

# MASS SPECTROMETRY DATA RELEASE TEAM

HuBMAP Annual Meeting – Sept. 24, 2019

## Team Members and Leaders

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## Assays

Which assays covered will be covered by this DRT?

MALDI Imaging MS (Vanderbilt) | nanoDESI Imaging MS (Purdue) | LC-based omics (Vanderbilt, Purdue, Stanford)

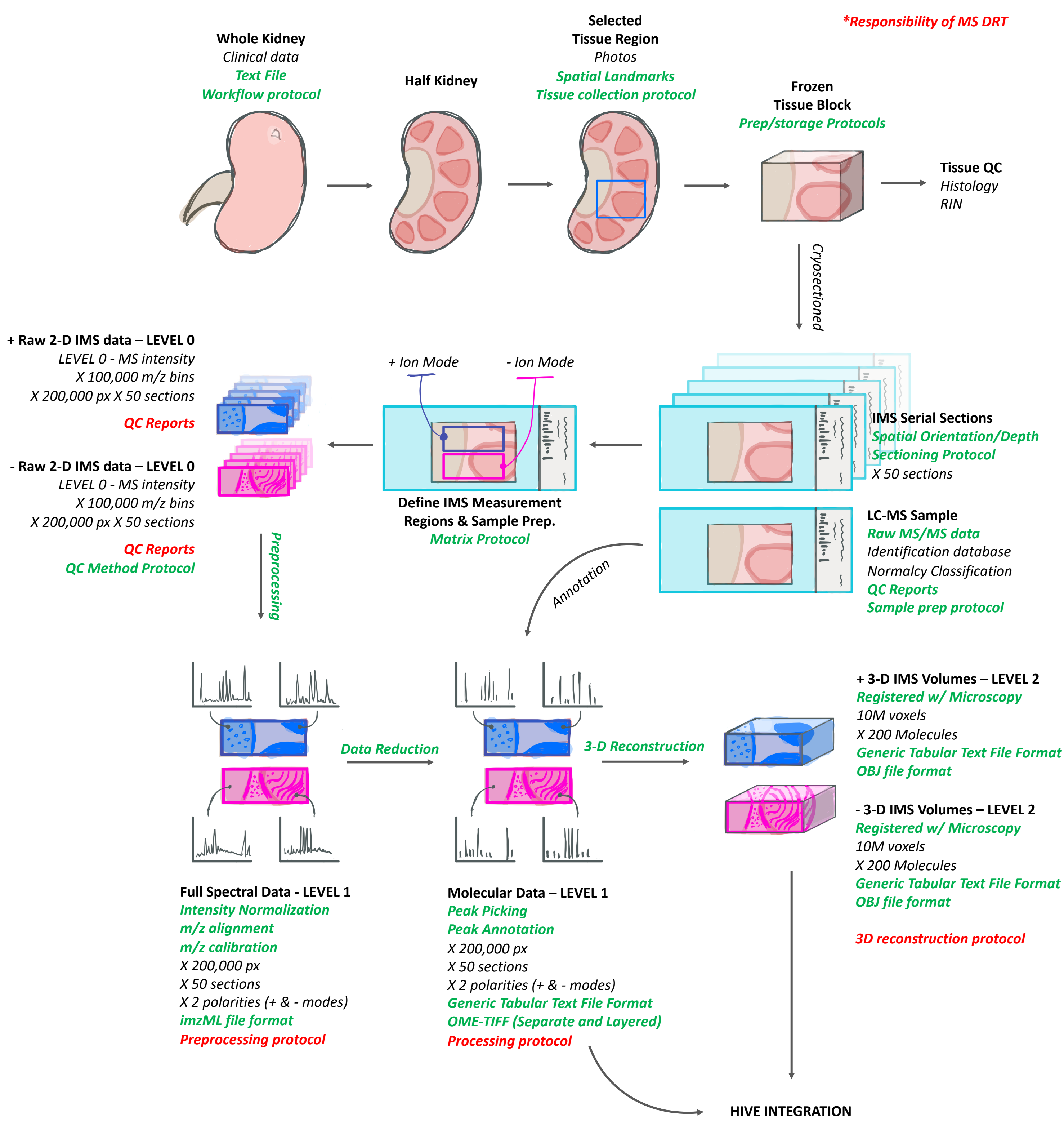
## Collaboration

How will the members of the DRT be working together? Regular or irregular meetings/calls? Shared Asana boards? Google Docs?

We will hold weekly meetings internally within in each TMC; A slack channel will be established to maintain a record of communications and documents; Ad hoc/irregular ‘all-hands’ meetings will be held as needed. All version controlled formal documents will be maintained in Google Docs.

## Pipeline

Outline how samples and data will flow from tissue collection to data deposition into the HuBMAP portal. Consider which data levels need to be defined (e.g. level 0 = raw data, level 1 = low-level processed data, level 2 = integrated or interpreted data, etc.). Clearly delimit the responsibilities of the DRT and the Tissues and Technology WG (focus on tissues and samples) and the Data Science WG (new focus on integrative analysis).



## Timeline

Define a timeline for developing the first draft of the data release plan (version 0, due September 2019), for the first release version (version 1, due December 2019), and the version that will be used for the first public data release (version n, due March 2019).

- Sept. 2019 – Official Data Release V0.1.
- Oct. 2019 – Automate QC reporting for MALDI IMS
- Nov. 2019 – DRT Version 1 - A finalized Data Release Plan with defined QA/QC standards
- Nov. 2019 – Official Data Release V1...
- Dec. 2019 – Adapt DRT and additional data releases

## What we have done so far...

|  |      |
|--|------|
| Identify Assays/Centers/Reps           | 100% |
| Specific workflows for each center     | 100% |
| Define data levels                     | 100% |
| File formats defined                   | 100% |
| Assay metadata and file format defined | 100% |
| Processing pipeline defined            | 70%  |
| Identify common processes/tools        | 70%  |
| Assay & Data QC/QA                     | 50%  |
| Upload data/metadata to HIVE           | 90%  |
| Validate & Transfer Tools to the HIVE  | 20%  |

## What we hope to achieve today?

1. Discuss/Finalize plan for QC/QA methods.
2. Identify differences in processing pipelines between MS groups.
3. Identify tools that are ready to be transferred to the HIVE.
4. Finalize timeline for next 6 months.
5. How do we represent annotation confidence/ID levels?
6. Minimal standards for HuBMAP MS data.