Silence and Art

Silence is unique. It is a common experience, yet it proves endlessly elusive in interpretation and analysis. This research takes advantage of the relationship between music and movement to study the effects of soundlessness on improvisational dance. When improvising, a dancer practices extreme outer awareness. He or she attempts to close the gap between external and internal worlds and communicate the result through movement. Sound is a large factor in this process. When silence is used as dancers' soundscape, the question becomes, "What are they hearing and communicating through their movement?" To answer this, dancers will be recorded improvising to music and silence. Afterwards, they will be interviewed about their experiences. These results will be analyzed comparatively and in the context of scholarly work on silence in the fields of Musicology and Sound Studies.

Faculty Research Mentor: Professor Thomas F. DeFrantz, African & African American Studies and Dance

Librarian Research Consultant: Lee Sorensen

This research project was started in Writing 101 with Instructor Sarah Bereza