

3D PLANNING

– Solutions for high complexity surgery –



mirai 3D
True medical experience

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BENEFITS OF OPERATING WITH 3D TECHNOLOGY

Reduce surgical risk, enhance patient safety

MIRAI 3D provides innovative and tailor-made solutions for complex medical challenges.

Our team of biomedical engineers combines extensive knowledge in medical image processing with the latest 3D printing technologies and advanced materials.

We develop patient-specific anatomical models and ultra-realistic simulators to help clinics and surgical teams improve medical training and patients care.

TIME

Reduces the duration of complex procedures by up to 50%.

COMMUNICATION

Facilitates the understanding and interaction with the patient.

DECISION MAKING

Prevents errors in real-time decisions.

PRECISION

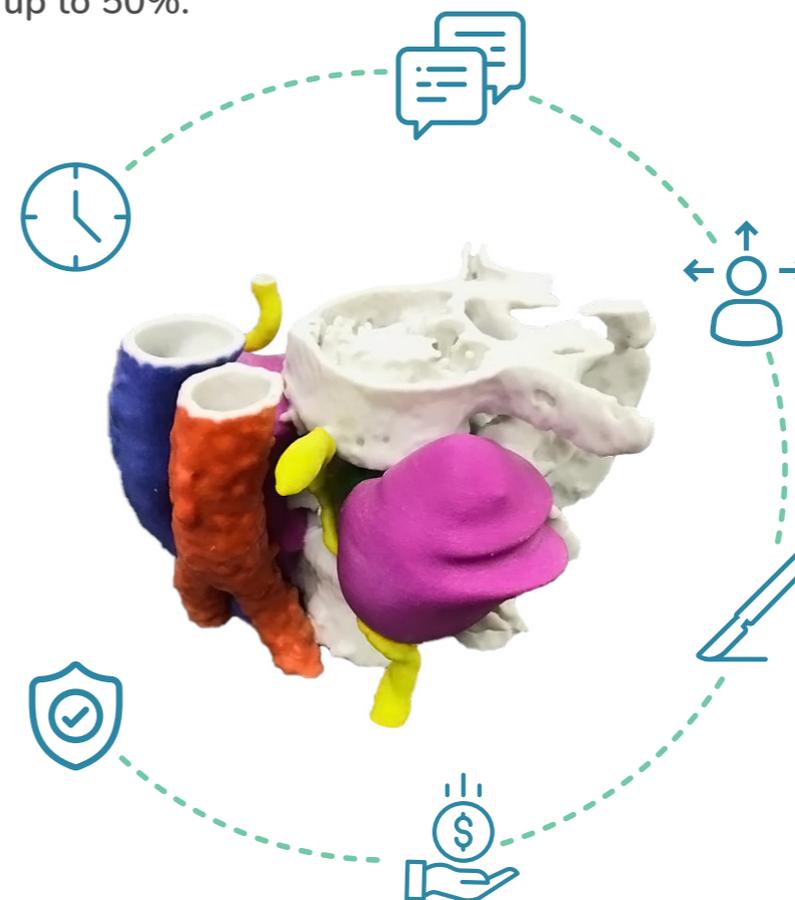
Allows for smaller incisions and reduced bleeding.

SAFETY

Increase success rate of surgeries by making them safer.

SAVING

Lowers the cost of the procedure by consuming less medical supplies.

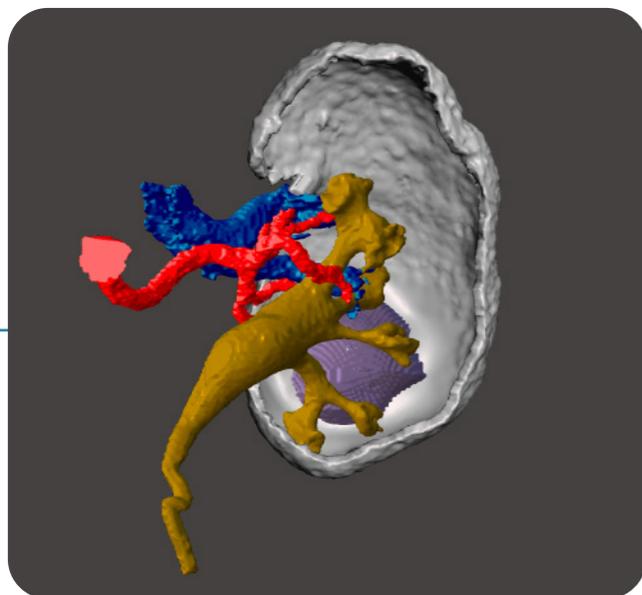


SOLUTIONS

Scalable and customizable

DIGITAL PLANNING

Segmentation and 3D reconstruction of the anatomical region, including differentiation in colors of each structure. Deliverable in video, STL file and augmented reality format



ELEMENTAL PLANNING

Segmentation and 3D printing in up to three colours. Resolution up to 0.1mm layer height. Allows printing of big volume anatomy.



ADVANCED PLANNING

Segmentation and 3D printing with digital materials. Multiple colours, flexible and translucent materials. Provides maximum amount of patient anatomy information.



(*) Solutions can be combined and different techniques can be used for surgeons specific needs, such as mirroring anatomies or printing surgical guides.

WORKFLOW

Fast and efficient

1



MEDICAL IMAGE

The professional uploads the images in DICOM format with requirements for the case.

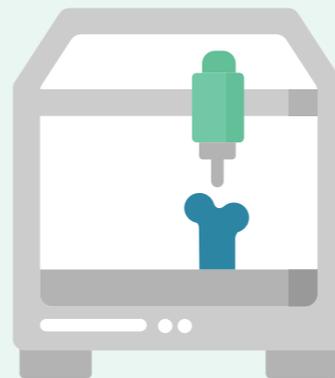
2



DESIGN

Our engineers process the image. The doctor visualizes and approves the 3D model.

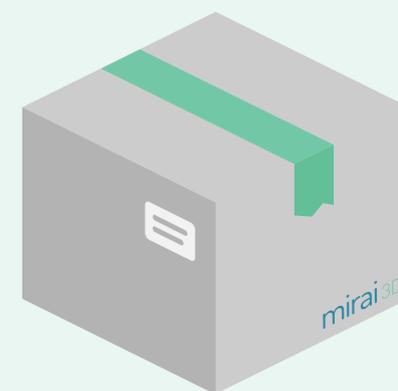
3



MANUFACTURING

The MIRAI 3D team prints the anatomical model in 3D using the most convenient technology and materials.

4



DELIVERY

The biomodel is delivered to the medical center in a few days and is ready to be used.

SUCCESS CASES

Experience and results

TRAUMA

**ANKLE WITH
MULTIPLE FRACTURES**

FDM technology



Material: Filament

Resolution: 0.3 mm

Finish: White or color

CMF

**LOWER JAW
WITH TUMOR**

SLA technology



Material: Resin

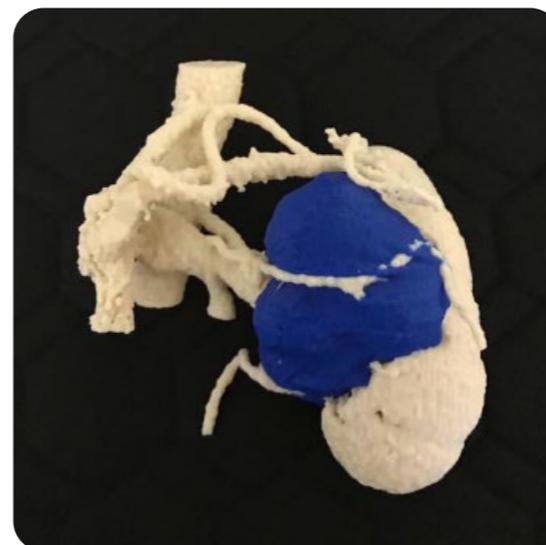
Resolution: 0.1 mm

Finish: Translucent with color

UROLOGY

**KIDNEY
WITH TUMOR**

FDM technology



Material: Filament

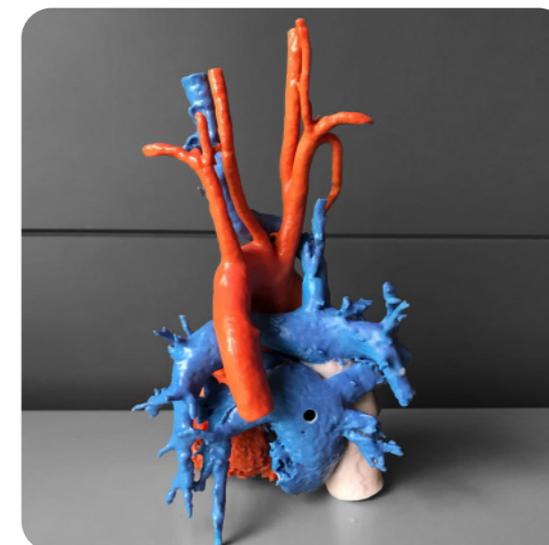
Resolution: 0.2 mm

Finish: Two colors

CARDIAC

**CARDIOVASCULAR
SYSTEM**

CJP technology



Material: Powder

Resolution: 0.1 mm

Finish: Multiple colors without
translucency

TESTIMONIALS

Professionalism and confidence

ORTHOPEDICS

DR. HOMERO DE AGOSTINO
MN 54336

HEAD OF TRAUMATOLOGY AT
SANTOJANNI HOSPITAL



"3D models have revolutionized the planning of orthopedic surgery of medium and high complexity. They help to correctly interpret the bone shape, the fracture lines and their displacements. "

UROLOGY

DR. GONZALO VITAGLIANO
MN 102007

HEAD OF UROLAPAROSCOPIC SERVICE AT
GERMAN HOSPITAL OF BUENOS AIRES



"In my daily practice, three-dimensional renal models are extremely helpful. They allow me to have a three-dimensional knowledge in a preoperative way in order to facilitate and perform a safe surgery."

THORAX

DR. ALEJANDRO BERTOLOTTI
MN 89399

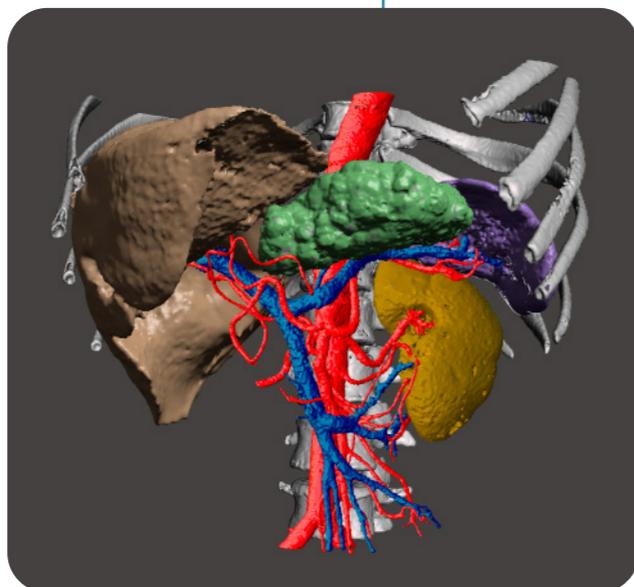
HEAD OF TRANSPLANTS AND THORACIC
SURGERIES AT FAVALORO FOUNDATION



"Having 3D printing for surgery is essential. It allows us to have a much more accurate idea of the reality, in real size, of what we will later find in the operating room. Biomodels allow us to make decisions much earlier. "

SIMULATION & DEVELOPMENT

A specific solution for every need



ADVANCED MEDICAL IMAGE SEGMENTATION

We work with leading medical devices companies, accelerating their product development and design stages, with our advanced medical image segmentation service. Send us your complex CT or MRI scan and receive the perfect 3D digital model file, ready-to-print or to edit in CAD software. Fast and cost-effective, either bone or soft-tissue segmentation.



MEDICAL SIMULATION AND TRAINING

We develop ultra-realistic medical simulators, by combining 3D printing technologies with hydrogels and silicon-based materials. We emulate the mechanical properties of each human body tissue thanks to an in-house research with biopolymers experts. We have solutions for plastic surgery, endoscopic and ultrasound procedures.

CLIENTS & PARTNERS



Our main partner and investor. They are experts accelerating healthcare startups.



One of the main institutions of nanotechnology in the world that collaborates with the development of new and advanced materials for simulation.

**ST>RT-UP
CHILE**

Strategic partner for the development of MIRAI 3D in Chile and other LATAM countries.



mirai 3D

True medical experience

**LET'S DO
BETTER SURGERY TOGETHER,
NOW**

GET IN TOUCH

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