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UNIVERSITÄT BERN

Seminar über Biomedizinische Photonik

Referent/in: Dr. Martin Schneiter, Department Biomedical Photonics, IAP, University of Bern

Titel: Towards quantitatively identifying impaired mucociliary motion in respiratory cell cultures grown at the air-liquid interface

The inner surface of our airways is lined by a mucous fluid film, which is permanently propelled in the direction of the throat. The propulsion of this airway surface liquid is provided by the collectively coordinated oscillatory motion of a myriad of subjacent slender organelles called cilia. Inhaled harmful particles get entrapped by the mucus layer and subsequently transported in the direction of the throat, where they finally get swallowed. Thereby, mucociliary clearance constitutes our airway's primary defense mechanism by protecting our airways from inhaled toxic and infectious agents. In our seminar, I will provide an introductory overview on this highly fascinating biophysical transport mechanism and talk about our ongoing interdisciplinary research project, which is aimed at the quantitative identification of impaired collective mucociliary motion in cultured respiratory cells.

Zeit: Mittwoch, 22. Dezember 2021, 10:15

Ort: Room A97, ExWi, Sidlerstrasse 5, 3012 Bern

Zoom-Meeting beitreten
https://ethz.zoom.us/j/64851454165