

3D Imaging & Analysis Workshop

NIH, Building 30 • August 4–6, 2026

Host: Andrew Doyle, Core Director, NIDCR Imaging Core

Session types: [\[Talk\]](#) [\[Tutorial\]](#) [\[Live demo\]](#) [\[Hands-on\]](#) [\[Break\]](#)

Day 1 • Aug 4 Introductions & live demos

Theme: *Introductions and live demos - Broad exposure for all levels*

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| 9:00 – 9:15 am | Welcome & workshop overview Andrew Doyle opens the event; Oxford instruments team introductions; overview of the workshop agenda. [Talk] Room 117 → seminar room (up to 50) |
| 9:15 – 10:15 am | The future of 3D microscopy: from acquisition to insight Talk covering challenges in confocal imaging and 3D analysis, and how BC43 + Imaris address them as an integrated solution. Presented by Lynsey Hamilton (Market Development Specialist) [Talk] Room 117 → seminar room |
| 10:15 – 10:30 am | Coffee break [Break] |
| 10:30 – 11:15 am | BC43 live demo — beautiful confocal data at the push of a button BC43 will be introduced in Room 117. Live acquisition of a prepared sample — z-stacks, tile scans, multi-channel imaging. Emphasizes simplicity, speed, and image quality. Q&A throughout. Presented by Andrew Swanson (Confocal Specialist) [Live demo] Room 117 → seminar room |
| 11:15 am – 12:15 pm | Introduction to Imaris: turning images into discoveries Overview of Imaris capabilities - 3D visualization, segmentation, tracking, and analysis. Use-case vignettes across neuroscience, cell biology, and developmental biology. Presented by Amelia Ralowicz-Perrone (Imaris Specialist) [Talk] Room 117 → seminar room |
| 12:15 – 1:30 pm | Lunch break [Break] |
| 1:30 – 5:00 pm | Afternoon hands-on sign-up slots begin First round of 1:1 / small group bookings. Attendees sign up for a 60 min BC43 + Imaris slot (imaging) or Imaris -only (analysis of their own data). [Hands-on] Room 134 → demo room |

Day 2 • Aug 5 Deep-dive tutorials

Theme: Building skills - guided, hands-on learning for all levels

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| 9:00 – 9:15 am | Day 2 welcome & recap Brief recap of Day 1 highlights and overview of today's tutorial program. [Talk] Room 117 |
| 9:15 – 10:45 am | Tutorial: Imaris fundamentals — 3D visualization & basic measurements Guided walkthrough of Imaris 11 basic features. This session will cover loading microscope data, navigating 3D views, image processing, generating publication-quality snapshots and animations, automated object detection using AI powered spots & surfaces for counts, volumetric measurements and object classification, vantage plots and Workflow creation. <i>Presented by Amelia Ralowicz-Perrone (Imaris Specialist)</i> [Tutorial] Room 117 |
| 10:45 – 11:00 am | Coffee break [Break] |
| 11:00 am – 12:30 pm | Tutorial: Imaris advanced — cell tracking, AI-powered tracing and batchable workflows Guided walkthrough of Imaris 11 advanced features. This session will include automated cell detection and spatial analysis tools, object tracking over time, AI-powered tracing of filamentous structures (vessels, neurons, microglia), cellular analysis of sub-cellular compartments and custom batchable Workflows for reproducible protocols. <i>Presented by Lynsey Hamilton (Market Development Specialist)</i> [Tutorial] Room 117 |
| 12:30 – 1:30 pm | Lunch break [Break] |
| 1:30 – 5:00 pm | Afternoon hands-on sign-up slots begin Second round of 1:1 / small group bookings. Attendees sign up for a 60 min BC43 + Imaris slot (imaging) or Imaris -only (analysis of their own data). Two tracks run in parallel. [Hands-on] Room 134 — demo room |

Day 3 • Aug 6 Your data, your science

Theme: Personalized support & wrap-up

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| 9:00 am – 12:00 pm | Morning hands-on sign-up slots begin Third round of 1:1 / small group bookings. Attendees sign up for a 60 min BC43 + Imaris slot (imaging) or Imaris -only (analysis of their own data). Two tracks run in parallel. [Hands-on] ● Room 134 - demo room |
| 12:00 pm | End of Workshop |