Optical traps are important tools for studies in many fields including biophysics, medicine, chemistry, and more. This study explains the physics of optical trapping, designs and design constraints, specific applications of optical traps, and potential for new implementations. Once the phenomenon is understood, it will be straightforward to visualize the various possible designs depending on the intended use for the trap. There are many different ways in which an optical trap can be built and used; one example that will be discussed thoroughly is bioanalysis using optical traps, which allows for the comparison of genetically identical cells. With invention comes the potential for innovation and improvement, especially as technology progresses; therefore, the study will be finalized with a brief discussion of the future of optical traps.