

# Spine counting and analysis

Spin counting and analysis is challenging at best and great care must be taken when preparing the samples and acquiring the data. Smaller spine and particularly the necks of the spines are often so small that they cannot be resolved with normal confocal microscope. Imaris offers a tracing software that also counts spines with a matlab add-on that classifies spines but the results we have seen have been less than credible. A literary review of modern methods is recommended as the problem is far from 'solved'. Several labs have made their own tools but care must be taken when employing them as they such tools are often optimized for images the lab in question has.