

Sonia He

Objective

To be accepted as the student member of the Howard County Environmental Sustainability Board.

Education

River Hill High School 2014-Present
12101 Clarksville Pike, Clarksville, MD 21029 · (410) 313-7120 GPA: 4.0

University of Maryland, College Park, MD Summer 2015
PSYC 221 - Young Scholars Program

Leadership

Co-President, Founder - River Hill High School Green Initiative 2016-Present

- ❖ Organize and supervise the green initiatives of River Hill High School and the surrounding community
- ❖ Revitalize a 2,000 sq. ft. rain garden and butterfly garden on school grounds for the purpose of filtering runoff water
- ❖ Organize tree planting event on school campus
- ❖ Analyze school energy bills to determine energy conservation measures
- ❖ Distribute environmental knowledge survey to student body
- ❖ Conduct monthly meetings with the school administration and teachers
- ❖ Write multiple grants in order to secure funds for the projects enacted

Executive Committee - Student Learning Conference 2015-2016

- ❖ Organized the 24th Howard County G/T Student Learning Conference, showcasing research projects conducted by high school students

Publicity Secretary - Class of 2018 Student Government Association 2014-2015

- ❖ Boosted membership and club events through promotional efforts
- ❖ Maintained correspondence with members via email and club meetings
- ❖ Organized the CandyGrams Fundraiser and Inspirational Note Project
- ❖ Composed the Freshman Slideshow, broadcasting student activity throughout the year

Honors and Awards

National Honor Society 2016-Present

Principal's Honor Roll Quarterly Achievements (10) 2014-Present

French National Honor Society

National French Exam Bronze Medalist 2016

Academic Excellence in G/T Independent Research 2016

Invited Presenter at 24th Annual Howard County Student Learning Conference April 2016

4th Place Global Business Maryland FBLA State Leadership Conference April 2015

Research Experience

Research Intern - Uniformed Services University of the Health Sciences

Summer 2016

Under the Guidance of Markos Koutmos, PhD

- ❖ Study effects of point mutations on the binding of Human Ribonuclease P to its substrate using various lab techniques: Mutagenesis, protein purification, binding and cleavage assays
- ❖ Create a research poster and presented findings to scientists in the field

Perfect Imperfections: Handmade vs. Machine-made Recycling Signs

2015-2016

Research Objective: To compare the effectiveness of hand-made signs vs. machine-made signs in encouraging students to recycle in a cafeteria-setting

- ❖ Gather information by reading articles from scholarly journals and conducting interviews with professionals
- ❖ Administer a behavioral experiment in the cafeterias of two local middle schools by weighing the recycling and comparing the waste diversion rates
- ❖ Create and distributed post-intervention survey to 300 students
- ❖ Compile results into a synthesis paper
- ❖ Present results to middle schools and the Howard County Office of Sustainability

Community Outreach

Member - River Hill Man in the Mirror

2014-Present

- ❖ Participate in service projects that help those in need: homeless families at Grassroots Crisis Intervention Center, impoverished children in Africa, deployed troops, patients at Mt. Sinai Hospital

Volunteer - University of Maryland Medical Center

2015-2016

- ❖ Assist with patient care
- ❖ Serve as a liaison between nurses and patients and between various hospital departments
- ❖ Stock patient rooms with appropriate materials to foster a sanitary environment
- ❖ Distribute water and other nourishment items to patients

Volunteer - "Read to Me" Program - Grassroots Crisis Intervention

2015

- ❖ Read to homeless children to inspire academic interest at a young age and provide their parents with leisure time

Junior Counselor - Howard County Recreation and Parks

Summer 2015

Volunteered as a camp counselor for various youth camps

- ❖ Responsible for 30 children, leading arts and cooking projects and skill development activities
- ❖ Work with camp counselors and parents of the children to ensure a seamless camper experience

References

Available Upon Request