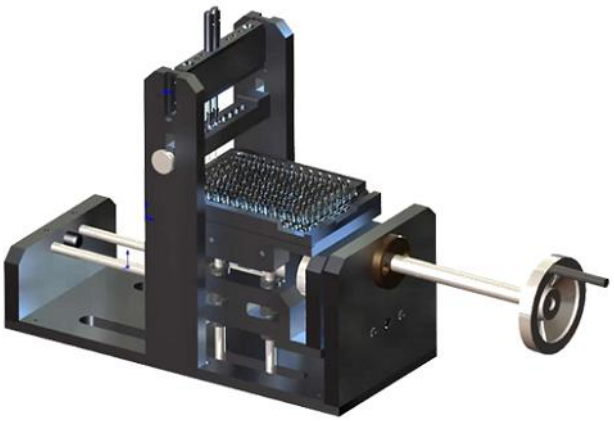
Scientific Instruments

Peira WoundScratcher

PROBLEM



The in vitro scratch assay is a straightforward and economical method for studying cell migration. The method is based on the observation that after creation of a so called "scratch", that is a new artificial gap on a confluent cell monolayer, the cells on the edge of the newly created gap will move towards the opening to close the "scratch" until new cell-cell contacts are established.
Existing techniques have shown a lack of consistency in generating those scratches. Gaps have traditionally been made either with a hand tool or by specially developed but abruptly moving apparatus, and both techniques disturb the cell monolayers.

FEATURE

The WoundScratcher was designed, developed and manufactured by Peira in close cooperation with researchers facing the problems mentioned above. The uniqueness of the instrument lies in the smooth and consistent two dimensional movement produced by a rotatative drive system. No abrupt or uncontrolled movements disturb the process.
Turning the wheel on the instrument combines an eccentric motion with a lateral spiral drive, resulting in a controlled tooth shaped movement of the well plate carrying the samples. This creates a gap in each of the 8 wells for a single turn cycle (versus 4 in conventional tools).

BENEFIT

As a first step towards automation and standardization of in vitro scratch experiments the WoundScratcher enhances productivity by doubling the capacity per time unit over existing systems and improves quality through uniformity and consistency of the scratch.

TECHNICAL DATA

Dimensions (LxWxH):	530 x 164 x 297 mm
Weight:	5 kg
Weight Scratch Pin:	105 g
Number of Pins:	4 or 8
Speed:	Manual
CE:	The WoundScratcher fully complies with all CE guidelines relative to mechanical compatibility.