

Release Notes - ASAP CRN Cloud - Version 3.0.0

Release Date: September 30, 2025

Overview:

The ASAP CRN Cloud is pleased to announce the 3.0.0 release of data which expands our datasets and collections of Human Postmortem-derived Brain Sequencing (PMDBS) and introduces non-human (Mouse) datasets. In addition to an update to the PMDBS Single Cell (sc) RNAseq Collection, and the PMDBS Bulk RNAseq Collection, we are introducing two spatial RNAseq Collections – a PMDBS Spatial RNAseq Collection and a Mouse Spatial RNAseq Collection – derived from brain slices. Our other datasets are organized as Other PMDBS and Other Mouse Datasets. In future releases we will also make additional Collections and Datasets from different modalities available.

Users with an active account and valid Data Use Agreement (DUA) will have access to the latest data on the platform. Use this link to access: https://cloud.parkinsonsroadmap.org/.

Version 3.0.0 - Release Updates:

Additions:

- Collections:
 - PMDBS Spatial RNAseq Collection, v1.0.0 DOI: 10.5281/zenodo.16979475
 - Spatial Transcriptomics data (GeoMx) of midbrain dopamine cells in control and <u>PD subjects</u> (edwards-pmdbs-spatial-geomx-th, previously released uncurated with CRN Urgent Data Release v2.0.2) (CRN Cloud link)
 - Mouse Spatial RNAseq Collection, v1.0.0 DOI: 10.5281/zenodo.16979297
 - Single Nucleus RNA sequencing of the Striatum of Two Murine Parkinson's
 Disease Models (cragg-mouse-spatial-visium-striatum, previously released uncurated with CRN Urgent Data Release v2.0.3) (CRN Cloud link)
- Additional Uncurated Datasets:
 - PMDBS Datasets: Raw data from an additional PMDBS datasets is made available.
 - Deep bulk RNAseq of neurological controls and PD brains (team-jakobsson-pmdbs-bulk-rnaseq,to be integrated into the PMDBS bulk RNAseq Collection in a future release) (CRN Cloud link)
 - Mouse Datasets: Raw data from two Mouse Single-Cell (Nucleus) RNAseq datasets are available and will be curated with a CRN Cloud Mouse scRNAseq workflow introduced in a future release.
 - Single Cell RNASeq of motor cortex in a mouse model of alpha-synuclein pathology (team-biederer-mouse-sc-rnaseq,previously released with <u>CRN Urgent</u> Data Release v2.0.2) (CRN Cloud link)
 - Spatial Transcriptomics of the Striatum of Two Murine Parkinson's Disease
 <u>Models</u> (team-cragg-mouse-sn-rnaseq-striatum, previously released with <u>CRN</u>
 <u>Urgent Data Release v2.0.2</u>) (<u>CRN Cloud link</u>)



Changes:

- New samples added to <u>Single nuclei sequencing of brain regions from healthy and</u> Parkinson's Disease individuals (CRN Cloud link)
- Updates to the Postmortem-derived (PMDBS) Brain Sequencing Collections:
 - PMDBS scRNAseq Collection, major version bump to v3.0.0 DOI: 10.5281/zenodo.16979638
 - Updated Workflow. The processing pipelines have been revised for this
 release to improve cell-type inference. The new methodology leverages
 the Allen Brain Map's <u>MapMyCells</u> on a simplified version of the SEA-AD
 taxonomy to infer simple cell-type taxonomies. Further details can be
 found here.
 - Integrated new samples from v2.0 of team-jakobsson-pmdbs-sn-rnaseq (CRN Cloud link)
 - Updated Cohort sc RNAseq dataset (cohort-pmdbs-sc-rnaseq)(CRN Cloud link)
 - PMDBS Bulk RNAseq Collection, minor version bump to v1.1.0 DOI: 10.5281/zenodo.16975686
 - Updated cohort bulk RNAseq dataset (cohort-pmdbs-bulk-rnaseq) (<u>CRN</u> <u>Cloud link</u>) to include previously excluded samples from <u>Bulk RNA-sequencing of human middle frontal gyrus</u> (team-lee-pmdbs-bulk-rnaseq-mfg) (<u>CRN Cloud link</u>)

Feedback and Support:

If you have any feedback or questions regarding this release or the CRN Cloud platform in general, please feel free to reach out to us at cloud@parkinsonsroadmap.org. We are more than happy to address your inquiries and can arrange a call if needed!