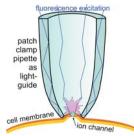
# *i*Diagnostics (*i*TIRF Arrays) **TIRF Spectroscopy TIRF Microscopy**



# **TIRF Labs**

Total Internal Reflection Fluorescence

#### Single ion Channel Single Molecule Detection







Patch clamp technique combined with fluorescence single molecule detection

### *i*Diagnostics

cellphone based molecular diagnostics



We extended TIRF into 3<sup>rd</sup> dimension and invented iDiagnostics Now you can hold a hospital laboratory in the palm of your hand



Modular TIRF systems include:

- Fluorescence microscope
- Ig-, p-, or/and o-TIRF microscopy flow systems
- Low light EM CCD camera
- Multi-color computer-controlled illuminator
- Computer-controlled fluidics system
- Potentiostat and/or wave-function generator
- Software for instrument control and data analysis

## Lightguide-, Prism-, and Objective-based TIRF Microscopy

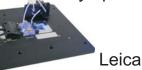
- Use YOUR microscope and YOUR objectives
- Ig-and p-TIRF work with dry, water-, and oil-imm. lenses
- Use Xenon lamp, LED, or laser illuminators
- Open perfusion or closed flow chambers
- Install/uninstall in less than one minute
- Optional electrochemical control and computer-controlled fluidics







**Olympus** 









- **TIRF Accessory** transforms your spectrofluorometer into a super-sensitive TIRF biosensor instrument
- Optional electrochemical, DEP and temperature control
- SmartFlow Fluidic System allows to run unattended TIRF experiments, measure sensograms to derive k<sub>an</sub> and k<sub>aff</sub>
- Novel microfluidics allows for handling nanoliter volumes



