To ensure consistent equipment performance, the Advanced Microscopy Core Facility performs weekly maintenance and quarterly performance checks on all instruments. Service contracts with comprehensive annual preventative maintenance visits are maintained on each instrument to ensure to ensure optimal performance. All systems undergo annual preventative maintenance by authorized service providers. 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 quarterly. If deviations in recorded values are ≥ 15%, researchers will be notified, and a service call will be initiated. Deviations and/or suboptimal performance in these measures will result in instrument service.