

# MicroHUB



[www.inovus.org](http://www.inovus.org)

# MicroHUB The future of microsurgical procedural training

Where tissue phantoms, precision optics, and digital insights converge.

MicroHub is a fully integrated training platform for microsurgical education. Combining soft tissue models and anatomical phantoms, high definition microscope and camera system, and the Totum digital surgery platform to create a seamless environment for practising microsurgical procedures, complete with objective feedback and a secure digital portfolio.

## Why it matters

- Immersive realism: practice true to life surgical workflows away from the operating room.
- Microsurgical visibility: see and capture every manoeuvre under the scope.
- Data driven progress: record, review, and track performance over time.

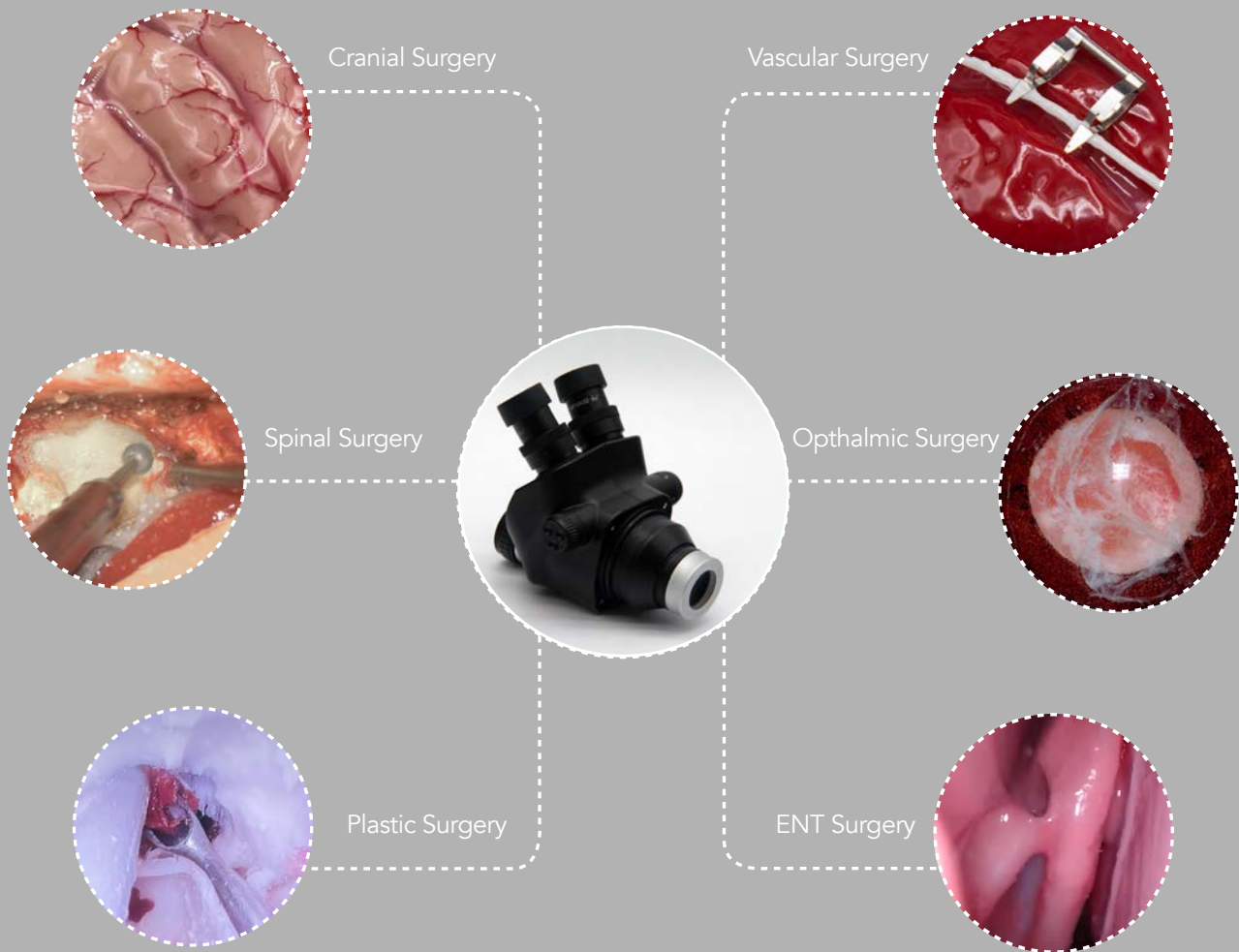


## The Simulator

### Anatomical fidelity you can feel

At the heart of MicroHUB training are high fidelity phantoms producing natural haptics and allowing training with real instruments. For cranial, spine, plastic and vascular surgery the system is integrated with the world leading simulators from our partners

at UpSurgeOn. Pair it with existing tissue phantoms or cadaver specimens for other specialties and procedures.



- 'Open system' - Pair the scope and Totum with our partner products or your existing tissue phantoms
- Instantly digitalise your microsurgical training with a low cost, low footprint scalable solution
- Capture and record microsurgery training and gain insights through Totum for deeper learning
- Manage learners with task management and integrated assessment tools in Totum

# Optics & Imaging

## Train under the microscope

Every detail matters. MicroHUB integrates a custom microscope and high definition camera system, powered by Totum to replicate the experience of operating under the scope, with the ability to record, replay and annotate every step.

### Features

- Microscope tailored bench top use and easy set up and break down between use
- High definition video capture for procedural review
- Adjustable optics to support realistic microsurgical ergonomics
- Magnification range: 3.5X 7-50X 100X 200X
- Working distance: 110mm
- Sensor: HD/4K
- Illumination: 144 adjustable LED lights
- Mount: Folding extension base with clamp mount







- Inovus microscope & HD, Totum enabled camera
- Adjustable microscope stand
- Quick start guide
- Soft shell wheeled carry case

Requires Totum Team licences, sold separately.

Product code: 00002430

# The Complete Ecosystem

## One platform. Multiple stakeholders.

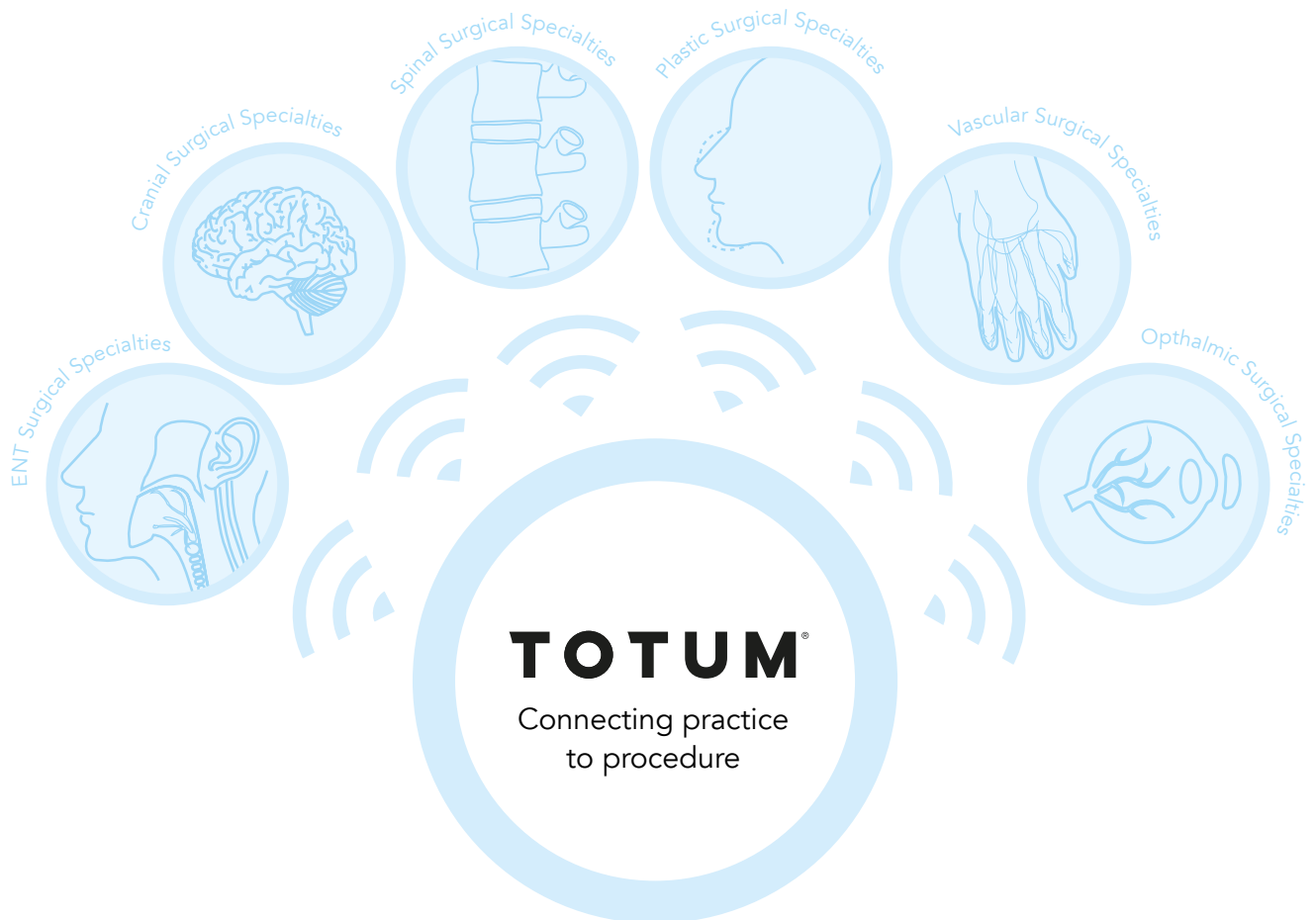
MicroHUB is more than a simulator, it's a connected learning ecosystem.

For trainees

- Realistic practice of microsurgical workflows
- Microsurgical skills under authentic optics
- Track training and progression

For educators & programme leads

- Standardised scenarios and scoring
- Efficient feedback and documentation
- Scalable across cohorts and sites



# Totum

## Turn practice into measurable progress

Training is only as effective as the feedback it generates. Totum powers MicroHUB with secure video capture, structured feedback and longitudinal tracking. Move from subjective impressions to objective, trackable improvement, supporting competency based curricula and audit ready records.

- Automatic video capture and secure storage of sessions
- Performance review tools (timelines, annotations, checklists)
- Cloud based portfolios for trainees and educators
- Assessment templates aligned to your curriculum
- Faculty dashboards
- Shareable case libraries



### Guiding the way to surgical success

Inovus' simulators allow surgeons to practice procedures with real instruments and simulated tissues that create natural haptics. The Augmented reality overlays of Totum are uniquely streamed direct to a screen, providing 'headset free', immersive training experiences. Totum connects surgeons of all grades with mentors, peers, and examiners to share best practice through its web based learning portal.



### Unlocking the power of practice

Totum's video capture and debrief portal provides an ecosystem for review, refinement, and mastery of surgical procedures. Record training events, receive written, time-stamped feedback and compare this to objective data to guide training needs. Utilise the task management portal to set training goals and review progress.



### Harnessing the power of data to transform surgical training

The powerful computer vision algorithms of Totum track instrument motions during training. The instruments are simultaneously mapped and recorded digitally. The data collected from practice is aggregated, managed and shared in each trainee's portfolio within Totum. These objective performance metrics guide improvements in surgical technique and operative flow.



### Dynamic assessment, universal recognition

Totum allows the digitalisation of skills curriculums by integrating them with the Inovus ecosystem of simulators. Use Totum to scale delivery and certification of national programmes such as LapPass. The assessment and certification portal can be used to issue certificates of competency for recognised curriculums, claim CPD/CME points for time spent training and perform work based assessments and OSATS.



## Surgical Training Remastered

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