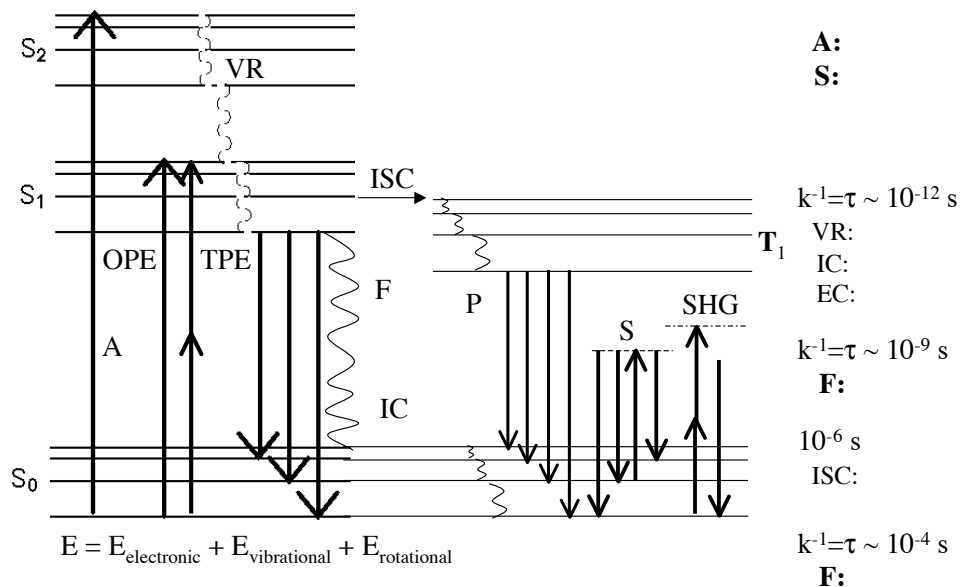
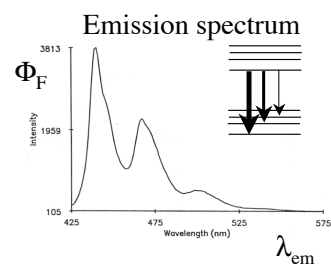
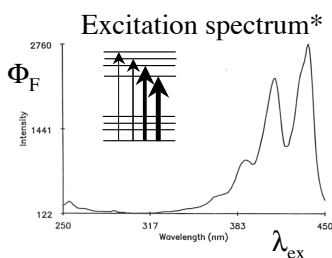
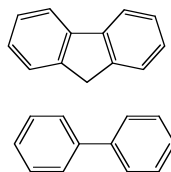


Photoinduced Processes Revisited

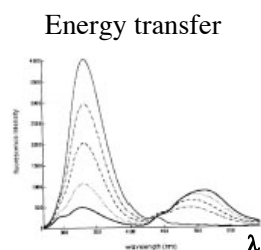
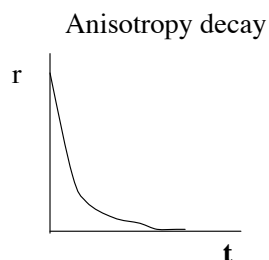
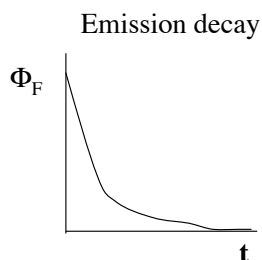


Fluorescence Spectroscopy

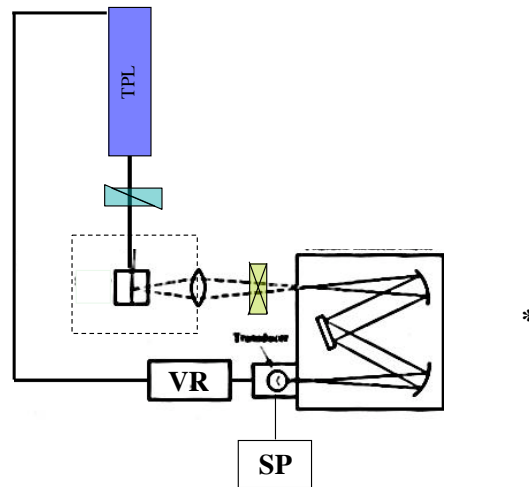
A fluorophore is characterized by several fluorescence properties -



$$\Phi_F =$$

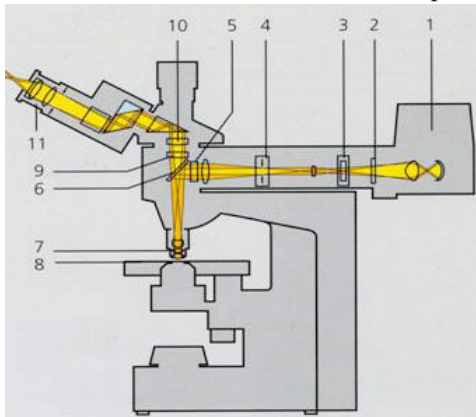


Fluorescence Spectrometer

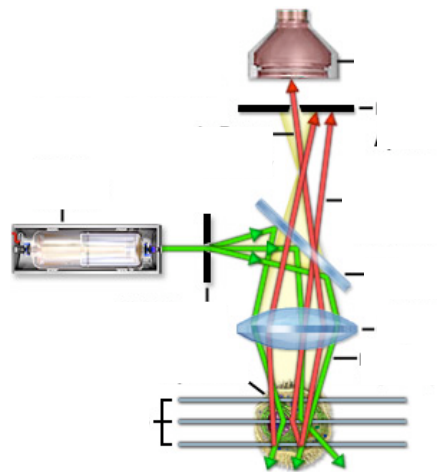


Fluorescence Microscopes

Conventional Fluorescence Microscope



Confocal Fluorescence Microscope

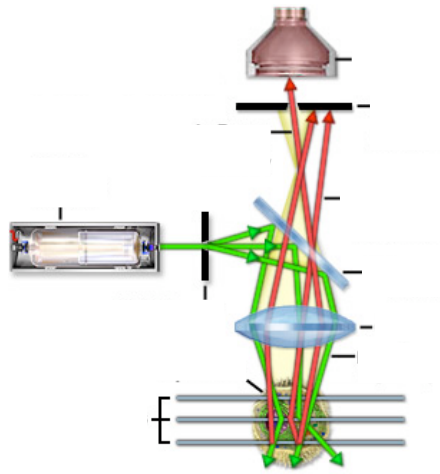


http://www.hi.helsinki.fi/amu/AMU%20Cf_tut/cf_tut_part1-1.htm

<http://www.microscopyu.com/articles/confocal/confocalintrobasics.html>

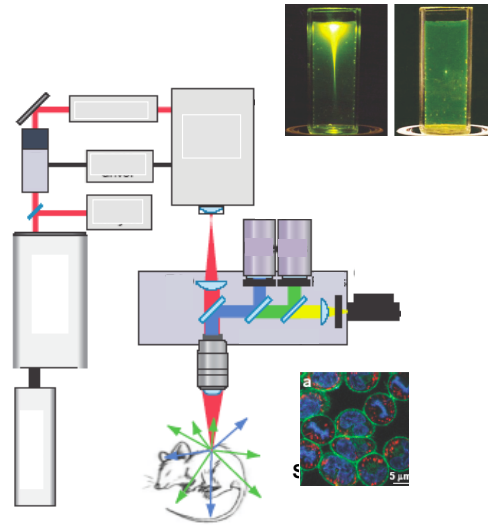
High Resolution Imaging

Confocal Microscopy



<http://www.microscopyu.com/articles/confocal/confocalintrobasics.html>

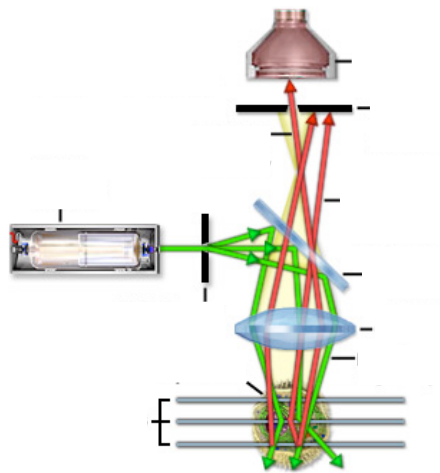
TwoPhoton μ Scopy (usu fl)



Zipfel, *et al.*, Nature Biotech

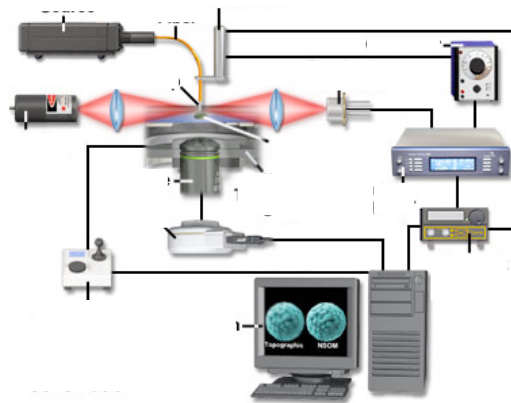
High Resolution Imaging

Confocal Microscopy (usu fl)



<http://www.microscopyu.com/articles/confocal/confocalintrobasics.html>

Near field Optical μ Scopy (usu fl)



<http://www.olympusmicro.com/primer/techniques/nearfield/nearfieldintro.html>

Paper 2: Electronic Spec.

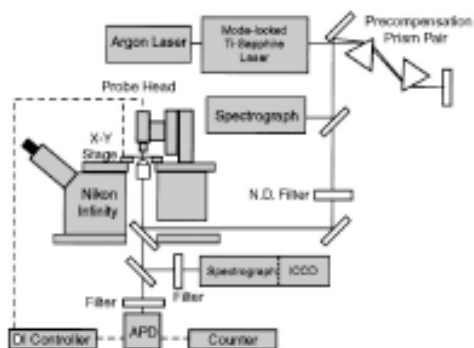
Sanchez, E.J., L. Novotny, and X.S. Xie, Near-field fluorescence microscopy based on two-photon excitation with metal tips. *Physical Review Letters* **1999**, 82(20), 4014-4017

Objectives

Approach

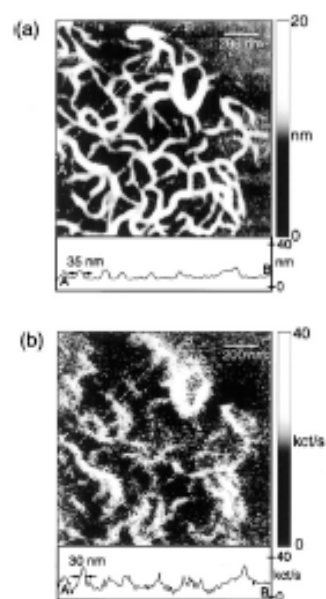
Instrumentation

Fig. 1



Results

Fig. 3



Results

Fig. 4

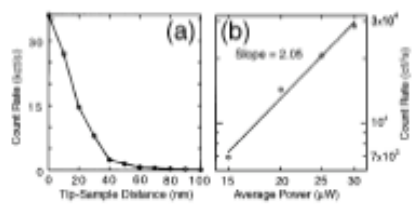
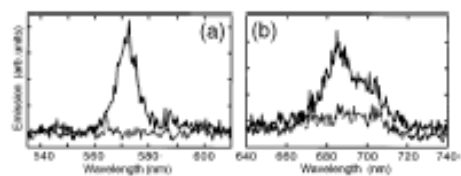
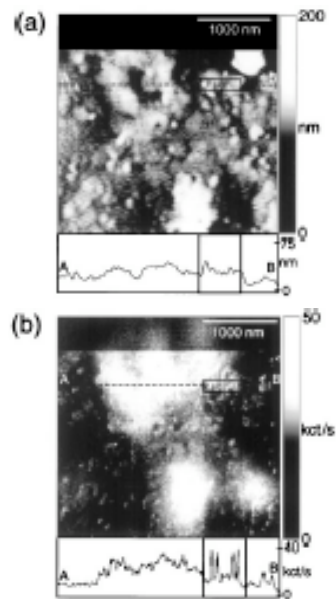


Fig. 5



Results

Fig. 6



Conclusions

Authors Conclusions

Critique