

I'm John Crosby, a graduate of the University of Nevada, Reno, and a current second year MS student at UNR studying mechanical engineering. My research employs atomistic simulation methods to study thermal transport at the nanoscale in graphene and graphite to improve thermal management technologies with a wide array of thermal engineering applications. My current project, *Designing Graphite-Enhanced Wax Phase Change Nanocomposites for NASA's Space Missions*, seeks to leverage the exceptional thermal transport properties of graphite to enhance wax-based phase change materials tailored for NASA's thermal management needs in extreme space environments. My previous work includes investigating ballistic thermal transport in multilayer graphitic structures, which was supported by the NASA NVSGC undergraduate research scholarship, as well as investigations into the effect of high pressure and surface chemistry on thermal transport in graphene and graphite.

After graduating with my MS in mechanical engineering, I hope to continue as a PhD student in the same subject, where I plan to expand my current research into the field of nanofluids and their thermal engineering applications. After graduating, I hope to work in the research and development of transformative thermal management technologies, with applications in fields such as supercomputing, clean energy generation, and aerospace.