Fluorescence Nanoimaging (AFM) **Nanocytomechanics (AFM) Elasticity of cell wall and Adhesion energy** 9 Specificity = 98% Specificity = 83% **SV-HUC-1** 9 Sensitivity= 93% Sensitivity= 97% **Normal cells** , (kPa) 30 20 10 MGH-U1 **Cancer cells** HUC MGH HUC MGH Nanomechanics (AFM) + Spectroscopy (Raman) ⇒ discriminates cancer from normal cells with high specificity and sensitivity for early diagnosis of cancer

Modulated Raman Spectroscopy

