Campus Vall d'Hebron - 3D Printing Catalogue 2026

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Research Group	Digital Design & Modeling	Clinical Simulation & Planning	Manufacturing & Prototiping	Validation	Enginnering & Scientific Consulting	3D Manufacturing Equipment	Software	Printing Material	Developed products	Standards of Quality	Service Provider	Open to collaborations	Bibliographic References
Stroke Research Group/ Neurology and Neuroradiology HUVH/Experimental Surgery Unit VHIR	Medical Image Segmentation Medical CAD Design Virtual Anatomical Models Modeled Mesh Generation Multiformat File Export (STL, OBJ, STEP, etc.)	Clinical Training with Anatomical Models	Prototype Manufacturing	Prototype Validation	Co-development of Research Prototypes	Formlabs Form 3; Anycubic Photon D2	3DSLICER; MESHMIXER, PREFORM; ANYCUBIC WORKSHOP	Soft and flexible materials (elastic 50A, flexible 80A); standard materials (clear); engineering materials (durable); bioengineering materials (hydrogel)	Neurovascular models for stroke simulation	<5% deviation between replica and original anatomy. Assessment by 3DSlicer and/or proprietary AI tool.	Yes	Yes	10.1161/SVIN.03.suppl_2.191; 10.1039/D5NR03429A; 10.1136/jnis-2025-023809; 10.1136/jnis-2022-019887; 10.1136/jnis-2023-020602
Musculoskeletal Tissue Engineering			Development of Bioinks for Tissue Engineering					Bioinks	Bioinks	GMP			DOI: 10.1002/term.2323; DOI: 10.1002/bit.28381
Radiology Department. Clinical Directorate	Medical Image Segmentation Virtual Anatomical Models Medical CAD Design Mesh Post-Processing and Optimization Multiformat File Export (STL, OBJ, STEP, etc.) Mesh Fusion	Virtual Surgical Planing Surgical Workflow Simulation Clinical Training with Anatomical Models	Design and Manufacturing of Surgical Guides and Tools	Prototype Validation	Co-development of Research Prototypes	Form4B Formlabs (2) - Stereolitography (SLA) technology Bambu X1E Combo Bambulab (2) - Fused Deposition Modeling (FDM)	Intellispace Portal; Syngovia; Horos; OSIRIX; Meshmixer; Brainlab; 3DSlicer, Fusion 360; Mimics & 3D Matic (Materialise)	SLA technology - Soft and flexible materials (elastic 50A, flexible 80A, Silicone 40A); standard materials (durable, clear); tough materials (tough 1500/2000); engineering materials (draft, high temp, grey pro, Rigid 4000/10K) FDM technology - PLA; ABS; ASA; PETG; PLA-CF	Anatomical models (virtual and printed) Medical device (prototype) Medical device (customized) Phantoms Simulators Surgical guides Custom-made prostheses for hospitalized complex patients	Manufacturing license for custom-made medical devices. Quality system based on ISO 13485	Yes	Yes	https://vhir.vallhebron.com/en/research/molecular-imaging-and-therapy https://hospital.vallhebron.com/en/healthcare/departments/radiodiagnosis
Bioengineering, Cell Therapy and Surgery in Congenital Malformations	Medical Image Segmentation		Bioprinting	Prototype Validation	Co-development of Research Prototypes	BIDOStation, 3D-bioprinter in sterile conditions	3DSlicer, MIMICS	Bioinks for musculoskeletal, osteoarticular or neural tissue regeneration	Personalized 3D-Bioimplats for musculoskeletal, osteoarticular or neural tissue regeneration. Testing and in vivo validation using large animal models imitating human pathologies	GMP preferred	Yes	Yes	Manuscripts in preparation

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You can also search for 3D biomodels in the ISCIII Biomodelsand Biobanks Platform https://www.isciiibiobanksbiomodels.es/