**UMAP** methylation hidden dim 1=0.4 latent dim=30 probability=0.4 group=15 Tearning rate=0.0001 n folds=3 batch size=32 tissue Breast Lung Haematopoietic and Lymphoid Thyroid Ovary Large Intestine Head and Neck Skin Kidney Central Nervous System Stomach Esophagus Bladder UMAP\_2 Peripheral Nervous System Bone Liver **Biliary Tract Pancreas** Uterus Prostate Endometrium Soft Tissue Adrenal Gland Cervix Vulva Placenta Testis Small Intestine Eye Unknown

UMAP\_1