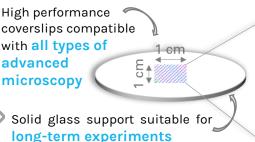
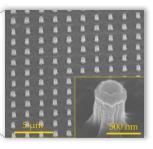
FakirSlide

Explore the effects of topological cues on cell membranes

FakirSlides are nanostructured glass coverslips designed for inducing controlled and repeated deformations on cells or planar model membranes.







Highly reproducible nanostructures, thoroughly checked by AFM microscopy

- Live imaging
- **Immunostaining**
- Migration assays
- Supported lipid bilayers

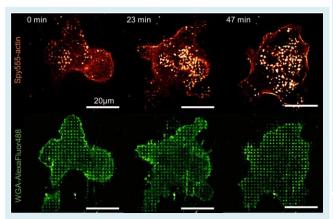
Our shape catalog

Unlock novel insights! Based on a newly-developed flexible nanostructuration technique, FakirSlide offers a wide panel of structures of various sizes and shapes to expand your research in mecanobiology:

Square pillars Round pillars Nano-domes Nano-cones

Results

More shapes to come: hexagonal pillars, nano-ridges, nano-cones... Stay tuned!



Live imaging of plasma membrane and actin dynamics of cells seeded on FakirSlide large round pillars

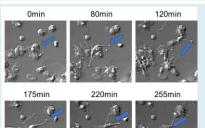
Cytoskeleton (spy555-actin, orange) and plasma membrane dynamics (WGA-AlexaFluor488, green) of seeded moDC imaged on a spinning disk microscope (Nikon Ti Inscoper CSU-X1, objective 100X Plan Apo lambda 1.45 NA DT 0.13mm oil). Raissa Rathar - IRIM Montpellier, 2022

[1] El Alaoui F. et al, Structure and dynamics of FCHo2 docking on membranes. eLife 2022;11:e73156 doi: 10.7554/eLife.73156

Supported lipid bilayers Purified proteins (FCHo2-AlexaFluor647) (OG-DHPE)

Organization of purified recombinant F-BAR protein FCHo2 on FakirSlide small nano-domes coated with isolated membranes

Airyscan sub-diffraction microscopy images of FakirSlide surface functionalized with supported-lipid bilayers (doped with 0.2% of OG-DHPE, green) and the recombinant protein FCHo2 labeled with AF647 (1 μM, magenta). Confocal/airyscan Zeiss LSM880 microscope (objective 63X Plan Apo Oil 1.4NA) [1]



FakirSlide round pillars support membrane projections during dendritic cell migration

moDCs were seeded on large round pillars and imaged on an inversed Olympus IX83 video-microscope (transmitted light, objective 40 X objective 40x LUCPLFLN 0,6NA RC2) 0.6 NA. Blue arrows point to membrane projections propelled during the migration of moDC cells. Raissa Rathar - IRIM Montpellier, 2021

