To ensure consistent equipment performance, the Advanced Microscopy Core Facility performs weekly maintenance, monthly and quarterly performance checks (Quality Checks) on ALL instruments. To further monitor and maintain consistent reproducibility and rigor during ongoing/long term imaging experiments, system responses (intensity under identical collection parameters), channel alignment, and intensity distribution across the scan area are recorded monthly and/or quarterly. If deviations in recorded values are  $\geq 15\%$ , researchers will be notified. Deviations and/or suboptimal performance in QC measures will result in instrument service. Service contracts with comprehensive annual preventative maintenance visits are maintained on each instrument unless cost prohibitive (fee exceeds 50% of instrument revenue). Systems undergo annual preventative maintenance and service by authorized service providers. QC and preventative maintenance records are recorded and displayed on each instrument.