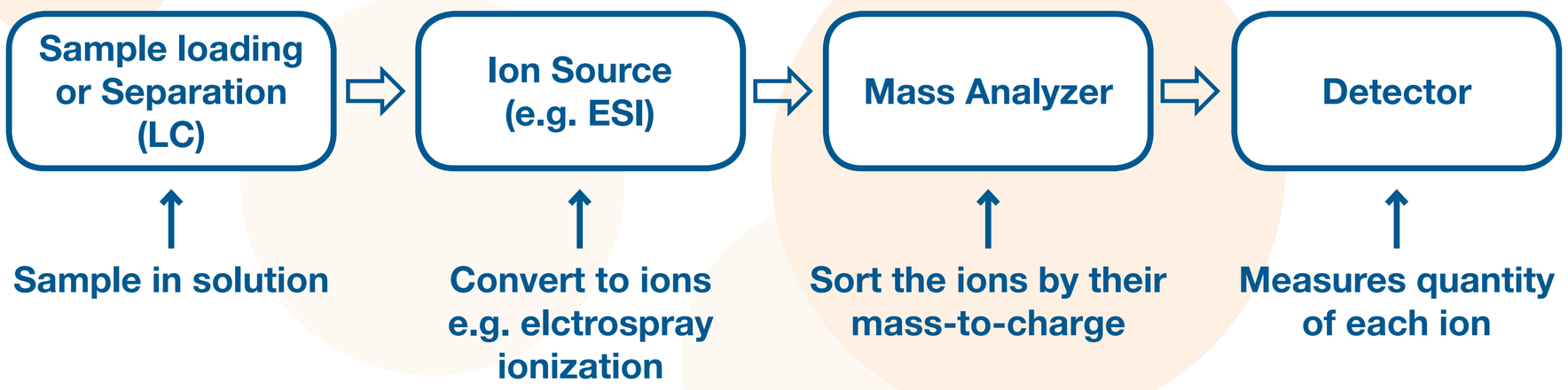
Mass Spectrometry Core

The mass spectrometry core provides collaboration, consultation and equipment to research investigators throughout our Research Institute and other research organizations. With cutting-edge instrumentation and methods, including close collaborations with clinicians through translational research, the mass spectrometry core is designed to meet the growing needs of investigators for development of analytical methods for detection and quantification of biomarkers in plasma, tissue and other biological materials like blood. **Mass spectrometry** is an analytical technique that measures the mass-to-charge ratio (m/z) (molecular mass) of charged particles and can be divided into three fundamental parts, namely the ionization source, the analyzer and the detector.



The mass spectrometer is currently being used to research

- **Blood Products: Red Blood Cells and Platelets –** Storage Time Extension
- **Transfusion –** Causes of transfusion complications
- **The causes of blood related diseases –** such as Sickle Cell Disease
- **Causes of Inflammation and Thrombosis –**
  - ARDS (Acute respiratory distress syndrome)
  - Clotting
  - TTP and other inflammatory diseases

Puget Sound Blood Center
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