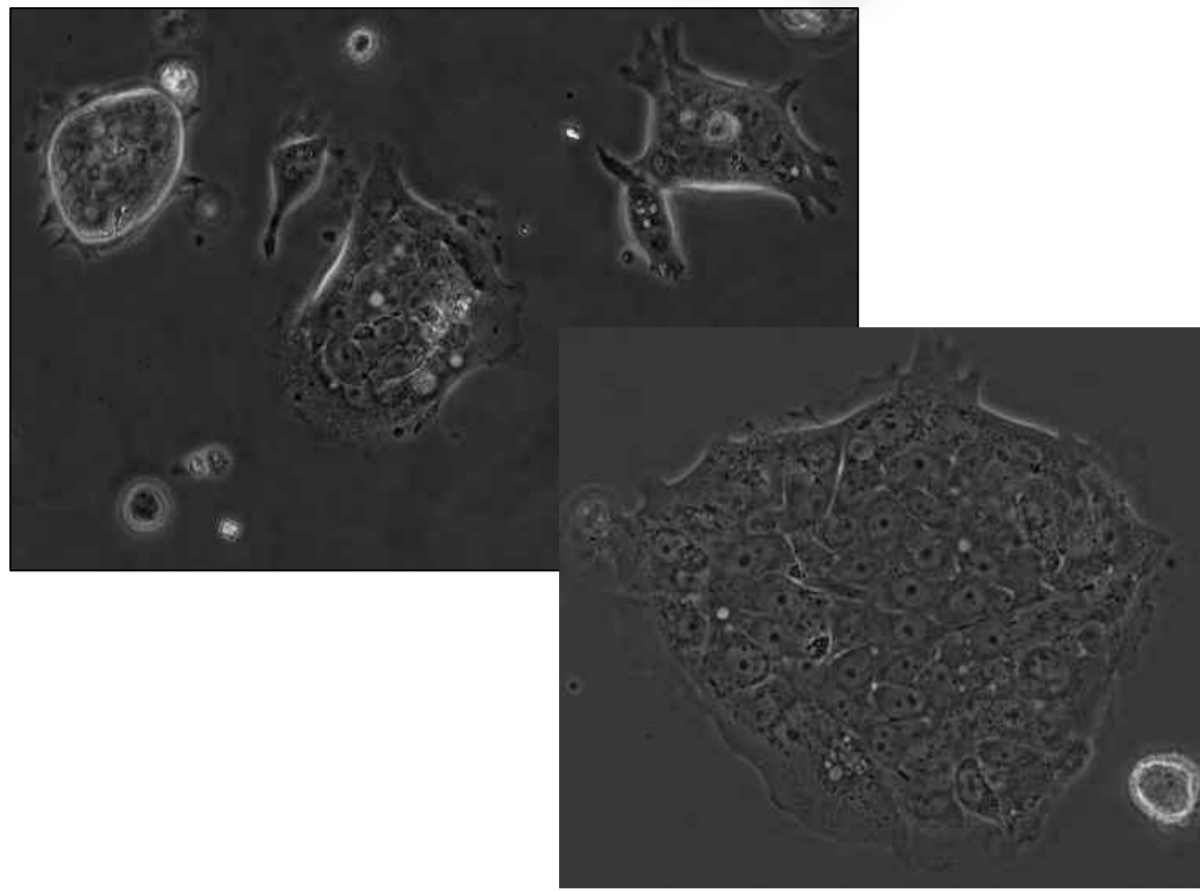
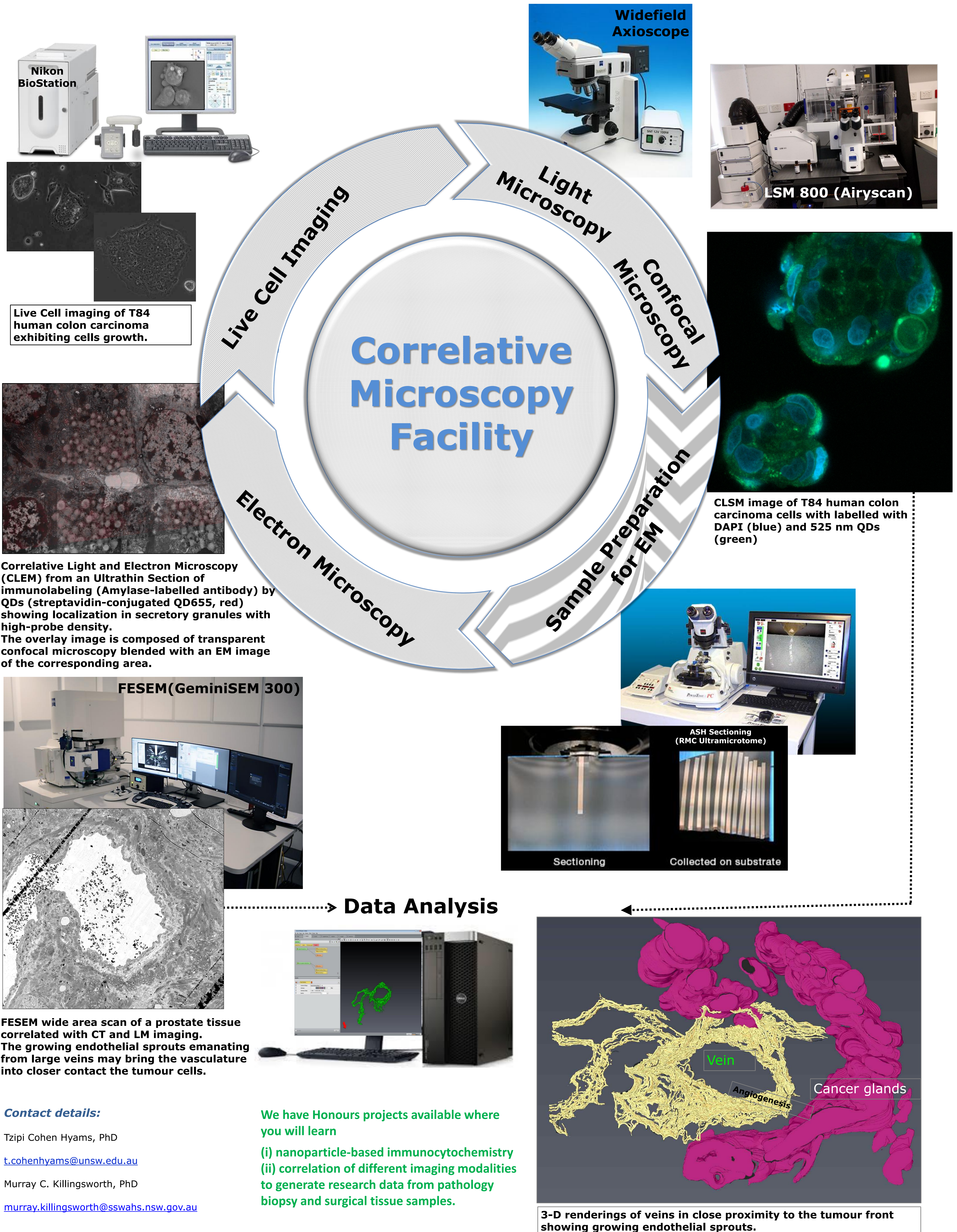


# Correlative Microscopy Facility

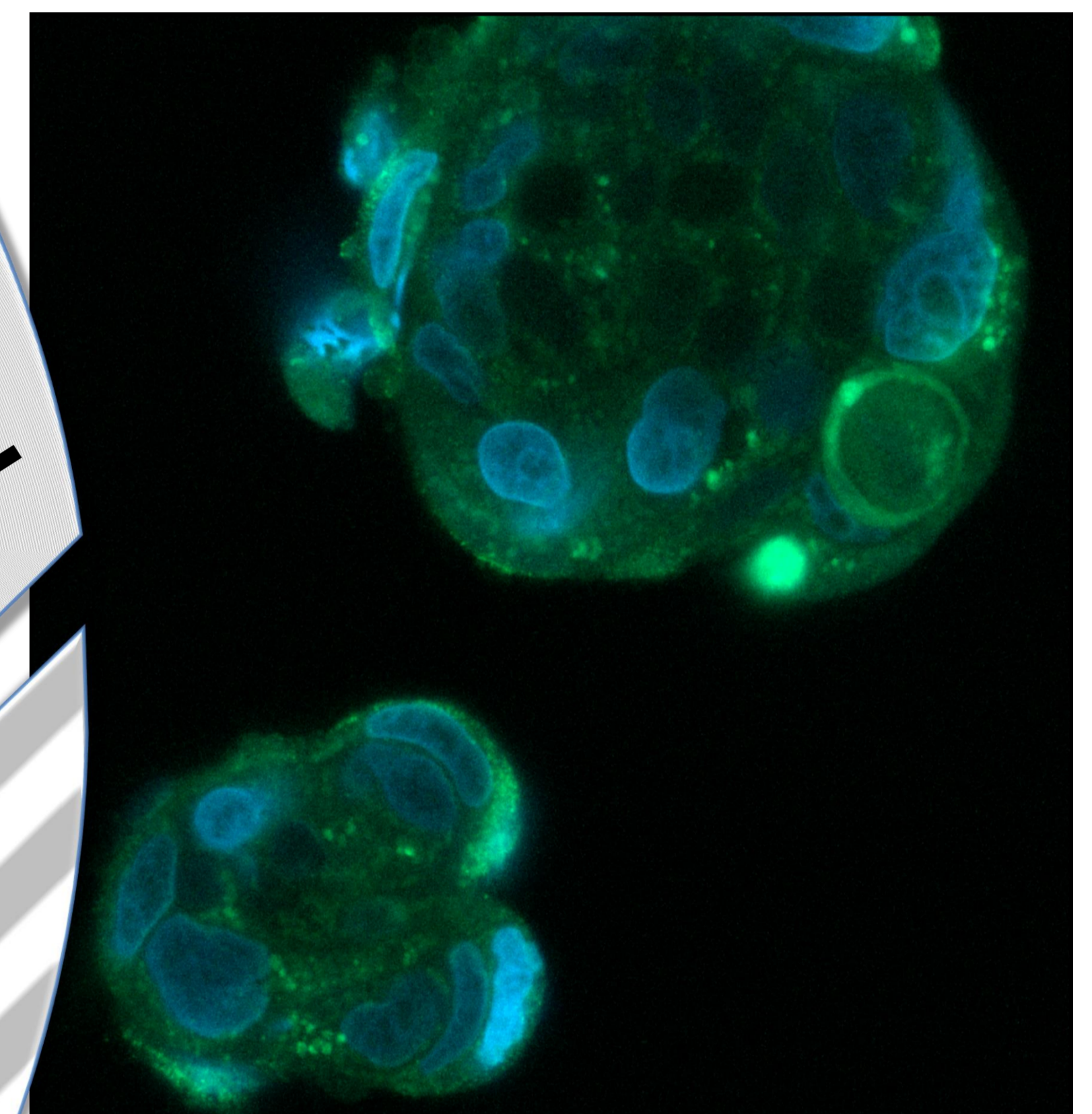
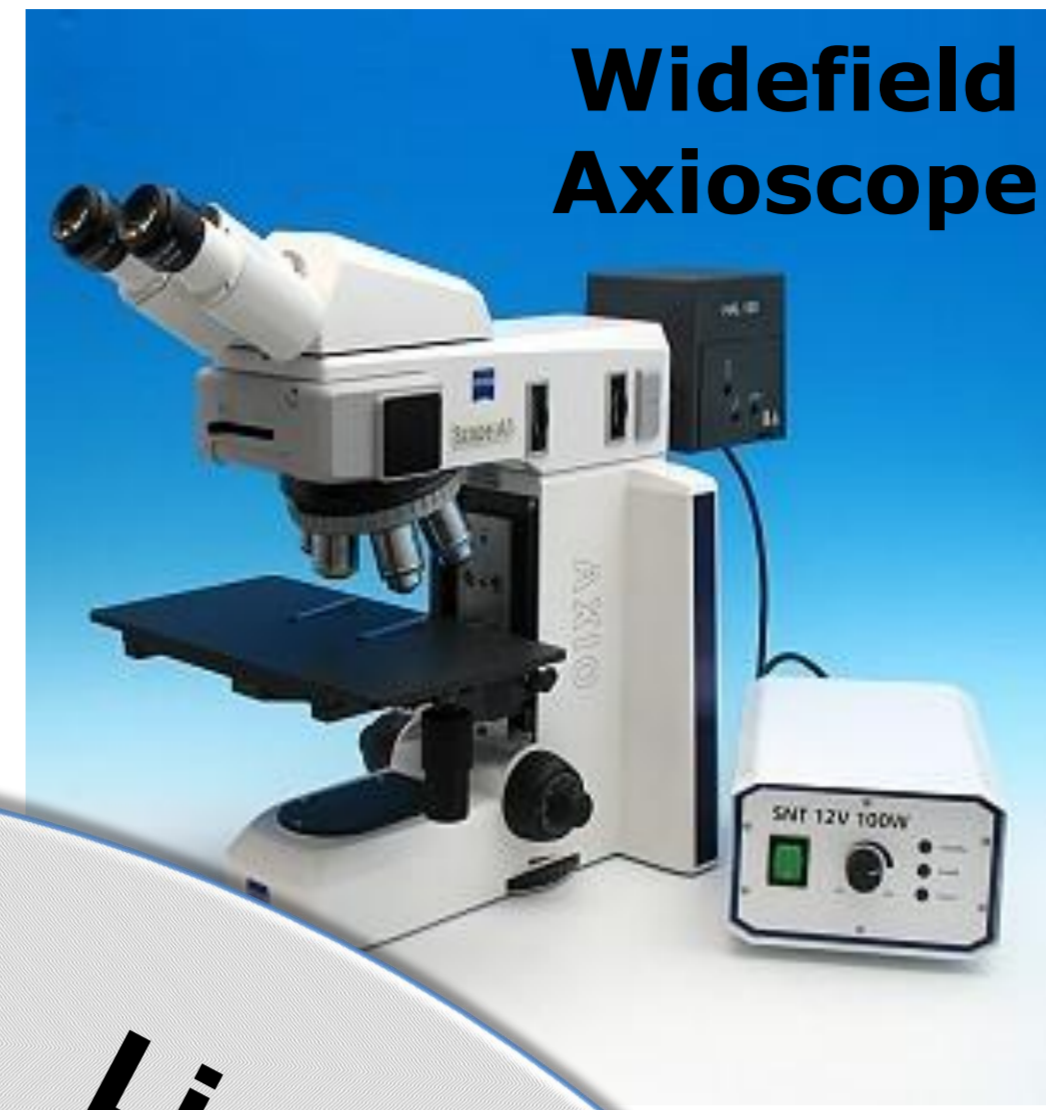
Tzipi Cohen Hyams<sup>1</sup> and Murray C. Killingsworth<sup>1,2</sup>

<sup>1</sup>The Ingham Institute

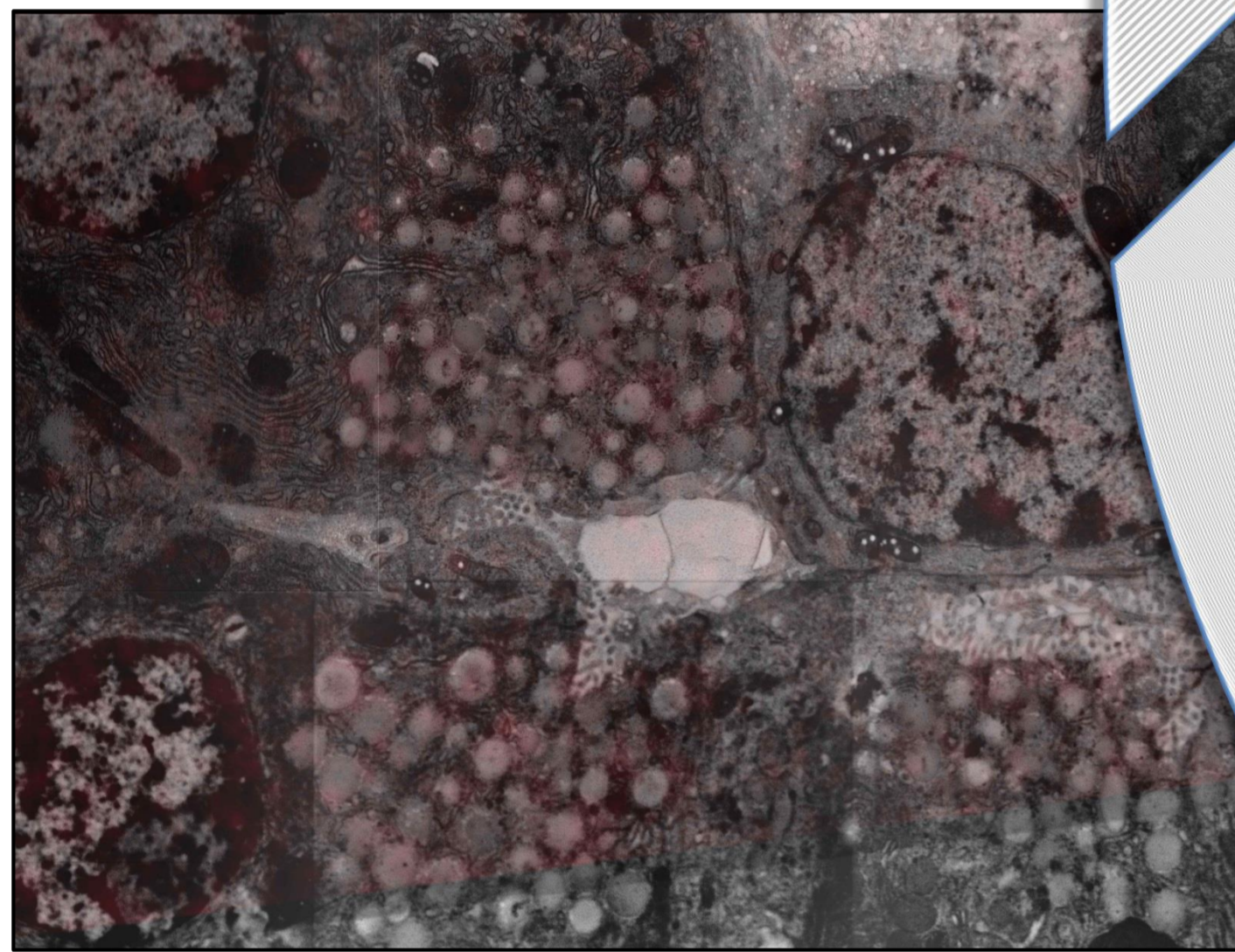
<sup>2</sup>New South Wales Health Pathology



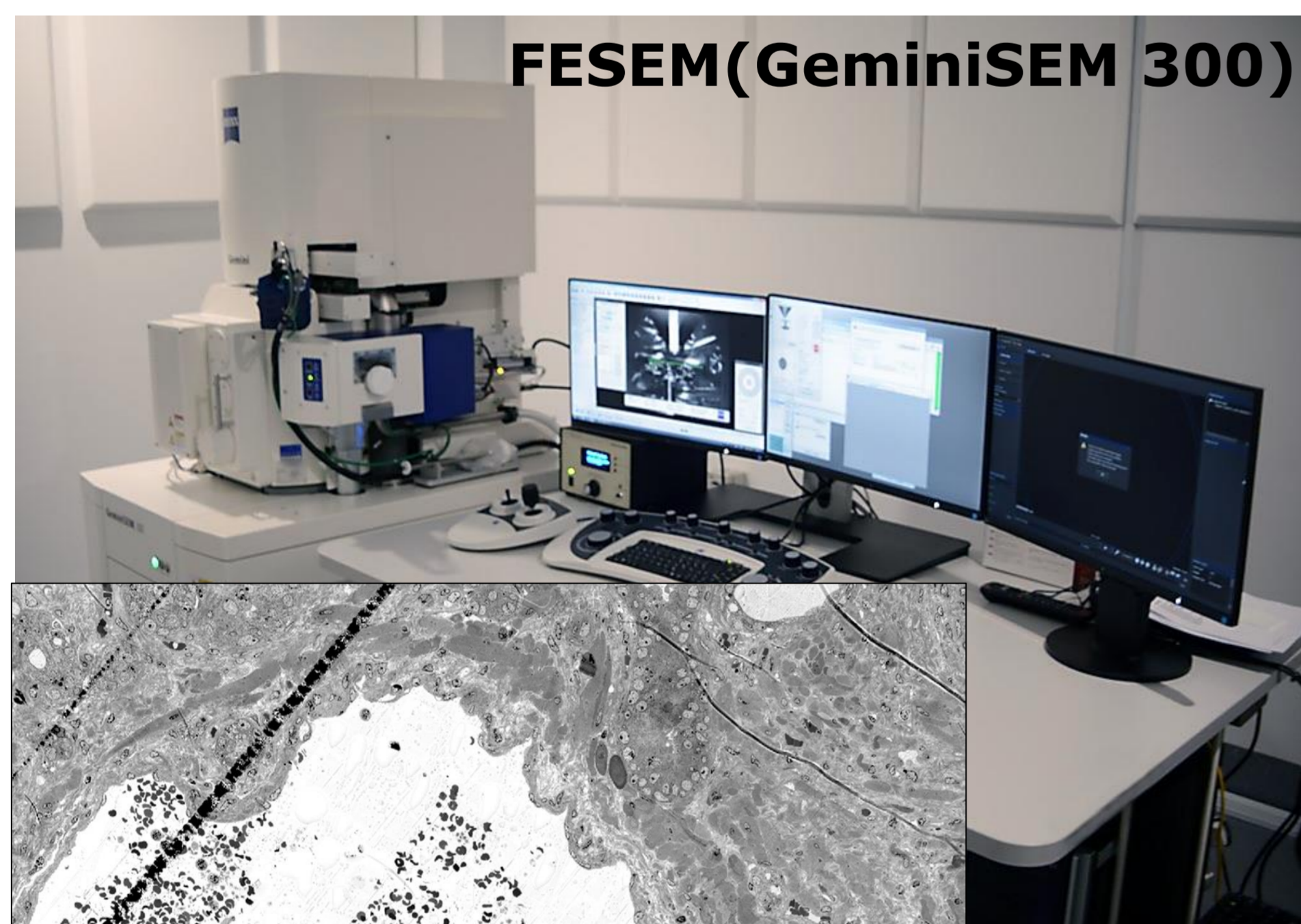
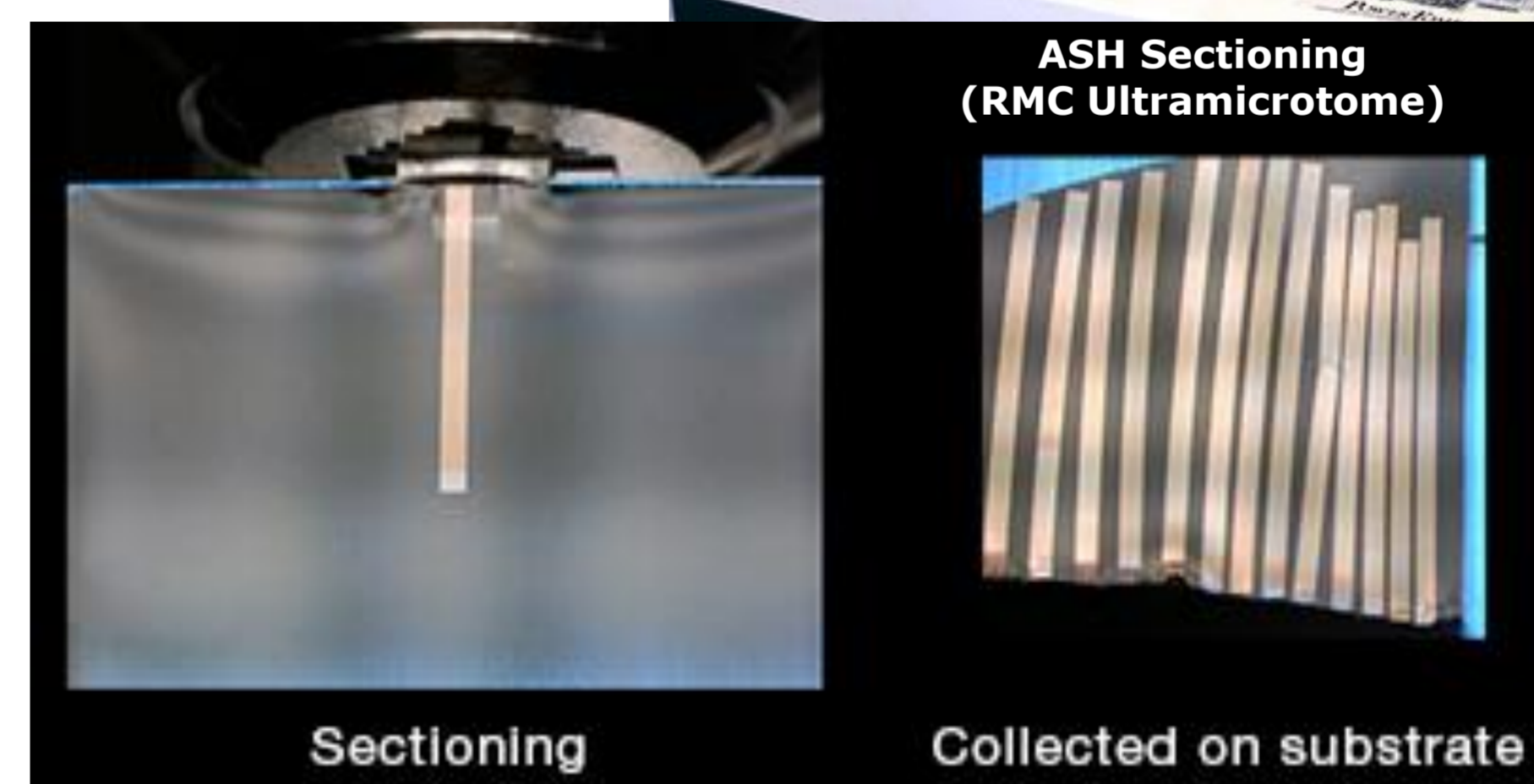
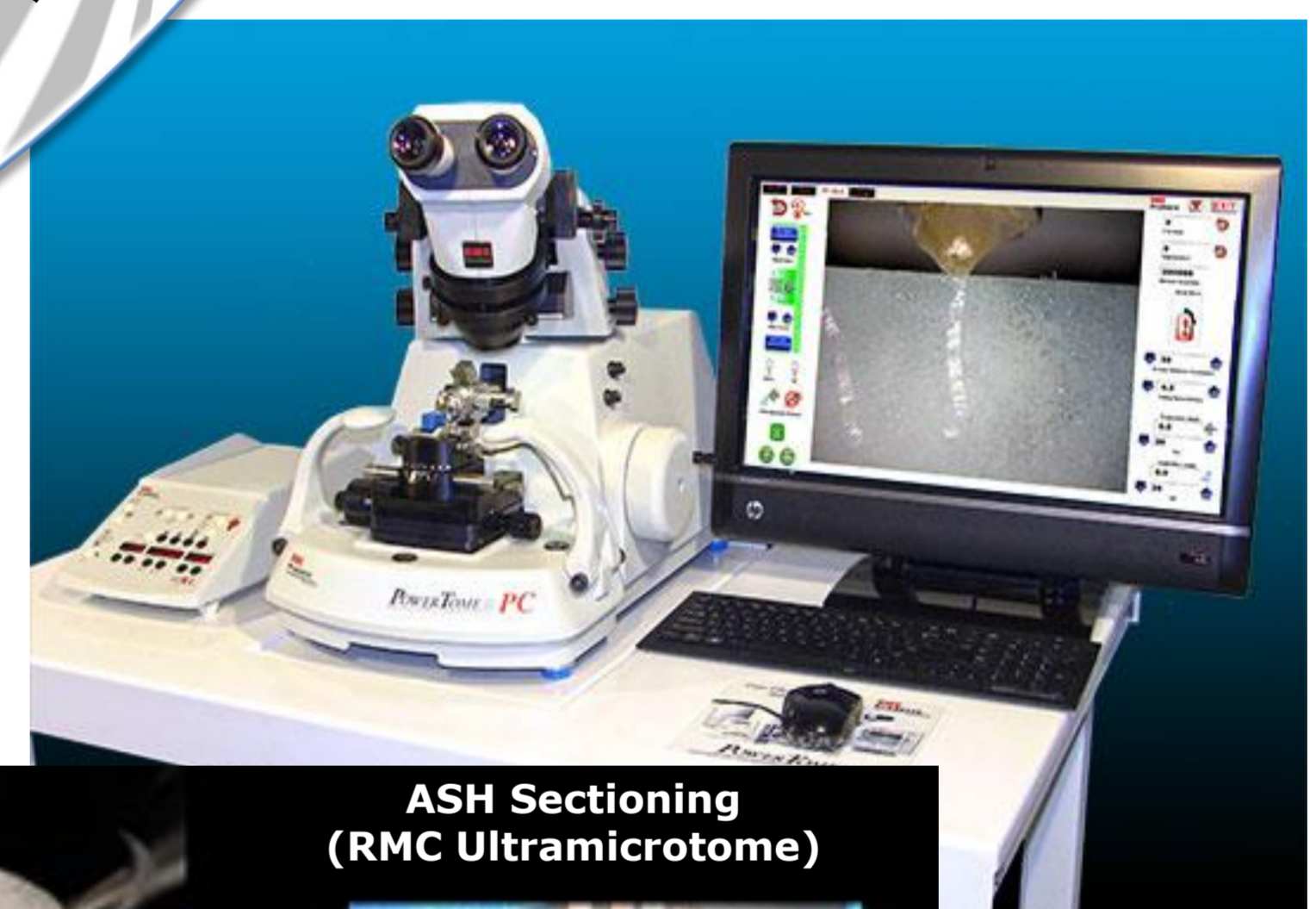
Live Cell imaging of T84 human colon carcinoma exhibiting cells growth.



CLSM image of T84 human colon carcinoma cells with labelled with DAPI (blue) and 525 nm QDs (green)

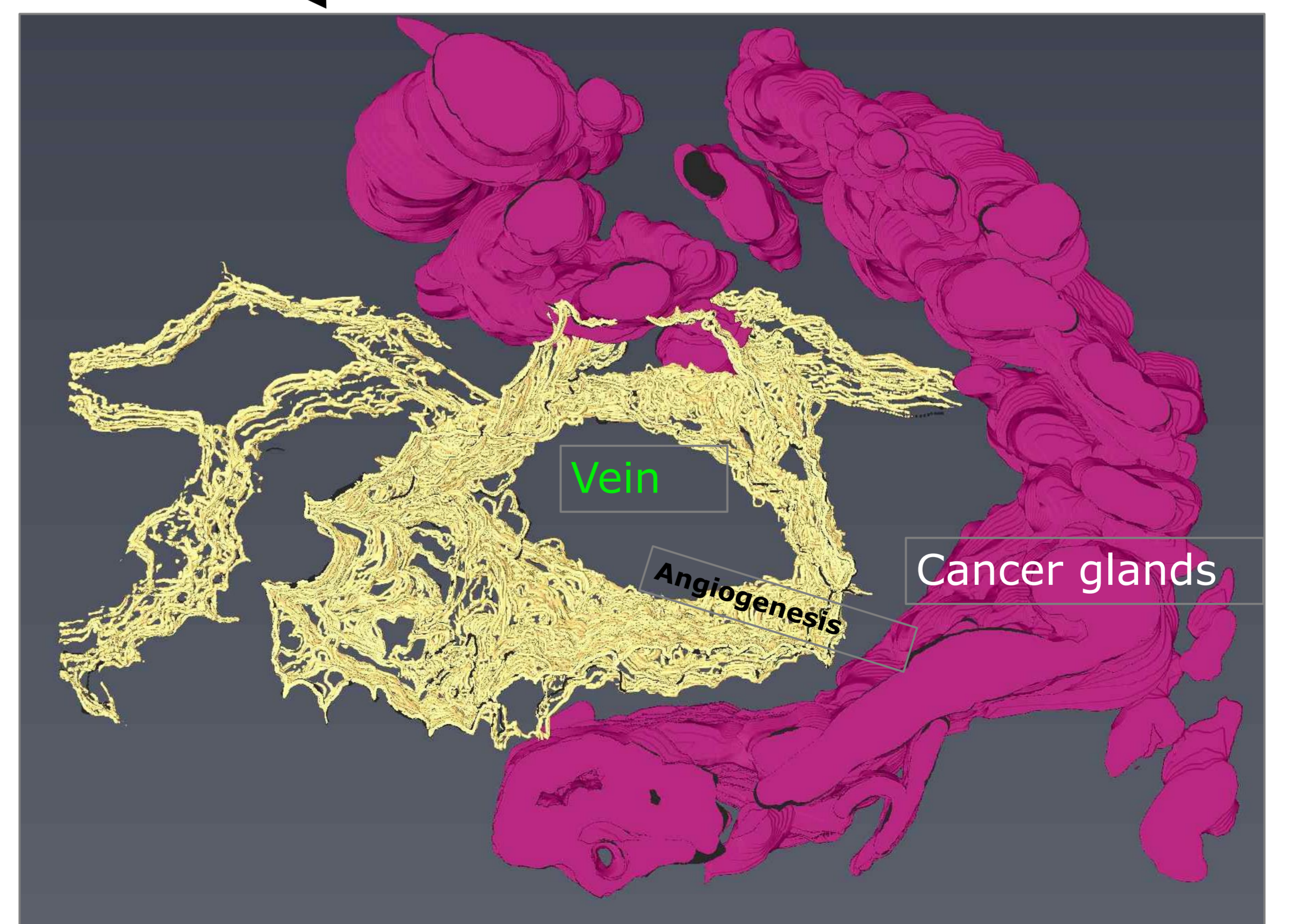
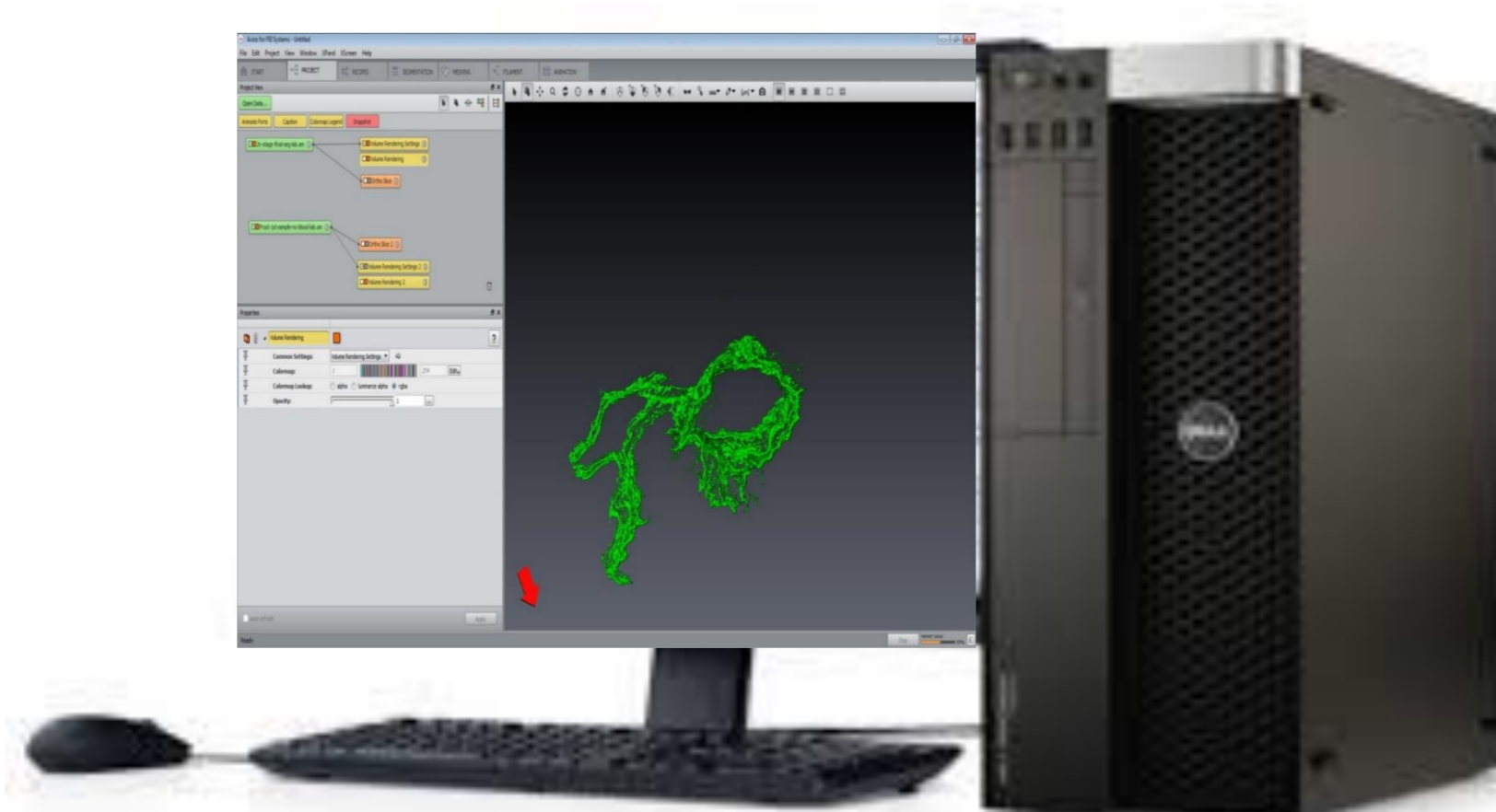


Correlative Light and Electron Microscopy (CLEM) from an Ultrathin Section of immunolabeling (Amylose-labelled antibody) by QDs (streptavidin-conjugated QD655, red) showing localization in secretory granules with high-probe density. The overlay image is composed of transparent confocal microscopy blended with an EM image of the corresponding area.



FESEM wide area scan of a prostate tissue correlated with CT and LM imaging. The growing endothelial sprouts emanating from large veins may bring the vasculature into closer contact the tumour cells.

## Data Analysis



3-D renderings of veins in close proximity to the tumour front showing growing endothelial sprouts.

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We have Honours projects available where you will learn

- (i) nanoparticle-based immunocytochemistry
- (ii) correlation of different imaging modalities to generate research data from pathology biopsy and surgical tissue samples.