



The CoreAFM by Nanosurf (<https://www.nanosurf.com/en/products/coreafm-the-essence-of-atomic-force-microscopy>): “The CoreAFM is the result of intelligently combining the core components of AFM to achieve maximum versatility and user-friendliness. Due to this fundamental design approach, the CoreAFM is equipped to perform AFM at its best. The fusion of a modern flexure-guided scanner, XYZ sample stage, camera, active vibration isolation table, and airflow shielding in a single all-in-one unit results in a complete AFM system with an unparalleled compact footprint. The system comes with a fully digital 24-bit controller developed specifically for the CoreAFM scanhead. All the essential functions of modern AFM are integral components of the CoreAFM system; all you need to do to take the CoreAFM into operation is connect the controller, and plug in power and USB.”

With the support of the Physics Department behind me, and filling in at a Chairs & Directors meeting for the Physics Department Chair who was incapacitated at the time, I successfully advocated for the acquisition of a research grade Atomic Force Microscope (AFM) that is portable and that can be easily transported and taken to local high schools for recruiting and outreach events. At the meeting it was agreed upon that the College of Science and Physics department would come together to acquire the instrumentation with the Physics Department paying 20% of the total costs. I completed all necessary sole source documentation needed for the acquisition of the instrument by the Purchasing Office, including providing quotes from four other competitors, negotiating prices with companies, and writing the department sole source letter to be signed by the department chair. The instrument made its debut during the spring 2019 semester. Also, I organized a company supported training session for all faculty and students within the Physics Department wanting to use the instrument in Spring 2019. I am responsible for training all new users, faculty and students, and have been the official faculty caretaker of the instrument since its arrival in Spring 2019. This instrument has been used for recruiting and is heavily used by students working in my laboratory; **it is open for use by faculty/students in the Physics Department and College of Science who receive proper training.**