Tissue Portable Arrayer System

Tissue micro-arrays (TMA)

Tissue micro-arrays (TMA) allow examining large pluralities of tissues with an economical use of material and technical resources. From a single donor block with a large number of tissue portions, e.g., 1000 biopsy samples, multiple, e.g., 200 identical tissue micro-arrays can be prepared, ensuring experimental uniformity.





Motivation

To-date, TMA technology has been based on two extremes. On the one hand, there are sophisticated tissue arrayers, which, at a significant cost, provide bulky machinery to perform a relatively easy task. On the other end of the spectrum, there are simple, non-durable needle devices lacking accuracy and robustness.

Electrical & Computer ENGINEERING



Project Objectives

This project, currently in progress, seeks to provide a range of portable, precision, easyto-use and low-cost instruments for forming a tissue array efficiently. This allows closer interaction of various research institutes and hospitals, enabling a better integrated approach towards discovery of the biological and clinical significance of established biomarkers.

"Precision instruments and control advancing medical research"

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