HuBMAP U54 UCSD Update

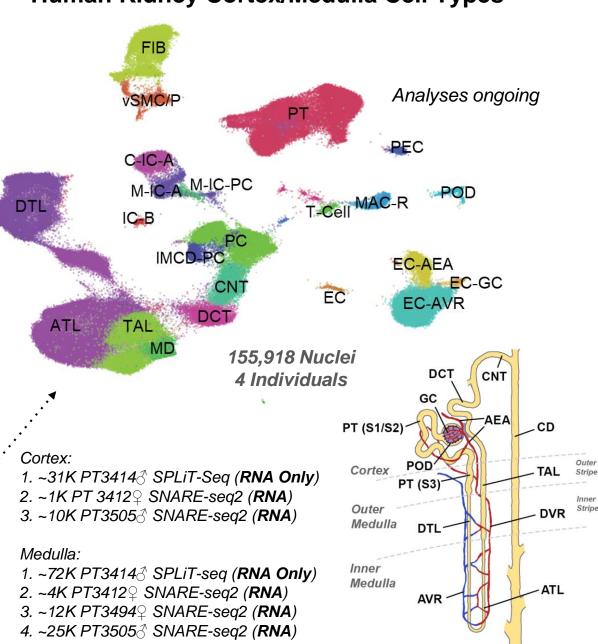
KULMAP Team

Sept. 23, 2019

Respiratory System Urinary System Trachea Cortex Bronchi **Kidney** Medulla Bronchioles **Tissue Processing** Washington University in St. Louis Ureter Lungs Alveoli SCHOOL OF MEDICINE ROCHESTER MEDICAL CENTER Jain Bladder Frozen (O.C.T.) Pryhuber Cryosections THE UNIVERSITY of NORTH CAROLINA Isolate Nuclei Histology at CHAPEL HILL & Imaging Hagood SNARE-Seq2 (In-Well, Combinatorial Barcoding) Library Prep Zhang Single & Sequencing Nucleus (sn) AAA... TTT... gDNA AAA... gDNA TTT... BC mRNA mRNA Open Chromatin **Tagmentation**

2019 HuBMAP Meeting

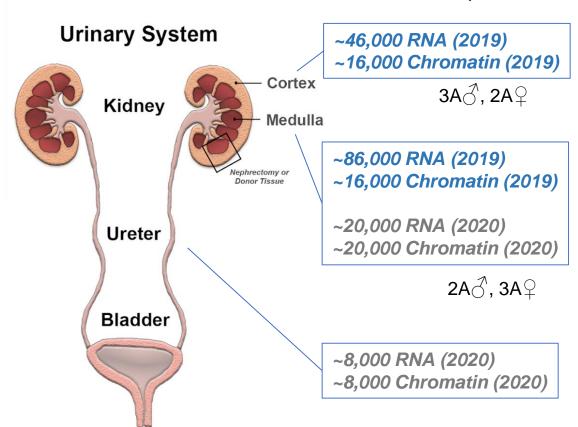
Human Kidney Cortex/Medulla Cell Types

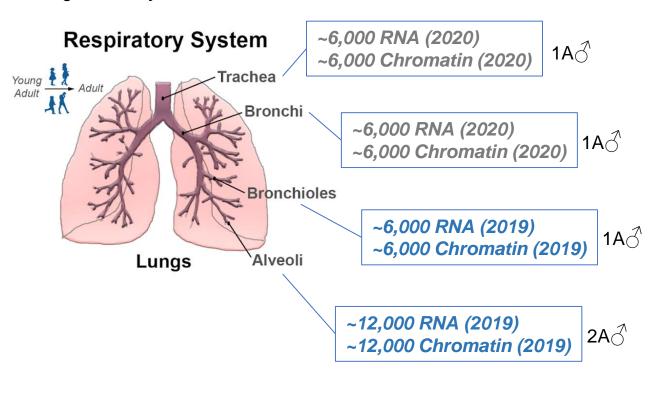


Next Year's Deliverable in 1 slide

Expected SNARE-Seq2 Deliverables*

*Actual numbers dependent on QC filtering and analysis outcomes





Collaborations in 1 slide

- Vanderbilt TMC (Jeff Spraggins): Autofluorescence vs DART-FISH integration
 - Generated a list of must and recommended fields and agreed on pathology parameters to harmonize between sites.
 - Processed and preserved tissues in solution with VU protocol, will ship tissues soon upon execution of the MTA.
 - Identified auto-fluorescent imaging parameters compatible with DART-FISH
- HMS TTD (Yin Peng): SABER-FISH vs DART-FISH comparison
 - Shipped tissues to HMS
 - Coordinated target genes and probe design

What should HuBMAP Do?

- 1. Annotation & Validation: it takes way more efforts than we think. Start making HuBMAP specific marker lists for HuBMAP organ systems to facilitate annotations and crossintegration.
- 2. Define criteria for shareable data, including the minimal standard for annotation/validation.
- 3. Sample consent mechanism