

Microsampling Laboratory

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Microsampling Devices

Tasso T20 dried blood



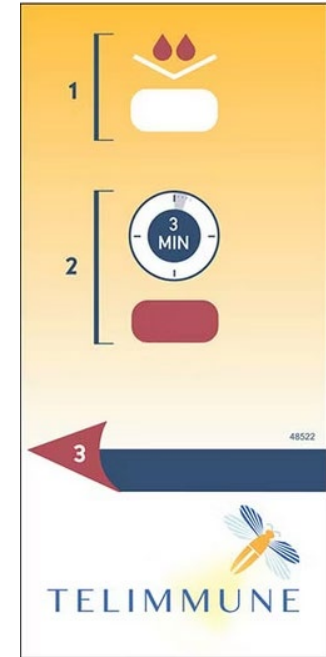
Status: In use (NSHAP, ENRICH, GSMS)
Feasibility: very high; inexpensive; preferred by study participants
Benefits: high compliance; more sample than DBS, better than M20
Limitations: 20-25% variance; cartridge disassembly

Tasso+ liquid capillary blood



Status: In development
Feasibility: high; expensive
Benefits: high compliance; liquid plasma
Limitations: cold chain; transit time

Telimmune Plasma Separator

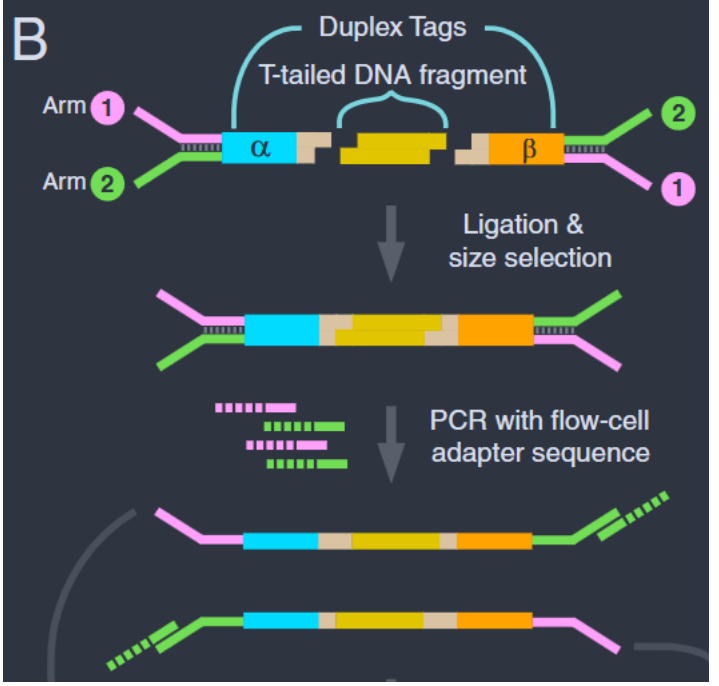
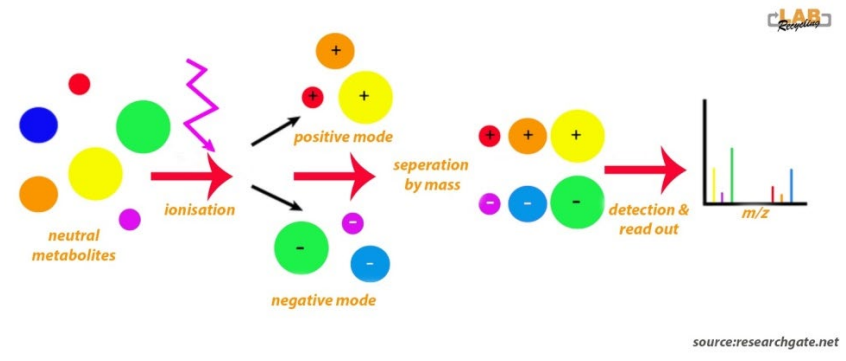


Status: In development
Feasibility: moderate; affordable
Benefits: dried plasma
Limitations: small sample volume (3 uL x 2 per card)

Assays and Platforms

LC-MS/MS

- Apo A1/B Ratio (CVD, to replace lipids), ApoE isoforms (ADRD), Carotenoids (Nutrition); plasma/serum vitamins
- **Readiness:** partner laboratory for large-scale studies

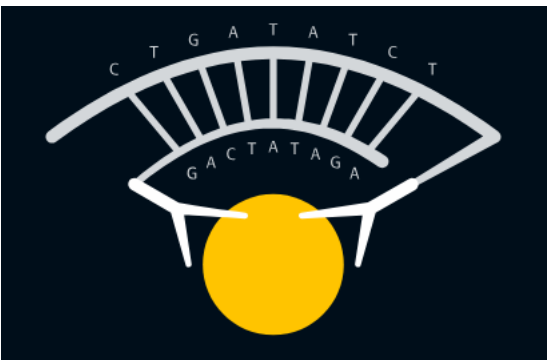


CHIP

- Clonal Hematopoiesis of Indeterminate Potential
- Expansion of cell line that leads to cancer
- Highly selective duplex sequencing
- **Readiness:** partner laboratory for large-scale studies

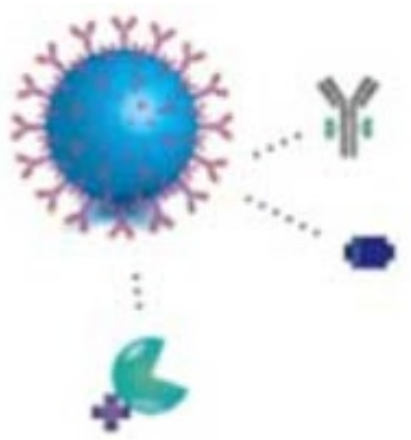
Olink

- PEA (proximity extension assay)
- fg/mL sensitivity
- Cytokines, ADRD, proteomics
- 1 uL sample size
- **Readiness:** pending grant funding for pilot



Quanterix

- SIMOA (single molecule array)
- fg/mL sensitivity
- ADRD
- 25 uL sample size
- **Readiness:** partner laboratory with SR-X for pilots (n < 200)



Acknowledgements

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Online Test Guide: testguide.labmed.uw.edu

