

SEMMELWEIS

INNOVATION CENTER



BACKGROUND

The Molecular Oncohematology Laboratory at the 1st Department of Pathology and Experimental Cancer Research has a long tradition in molecular studies and the institute is well-equipped with cutting edge molecular diagnostic facilities.

The NanoString GeoMx® DSP system offers versatile, established workflows for the spatial characterization of RNA and/or protein expression. The workflow enables researchers to investigate RNA expression in formalin-fixed, paraffinembedded tissue slides up to the wholetranscriptome level and offers protein expression assays which can be combined to investigate 100's of protein targets playing a role in immune regulation, tumor microenvironment, etc. The combination of the NanoString GeoMx® DSP system with nextgeneration sequencing or nCounter readout (both available at the 1st Department of Pathology and Experimental Cancer Research) provides reliable output from all kind of experiments.

NANOSTRING GEOMX® DIGITAL SPATIAL PROFILER

The NanoString GeoMx® Digital Spatial Profiler system provides the opportunity for researchers to investigate RNA and/or protein expression in situ in connection with tissue morphology at the 1st Department of Pathology and Experimental Cancer Research.

APPLICATION/SERVICES

NanoString GeoMx® DSP experiment projects with the reagent kits available from the manufacturer.

- NanoString GeoMx® DSP tissue slide preparation and region-of-interest selection for RNA targets
- NanoString GeoMx® DSP tissue slide preparation and region-of-interest selection for protein targets
- Readout with the NanoString nCounter system or next-generation sequencing (Illumina MiSeq or NextSeq2000)
- Downstream data analysis using the on-board software of the GeoMx® DSP system
- Remote Desktop approaches can be used to instrument the GeoMx platform in order to afford ROI selection and data analysis for external researchers.

• For more information visit the following website: <u>https://www.nanostring.com/products/geomx-</u> <u>digital-spatial-profiler/</u>



CONTACT

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SPECIAL EQUIPMENT

NanoString GeoMx® Digital Spatial Profiler

Year of commissioning: 2021

SCIENTIFIC CONTACT

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