

Kelsey Ritter

GPA: 4.0 (Unweighted), 5.0 (Quarterly Weighted)

Relevant Coursework: AP Physics C: Mechanics, AP Calculus AB, AP Computer Science Principles, AP Spanish V, AP U.S. Government and Politics

RESEARCH & INTERNSHIPS

Microbial Fuel Cell (MFC) Bio-Energy Research: From Waste to Energy — *Independent Research, Fall 2025*

- Investigate MFC technology for sustainable CO₂ capture and waste-to-energy conversion, involving 40+ academic report reviews, synthesizing novel pathways for bioreactor optimization, and conducting interviews with field experts to secure a formal research mentorship

Environmental Journalism Intern — *EarthTalk Q&A Column, E-The Environmental Magazine, 2024-Present*

- Publishing weekly sustainability columns to a 6 million+ readership across 1000+ media outlets, researching green living & climate issues
- Mentored by editor-in-chief Roddy Scheer

LEADERSHIP & ACTIVISM

Youth Climate Institute (YCI)—*Certified Ambassador & Leadership Council, 2023–Present*

- Leader in the 20th NOAA Watershed Anniversary project with a field trip biology group, reporting in a county-wide data presentation
- Spearheaded schoolwide sustainability initiatives: cafeteria share table (reducing waste) & "Shop n' Swap" clothing drive (combating fast-fashion climate impact) and working to found a campaign targeting the negative effects of fast fashion and overconsumption on waterways
- Selected as the keynote speaker for the graduate class of Eastern University of Michigan by Professor Zach Krauss, to present work with YCI

Howard County Association of Student Councils (HCASC)—*Environmental Affairs Committee Chair & Appointed Staff Member, 2024–Present*

- Liaison between students and the local government to promote environmental initiatives
- Meet with student and peer environmentalists to organize a workshop at local libraries, bridging the gap between youth and climate action

Atholton Green Team — *Climate justice Leader, 2024–Present*

- Facilitate school climate action plans; promote environmental justice and awareness, lead recycling drive, plant native flowers in the courtyard

Electrify HoCo — *Advocate, 2023–2024*

- Advocate for electrification, energy conservation, & solar readiness, delivering testimony to successfully support Better Buildings Act of 2025

STEM & TECH EXPERIENCE

Johns Hopkins Applied Physics Laboratory: MESA (Math, Engineering, Science Achievement) — *2024–Present*

- 1st Place, Regional Champion – 2025 Planetary Landing Challenge; State Finalist
- Designed and tested expanding structures for use in space landings, and presented a prototype at a regional and statewide convention

PROFESSIONAL EXPERIENCE

Merriweather Post Pavilion — *Food Prep & Service Associate, May 2024–Present*

- Serve 15,000+ guests per event in a fast-paced concert environment; multitask under pressure while catering to the needs of customers

Private Childcare Provider — *Babysitter, 2022–Present*

- Provide care to 10+ local families consistently; manage schedules, activities, and supervision for children ages 2-10, working late hours

ATHLETICS & MENTORSHIP

High School Varsity Field Hockey & Alpha: Club Team (Year-Round) — *Defender, 2023–Present*

- Team MVP (2023); 8 years of aggregate experience; Atholton booster clinic summer volunteer/coach, and UMD summer camp attendee

Varsity Allied Bowling — *Team Lead, Winter 2024 - Present*

- Guide and assist disabled teammates during biweekly practices, mentoring people with disabilities or impairments, fostering a supportive team

HONORS & AWARDS

- **MESA 2025 Regional Champion & State Finalist: 1st Place in Howard County for Planetary Landers (2025)**
- **NOAA Watershed Leadership Award (2024)**
- **Atholton Varsity Field Hockey MVP (2023)**
- **1st Place Award Recipient: Yom HaShoah 2025 Artwork Contest (2025)**
- **National Spanish Honor Society Inductee: Honoraria Español (2024)**
- **Technical Skills:** JavaScript, Python, R, Bibliometric Analysis, Scientific Writing
- **Languages:** Proficient in Spanish
- **Artistic Interests:** Piano (10+ years), Visual Arts, Creative Writing