regenHU
BIOSYSTEM ARCHITECTS

Bioprinting*Suite*

UNLIMITED POSSIBILITIES | UNLIMITED SOLUTIONS

BioCAD
The intuitive design tool from idea to complex 3D Tissue printing

BioCAM
The bridge from multimaterial modeling to complex 3D Tissue printing

BioCUT
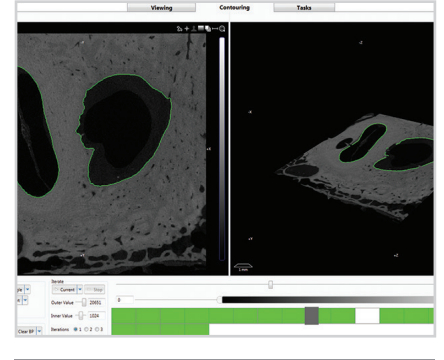The digital woorkflow from medical imaging to complex 3D Tissue printing

⊕ **SWISS INNOVATION**

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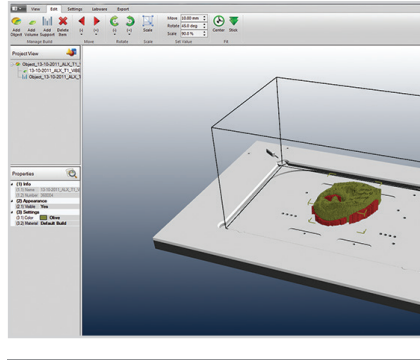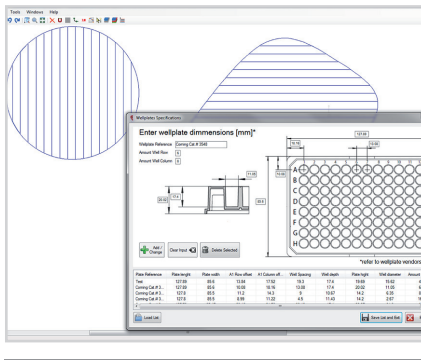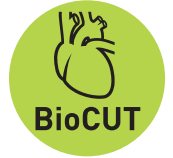
BioCAD™

BioCAD

> BioCAD™ is an intuitive, easy to use drawing suite that allows scientists and biomedical designers to design tissues, patterns, and scaffolds within minutes. There is no need for pre-existing 3D models or medical images, since BioCAD™ has all the necessary tools that allow you to design multimaterial models from scratch.

> The user interface is known for its simplicity allowing beginners to obtain results without spending time for an extensive training and learning phase and therefore shortening the design cycle.

BioCAD™ guides you from idea to 3D model:

> **Design**
BioCAD™ builds on commonly known design tools to generate simple geometries such as squares, circles, splines that can be combined with complex functions such as automated filling algorithms, offsets or gradients.

> **Define**
Attribute materials and printhead parameters to your designs using the broad range of parametrization functions to tune the instrument to materials that fit your needs.

> **Standardize**
BioCAD™ offers a database for standard labware. The database can be expanded with specific labware, lab-on-chip and substrate designs.

The bridge from multimaterial modeling to complex 3D Tissue printing

BioCAM™

BioCAM

> BioCAM™ is an easy to use 3D model slicer and toolpath generator dedicated to regenHU's 3D bio and tissue printers. It enables the creation of multimaterial tissues based on 3D digital models acquired from CAD systems, 3D scanners or medical imaging.

> The models can be arranged, scaled and merged after import.

> **BioCAM™** supports regenHU's broad hardware options and accessories portfolio. Complex processes, including hardware such as curing units, lasers, measuring units, are supported.

> The material dependent print parameters can be stored in a database to be reused and modified at a later time.

> An expandable database for standard labware is available. It will help you to speed up your design process cycle.

BioCAM™ guides you through multimaterial modelization:

> **Interface**
Import stereolithography file format (STL) and/or additive manufacturing file format (AMF).

> **Engineer**
Support material generation / multimaterial attribution/ toolpath visualization.

> **Export**
STL, AMF, BCD, G-code.

The digital worklow from medical imaging to complex 3D Tissue printing

BioCUT™

BioCUT

> BioCUT™ is an easy to use DICOM visualizer and analyzing tool which is integrated in regenHU's 3D bio and tissue printing digital workflow. It is a powerful software tool that allows scientists, biomedical designers and healthcare providers to create complex tissue structures while leading the user through the digital workflow: from medical imaging to multi-tissue modeling and multi material 3D bioprinting interface.

> State of the art segmentation and filtering tools enabling complex contouring, morphing or threshold based segmentation of the tissue of interest. A unique interface enables you to directly parametrize tissue structures for 3DDiscovery® and BioFactory® bioprinters.

> The powerful scripting interface and image processing language offers unique possibilities to create customized filters.

BioCUT™ guides you through the digital workflow:

> **Import**
Import raw data from medical and scientific image acquisition hardware.

> **Segment**
Convert center of interest into 3D digital models using automatic segmentation functions.

> **Create**
Combine tissue structures and assign material properties for 3D bioprinting.

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