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Remember high school biology and that tabletop microscope? A much more powerful version exists today. On HEALTHLINE, here's Dr. Greg Highison of the University of Nevada School of Medicine:

"Most of what we know today about how cells work comes from early studies done with a light microscope. But light microscopy has its limitations. It only enables us to look at groups of cells which make up a specific organ like the lungs or the heart. However, with the recent development of the electron microscope -- which magnifies up to six million times -- we can look at single cells and at individual cell surfaces. The cell surface is very important because it has been shown to regulate and to a certain extent control what's going on inside the cell. In my lab, we are using sound waves to expose cell surfaces that have never been examined before. From what we learn of these normal cell surfaces, we can then begin to understand and possibly identify pre-disease states."

This is HEALTHLINE from the University of Nevada School of Medicine.