3D PRINTED HIGH FIDELITY SIMULATION MODELS FOR ROBOTIC SURGICAL PLANNING & TRAINING
Who are 3D LifePrints?

• 3D LifePrints UK Ltd (3DLP), are a Medical 3D Printing & Technology Provider

• 3DLP offers a range of medical 3D printed products such as surgical models, surgical guides, surgical implants and simulation & training models

• 3DLP provides 3D products & services to over 20 NHS and private medical institutions

• 3DLP works with 10+ universities on a variety of research projects, including an embedded facility at the University of Oxford
Robotic Surgical Simulation Models

- 3DLP offers 3D printed surgical simulation models that can be used to enhance your robotic surgical planning and training programs.
- Can be used to optimise operator skills in docking and configuring port sites / arm placements, manipulation with end point instruments and needle control.
- Enhance laparoscopic skills for grasping, cutting, blunt & sharp dissection, approximation, ligation, electrocautery and suturing.
- All models can be based on actual MR/CT patient data to match shape, size and pathologies to practice prior to the procedure.
- 3D printed models can be made in a variety of materials that mimic human tissue, bone and pathologies.
- Areas of interest can be made in a different hardness / colour (e.g. to highlight the parenchyma).
- Models can be created on request to meet your timelines & requirements.

Example 3D Model Surgical Use Cases

**COLORECTAL**
- Colon Cancer
- Rectal Cancer

**CARDIAC**
- Mitral Valve Repair
- Atrial Septal Closure

**GENERAL SURGERY**
- Hiatal Hernia Repair
- Pancreatectomy
- Suturing
- Nephrectomy

**GYNAECOLOGY**
- Myomectomy
- Hysterectomy

**UROLOGY**
- Prostatectomy
- Cystectomy
- Pyeloplasty

**EAR, NOSE & THROAT**
- Ophthalmology
EXAMPLES OF 3DLP 3D PRINTED MODELS FOR ROBOTIC SURGICAL PLANNING & TRAINING
3D PRINTED SIMULATION MODEL:
Atrial Septal Defect Repair
This advanced 3D printing of intraventricular blood volume was amazing, it gives us the most accurate image of the position & size of the multiple holes in the heart. This helped us to plan a less invasive procedure with an excellent outcome for the patient.

Rafael Guerrero, Alder Hey Children’s Hospital
Consultant Paediatric Surgeon
3D PRINTED SIMULATION MODEL:
Mitral Valve Repair
3D PRINTED SIMULATION MODEL:
Complete Urinary Simulator & Cystectomy
3D PRINTED SIMULATION MODEL: Prostatectomy
3D PRINTED SIMULATION MODEL:
Liver Procedures
3D PRINTED SIMULATION MODEL:
Ovarian Cyst Removal, Myomectomy, Hysterectomy
3D PRINTED SIMULATION MODEL:
Nephrectomy & Pyeloplasty
3D PRINTED SIMULATION MODEL:
Pancreas With Stent & Tumour
3D PRINTED SIMULATION MODEL:
3D printed silicon training model with realistic epidermis layers for suture training
3D PRINTED SIMULATION MODEL:
3D printed eye training model
3D PRINTED SIMULATION MODEL:
Colon
www.3dlifeprints.com

paul@3dlifeprints.com