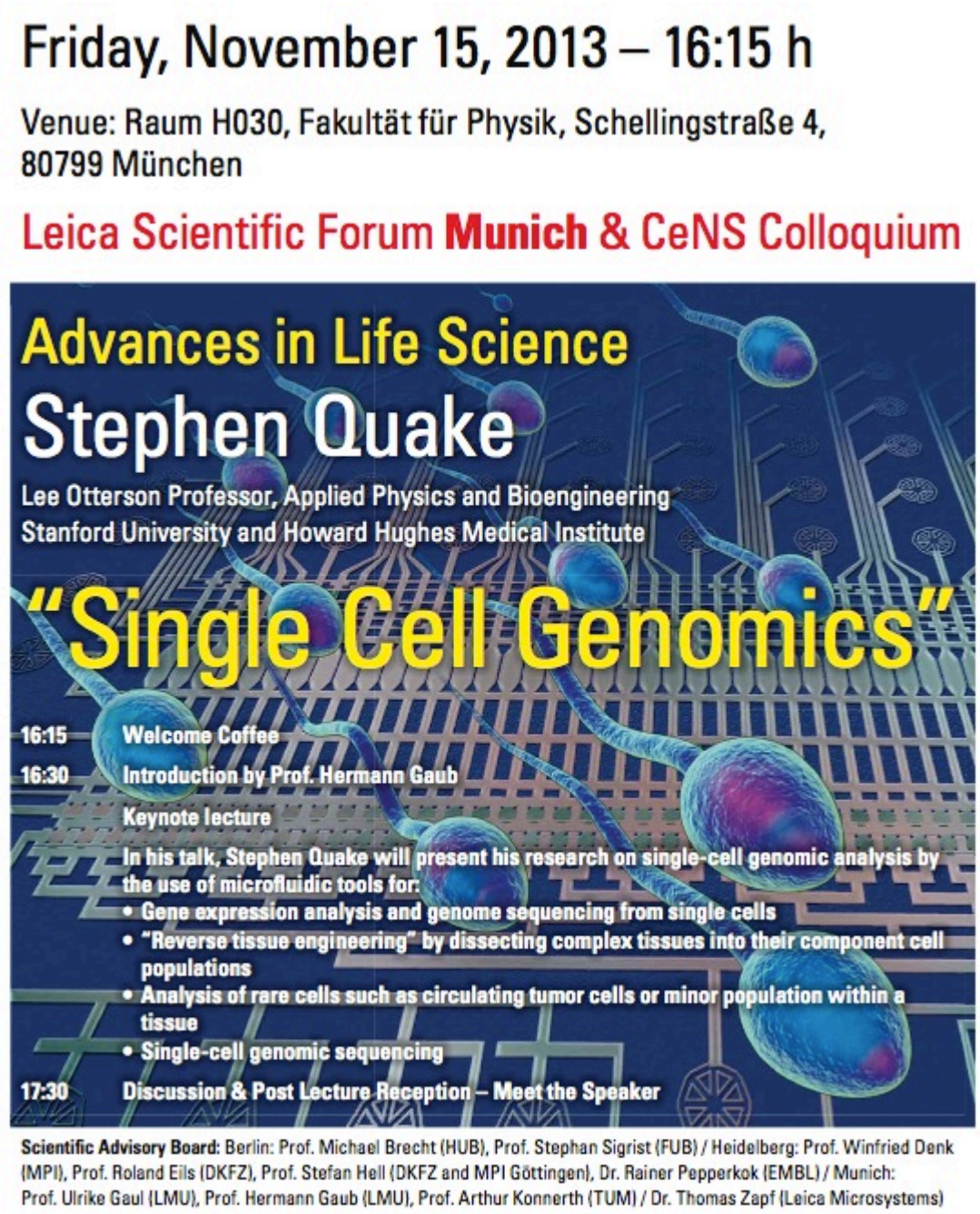
GENETICS

SINGLE CELL GENOMICS UPDATE

16.11.2013



I have been attending yesterday an interesting talk of Stephen Quake. Yes, this was a Leica sponsored event, but not about photography, it was about single cell genomics. I was always interested in that field and quite impressed by the Quake approach. These biology-baptized mathematicians and physicists can easily compete with whole research centers and a 100fold head count.

The commercial spin-off is fluidigm.com while his main research is not only sequencing of the fastest moving bacterium but also an estimate of mutations in his own haploid (sperm) genomes, single cell expression along with single cell methylation patterns.

One of the really exciting questions is the mismatch of single cell RNA and protein content where I need to go for some papers that I wasn't aware off. Another excellent idea is the clustering of single cell expression profiles. This is already leading to new classes of cells and a probably much more valid approach than using random? surface markers as immunologists usually do, yea, yea.