



BROKERAGE FOR HEALTH

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Flash Presentation:
Session 2



Lab-on-a-Disc System for Point-of-Use Applications

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Project idea/ Company expertise

- **FPC@DCU offers its expertise in the design, development and manufacture of microfluidic systems for bioanalytical testing at the point-of-use**
- **We can be your partner to automate and prepare for commercialisation your manual laboratory developed processes for sample preparation and/or assay implementation for Small molecules, Immunoassays, Nucleic Acid Detection, Biomarker Detection and Cell based Assays.**
- **We offer both instrument development and also microfluidic cartridge development.**
- **Our unique advantage**
 - **IP in our patented valving technology enables us to achieve a higher level of integration and implement more complex and demanding assays on the cartridge than other platforms.**
 - **Our design for manufacturing platform enables our designs to be mass manufactured using industry standard technologies such as injection moulding**
- **The analyte sample may be liquid such as whole blood, plasma, saliva, urine or other matrices such as food or environmental materials (may require an initial off-cartridge sample prep process).**



Topic

Any topic/project where the implementation of an automated point-of-use sample preparation or assay based on an existing or to be developed manual or laboratory based protocol would add value in deploying the assay.

Examples may include but are not limited to:

SC1-BHC-28-2019: The Human Exposome Project: a toolbox for assessing and addressing the impact of environment on health.

SC1-BHC-25-2019: Demonstration pilots for implementation of personalised medicine in healthcare

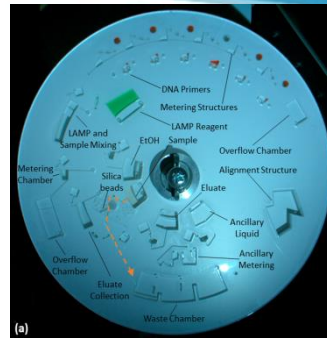
SC1-BHC-10-2019: Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis

SC1-BHC-30-2019: Towards risk-based screening strategies for non-communicable diseases

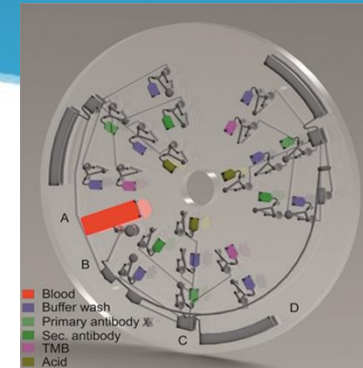
Application demonstrations



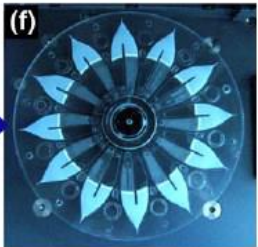
Milk quality and
Disease
detection



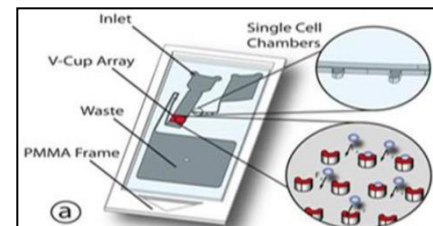
Nucleic Acid Purification
and Detection



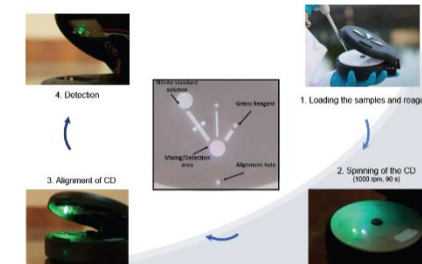
Multiplexed detection of
Prostate Cancer Biomarkers



Small Molecule assays (Liver Assay
Panel etc.)



Single cell analysis



Nitrate detection for
water contamination

Partners:

Fraunhofer Institute of Production Technology – Aachen, Germany – Upscaling microfluidic cartridge manufacture

Mergon International – Ireland – Microfluidic cartridge mass manufacture

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Contact details

Thank you!

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FPC@DCU is a Research Institute based at Dublin City University,
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