

Biomedical Research Centre

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Q-TOF-MS with electrospray and imaging MALDI options along with LC and associated equipment for proteomic analysis

Single cell recording electrophysiology laboratory

Real time PCR

Flow cytometer with cell sorter

Cell culture facilities for bacterial and mammalian cells

Confocal microscopy suite

Peptide synthesiser and sequencer

DNA microarray scanner

Biacore facility

AKTA FPLC (fast protein liquid chromatography) – used to separate or purify proteins and other polymers from complex mixtures

MALDI (matrix assisted laser desorption ionisation) analysis of biomolecules (biopolymers such as proteins, peptides and sugars) and large organic molecules (such as polymers, dendrimers and other macromolecules)

ESI (electrospray ionisation) useful in producing ions from macromolecules

SYNAPT G2 – ESI / MALDI ion mobility spectrometry mass spectrometry – characterisation of molecules from 10Da to 100,000Da. Mass, cross sectional area, separations.

AB Sciex Voyager – MALDI– Mass information from surfaces, biological samples, proteomics, complex solutions.

LC-Q – High pressure liquid chromatography coupled to a mass spectrometer. Used for the separation of molecules and mass analysis.

GC-MS – Gas chromatography–mass spectrometry substance identification

NMR – Nuclear Magnetic Resonance – small molecular structure and dynamics.

Autoclaves – High pressure and temperature environments normally used for sterilisation.