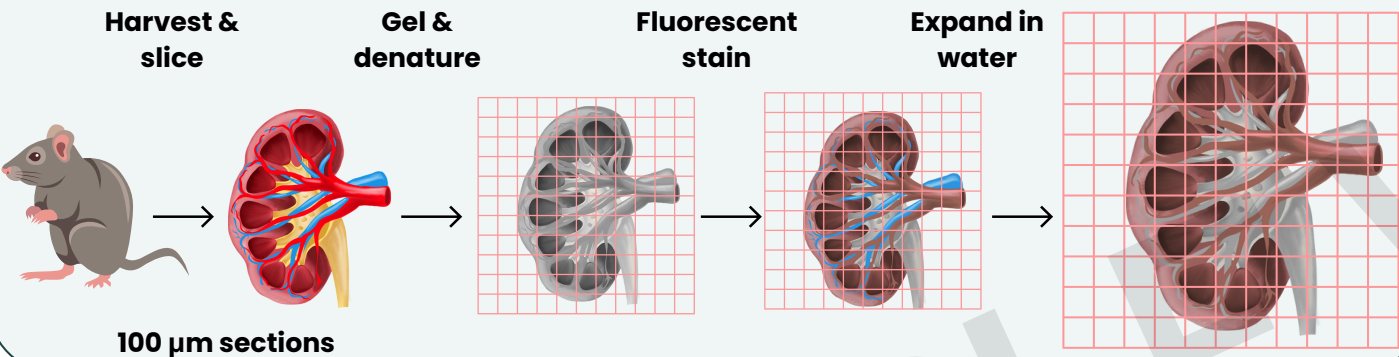


GRAPHICAL ABSTRACT SAMPLE WORK

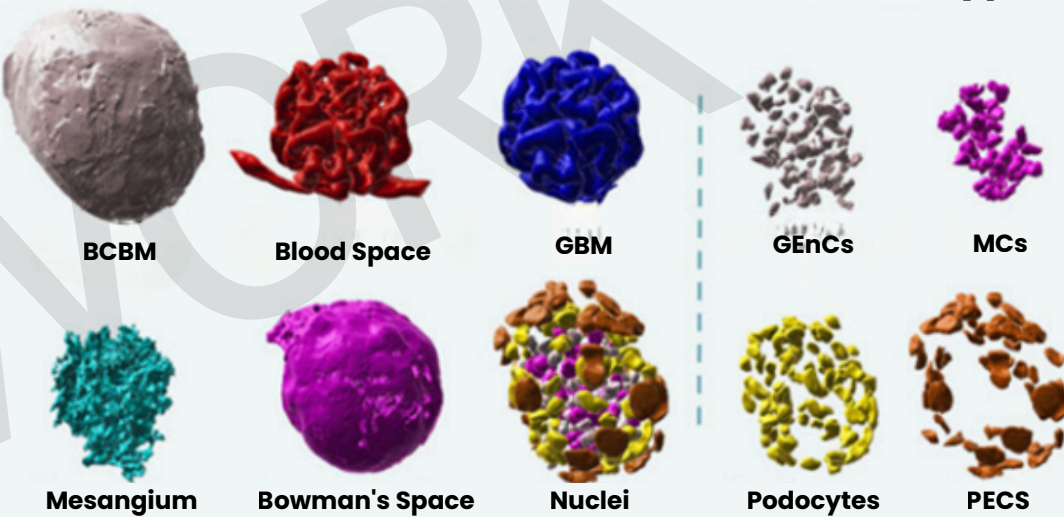
Super-resolved optical imaging, reconstruction, and spatial analysis of whole mouse glomeruli via the Glomerulus Mapping and Analysis Pipeline

Super-resolved optical imaging, reconstruction, and spatial analysis of whole mouse glomeruli via the Glomerulus Mapping and Analysis Pipeline

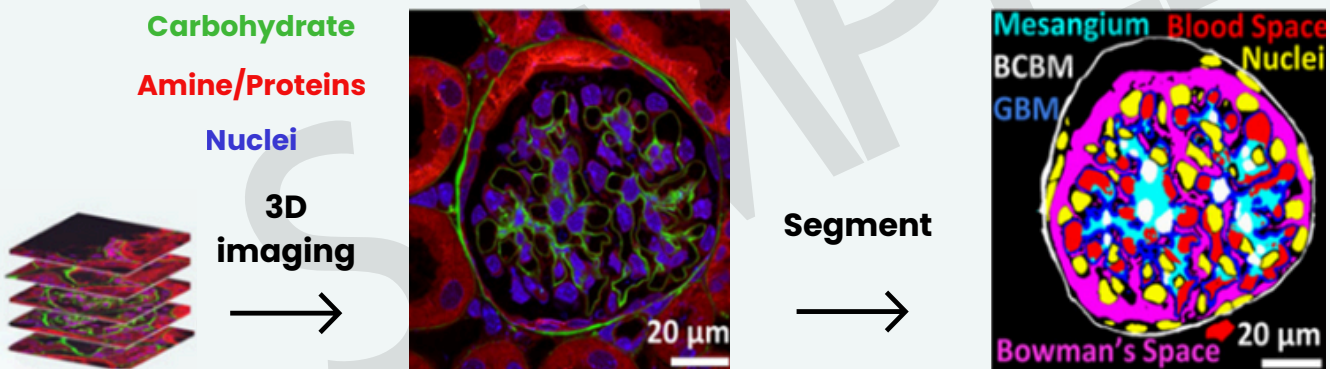
Stain and Expansion



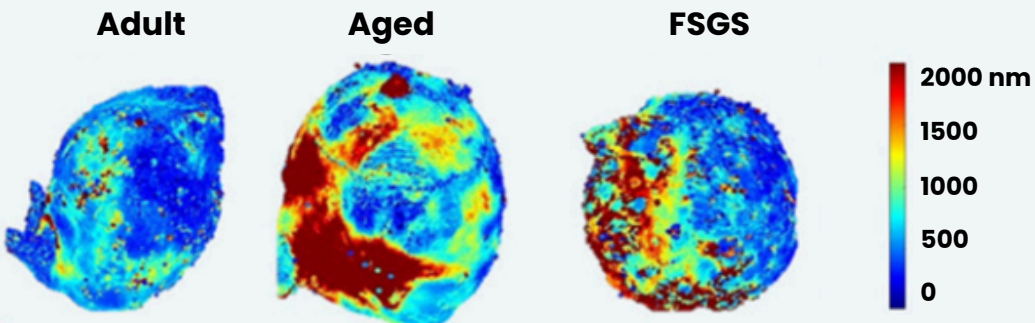
Mouse Glomerulus Reconstruction and Cell Types



3D Imaging and Segmentation



Capsule Basement Membrane Thickness Distribution



Images adapted from Ali, A., Liu, Z., Ye, K., Guan, Y., Chen, S., Liu, T., Guo, Z., Wong, M. K., Vasquez, P., Poudel, C., Mustonen, B. C., Eng, D. G., Pippin, J. W., Shankland, S. J., Wang, S., & Vaughan, J. C. (2025). Super-resolved optical imaging, reconstruction, and spatial analysis of whole mouse glomeruli via the Glomerulus Mapping and Analysis Pipeline. *Kidney International*. <https://doi.org/10.1016/j.kint.2025.07.024>

CONCLUSION:

This study introduces a novel pipeline called GloMAP (Glomerulus Mapping and Analysis Pipeline) for nanoscale 3D imaging, reconstruction, and analysis of whole mouse glomeruli across various conditions, providing a valuable tool for diverse research applications.