Anuar Beisembayev has always found computers fascinating. He enjoys figuring out how they work, both in terms of hardware and software. When Anuar learned that scientists were making computers capable of learning, he was instantly hooked. One aspect in particular that interested him was applying machine learning to existing technology, like drones, in order to create self-operating vehicles. With his project, Autonomous Drones: Applying Machine Learning to Drones, Anuar aims to figure out how machine learning works, how it applies to drones, and how practical autonomous drones really are. In the future, Anuar plans to attend UMBC and major in Computer Science.

Jocelyn Chen has always been a strong advocate for mental health awareness and helping others. She is very curious and always wants to know the mechanisms behind how things work. When she first learned about the nature versus nurture debate in her AP Biology and AP Psychology courses, she immediately knew what she wanted to do for her research project, Kill ‘Em With Kindness: The Reasons Behind Altruism. She has always been fascinated with anomalies and difficult puzzles especially within the biology of life. With the recent stories about heroic sacrifices, she hopes to delve deeper into her understanding of human altruism. Next year, Jocelyn plans on majoring in bioengineering at college.

Tara Doddapaneni has always been interested in the issues relating to the environment. She also hated bees until one day she read about how important bees are for our ecosystem and how in recent years the number of bees in the United States has been drastically declining. In her project, What’s the Buzz?: The Importance of the Bee Decline, Tara researches the possible causes for the bee decline as well as the consequences of the loss of bees for the environment and for humans. Next year, Tara plans to study public health in college.
Eeshah Haq has a passion for protecting the Earth’s environment for the future generations. She’s worried that earth will become like how it was portrayed in the 2008 movie, *Wall-E*: filled with mountains of trash and no humans left on earth, so she’s promised herself to live a life full of Reusing, Reducing, and Recycling. This led her to her project, *Reuse It, Don’t Just Lost It: The Benefits of Reusing in a Throwaway Society*. Eeshah focuses on economic, environmental, and community benefits of reusing to hopefully convince more members of her community to reuse more often. Alongside her interest in environmental studies, Eeshah loves math. She hopes to pursue a double major in Mathematics and Finance at the University of Maryland next fall.

Chloe Hickman has grown up with a severe nut allergy her entire life. Her school career was always filled with health forms and meetings with the school nurse and principal. This personal experience led to her interest in food allergies and school policies about allergies. Are schools in position to take on the challenges that food allergies present? In her project, *Wear Teal for a Safe Meal: A Study of Preparedness for Food Allergies in School*, Chloe answers this question and analyzes the extent of schools’ readiness for students with severe allergies. Next year Chloe will be attending the University of Central Florida and studying Forensic Science.

Jelani Hines has always been aware of the people around her. Developing an interest in appearance, she started to notice the different hairstyles that she encountered. Since her hair became damaged from all the heat and chemicals associated with straight hair, she chose to wear her hair naturally her sophomore year of high school and it has remained that way. Curious about others’ hair journey, she wanted to focus on “hair-ism,” discrimination based upon one’s hair. This interest led to the development of her project, *“Hair-ism”: A Hair-Raising Study of Hair Culture*. Next year, Jelani plans to attend Morgan State University where she will major in education and minor in Spanish.

Kayla Jan began to get acne in middle school. She has dealt with the struggle for many years until her dermatologist recommended Accutane. As Accutane is a powerful medication with crazy side effects, many people are scared to take it. After her best friend told her that Accutane was deadly, Kayla decided to do research the topic for her project, *Is it Worth it? A Study of the Side Effects of Accutane*. In the future, Kayla will study fashion merchandising in college next year.
Vyoma Jani is the “test subject” of her family. In other words, she is the older sibling. Diving into college research, AP exams, and this Ulysses project without assistance, Vyoma has noticed that her younger sister does not face the same struggle. This is because her little sister has Vyoma to guide her. This imbalance in sibling roles has fascinated Vyoma, as she reflects in her senior project, *The Psychology of Siblings: A Study of Birth Order*. Vyoma hopes to better understand the overall sibling relationship, as well as her own relationship with her little sister. In the fall, she looks forward to majoring in bioengineering at the University of Maryland, College Park.

Janiece Jefferies has always been the one who needs lotion. Her mother would carry vaseline, hand lotion, scented lotion, and creams just for her. Dealing with jokes and comments, Janiece decided to see a dermatologist to understand her skin and to understand why her skin is “different” from others. After discovering she has an allergen that causes her skin to be dry, she became interested in discovering what really happens underneath the skin layer that everyone sees. This led her to her project, *The Shedding of Snake Skin: A Study of Dry Skin*. Although her project is about skin, she plans to major in environmental health at East Carolina University next fall.

Corey Jones grew up always wanting to do something in medical field. From being an anesthesiologist or a neurosurgeon, medicine and science have always intrigued him. His strong interest led to his research project, *Let’s Get Cracking: The Recent Advancements of Neurosurgery*. In his project, Corey explores the recent advancements in neurosurgery and how they have affected accuracy and precision. Throughout high school, Corey enjoyed being involved in the Pre-Medicine Society and he was Class President all four years. Next year, he will be majoring in Neuroscience on the Pre-Medicine track at the University of Miami.

Pranusha Kareddy has always been a fan of shopping. Whether it was a new pair of shoes or a Taco Bell burrito, she found most of her purchases to be unnecessary. She discovered that companies may have a part in how they get consumers interested in their product, beside the traditional marketing strategies. Her project, *Why Did I Buy That? A Study of Subliminal Marketing*, analyzes how companies appeal to the consumer’s subconscious mind. Through her research, she determines whether subliminal marketing practices are ethical and in what specific cases. In the future, Pranusha plans to double major in Operations Management and Business Analytics and Information Systems.
Nina Lau has always been interested in the sciences. During high school, after having taken AP Biology in sophomore year and AP Chemistry in junior year, she decided she would pursue a career in science. Her project, *The End of Aging: A Study of the Genetics of Anti-Aging Medicine*, explores genetic modification, an up-and-coming field in the world of science. She hopes to bring attention to this growing topic with her project as it will likely be a very important aspect of life in the near future. After graduation, she will attend University of Maryland Baltimore County as a chemical engineering major.

Hyeseung Lee has labeled herself in many ways since childhood. She has struggled with her identity, and continues to try to find her true self in the world. The emotions she has felt throughout her life led her to ponder just why people feel the emotions they do, think the way they do, and act the way they do. Her project, *The Manual to Diagnosing Mental Disorders*, reflects her determination to explore and learn more about the human mind. In the future, she intends to attend a university to major in psychology with the plans to go to medical school to become a psychiatrist.

LaTesjia Lorfils grew up being one of eleven children, all with different personalities. She has always been interested in a young children’s responses to specific situations as they grow and develop. Her personal observations about the differences among siblings led to her project, *The Effects of Breastfeeding on Children’s Behavior*. Next year LaTesjia plans on studying international law at college with hopes to study abroad during the next four years of her education.

Nicole Monninger has loved animals from a very young age. After visiting SeaWorld for a family vacation, she became interested in the issue of animal captivity. After watching the documentary *Blackfish* which exposes SeaWorld for their mistreatment of orca whales, she quickly became concerned about the negative effects of keeping animals in captivity and the ethical issues it raises. In her project, *Animals In Captivity*, Nicole examines the effects of keeping animals captive in facilities such as zoos, aquariums, and marine theme parks, and whether the practice should be continued. Next year, Nicole will be majoring in hospitality management at the University of South Carolina and plans to one day open her own animal-friendly hotel.
Sahiti Nadimpalli has always loved to work with kids in various after school and volunteer programs. She has also been intrigued by childhood innocence, and seeing that children are so impressionable at a young age, she wondered how one’s educational experiences during a child’s critical period may affect one’s future success and perception of the world in adolescence. Sahiti hopes to spread awareness of the importance of Early Childhood Education as well as how it can be improved in the future through her project, Pre-K to Prime: A Study of Early Childhood Education. She will be continuing her education next year at the University of Maryland College Park where she hopes to study Information Systems Business Analytics.

Danielle Nwogu has been an avid reader for the majority of her life, but she found a particular interest in graphic novels, including mangas and comics. She began to wonder; however, why students were often discouraged from reading graphic novels in school, and told instead to read only traditional novels. This questioning led to her project, Exploring the Value of Graphic Novels in Classrooms. She hopes that her research will encourage teachers and students to acknowledge the value of graphic novels and will be more willing to read them. Danielle plans to attend college where she will be working hard towards her goal of becoming a pediatric oncologist.

Deborah Nwogu has loved clothes and fashion since she was a little girl. As she grew older, she wondered why the more fashionable women’s apparel was also the more uncomfortable. Being the history nerd that she is, she decided to learn the history of fashion in hopes of finding an explanation. It was then that she learned that many painful fashion trends of the past were used as a means to increase a woman’s value as a prospective wife. Curious about how past trends related to modern fashion, Deborah pursued her project, Women’s Fashion as a Projection of Society’s View of Women. She hopes that by bringing awareness to the origin of certain fashion trends and styles that women will be able to feel comfortable wearing whatever they like without being pressured by society. Next year, Deborah hopes to study global economics and finance at Villanova University or American University.

Olivia Nwokoma was intrigued by the idea of full-body human cloning, and upon reading a recent tweet about a scientist’s plans to implement full-body human clones into society, her interest in how human clones would alter the societal dynamic was further fueled. In her project, Common Uniqueness: The Ethical Concerns and Potential Consequences of Full-Body Human Cloning, Olivia explores not only the benefits, consequences, and moral concerns surrounding the idea of full-body human clones, but also human population’s overall attitude towards the coexistence of natural and unnatural life forms in an already chaotic world. Olivia hopes to further her work in the scientific fields by majoring in astronomy in the future and one day working for NASA.
Julia Perez has been riding horses since she was seven years old. In 2012, her interest led her to Great and Small, a local therapeutic riding center. She volunteered there from 6th grade through 12th grades, accumulating over 1,000 service learning hours. She was interested in learning about how horses can be used as a form of therapy and uses her experience working in riding lessons for her project, *Hippotherapy: The Benefits of Horseback Riding for Children with Disabilities*. Volunteering with kids taught her that she wants to go into a career helping children and ultimately become a teacher and get her masters in education. She plans to continue her education at the California Polytechnic institute in San Luis Obispo and study biology as an undergraduate.

Jessica Saunders is the product of a Caucasian Jewish mother and a Black Christian father. It was not until she reached middle school that she realized that her mixed background was a significant part of her identity. On her journey to identify herself racially, Jessica wondered if other biracial individuals experienced similar situations leading to her project, *Too Black for the White Kids and Too White for the Black: A Study of Societal Difficulties for Biracial Teenagers*. Through her research Jessica explores the difficulties of racially identifying for biracial teenagers and how this compares to their monoracial counterparts. Next year, Jessica will be attending Temple University where she plans to major in Communications with Social Influence where she hopes to turn her interest in social justice and civil rights issues into a career.

Pamela Steimel loved coloring as a kid. During her sophomore year, she read a blog post that suggested printing out coloring pages and spending time coloring them as a way to relieve stress. She thought this was a good idea, and it proved to be effective when she was very stressed out, especially during her junior year. Soon after, she noticed that something called Adult Coloring Books were being sold in bookstores as a method for stress relief. This led her to investigate whether people thought coloring should just be for children, as well as whether stress relief could be relieved in teens in similar ways as adults through coloring in her project, *The Perception of Coloring: A Pigment of Your Imagination*. Pamela hopes that the results of her study inspire more teens and adults to color to relieve their stress. She plans to study psychology and neuroscience in college.

Alisha Varma has always had a strong interest in helping people. Her curiosity increased when she had watched the documentary, *Remote Area Medical*, during her sophomore year of high school. While watching the documentary, she realized that many people here in the United States are in desperate need of medical services. Her project, *The Lack of Medical Access: A Comparison of Low-Income Rural and Urban Communities*, compares the barriers to medical access for low-income urban and rural communities and possible solutions, specifically for communities in the D.C. and Maryland region. In the fall, Alisha plans on studying Computer Science and pre-medical sciences at the University of Maryland, College Park.
Emma Walters has been interested in helping people for as long as she can remember. She learned that life’s greatest challenges bring about tremendous opportunities to learn and grow. Last year, Emma fell into the grips of a deadly prescription drug addiction that almost claimed her life. After attending Caron Treatment Center, she found that her greatest passion came to life through supporting those in addiction recovery. Emma’s battle with drug abuse led her to her project, *Challenging Rock Bottom: A Study of the Biology and Psychology of Addiction*. She plans to earn her associate’s degree at Montgomery College before earning her bachelor’s degree in psychology at a four-year university. She plans to enter the field of psychotherapy and counseling, with a primary focus in recovery from substance abuse disorder.

Jennifer Wang began to notice that all the people around her habitually respond to the question “how are you?” by going on about their busy schedules as if they were bragging. More and more, she began to see this pervasive trend: people seeming busy to garner respect. She noticed it when her friends at school mentioned how they “got no sleep” the night prior due to homework and or even scrolling on social media. Jennifer realized that this phenomenon of idealizing busy people and trying to seem busy would be the perfect topic for her project, *The Idealization of Being Busy*. Jennifer plans to major in finance and philosophy when she heads off to college next year.