

## **Correlative microscopy techniques for biomedical applications**

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The capability of resolving small structures with optical microscopy is limited by diffraction. Due to this limitation, several optical imaging methods have been developed, including super-resolution fluorescence microscopy, which allows to see objects down to 10nm in size. On the other hand, scanning probe microscopies allow a detailed imaging of the surface of a sample with sub nanometer resolution. Being able to combine different techniques to "see" on a nano-metric scale, will help unravelling the interaction phenomena between molecules and materials. In this communication I will present two examples of how the combination of confocal fluorescence microscopy and atomic force microscopy (AFM) can provide a detailed overview of the interaction phenomena in biological materials at the nanoscale [1-2]. This study emphasizes how using advanced microscopy methods can be a powerful aid in the development of new disease treatment techniques.