



DECEMBER 2020

UANDES Technology Portfolio



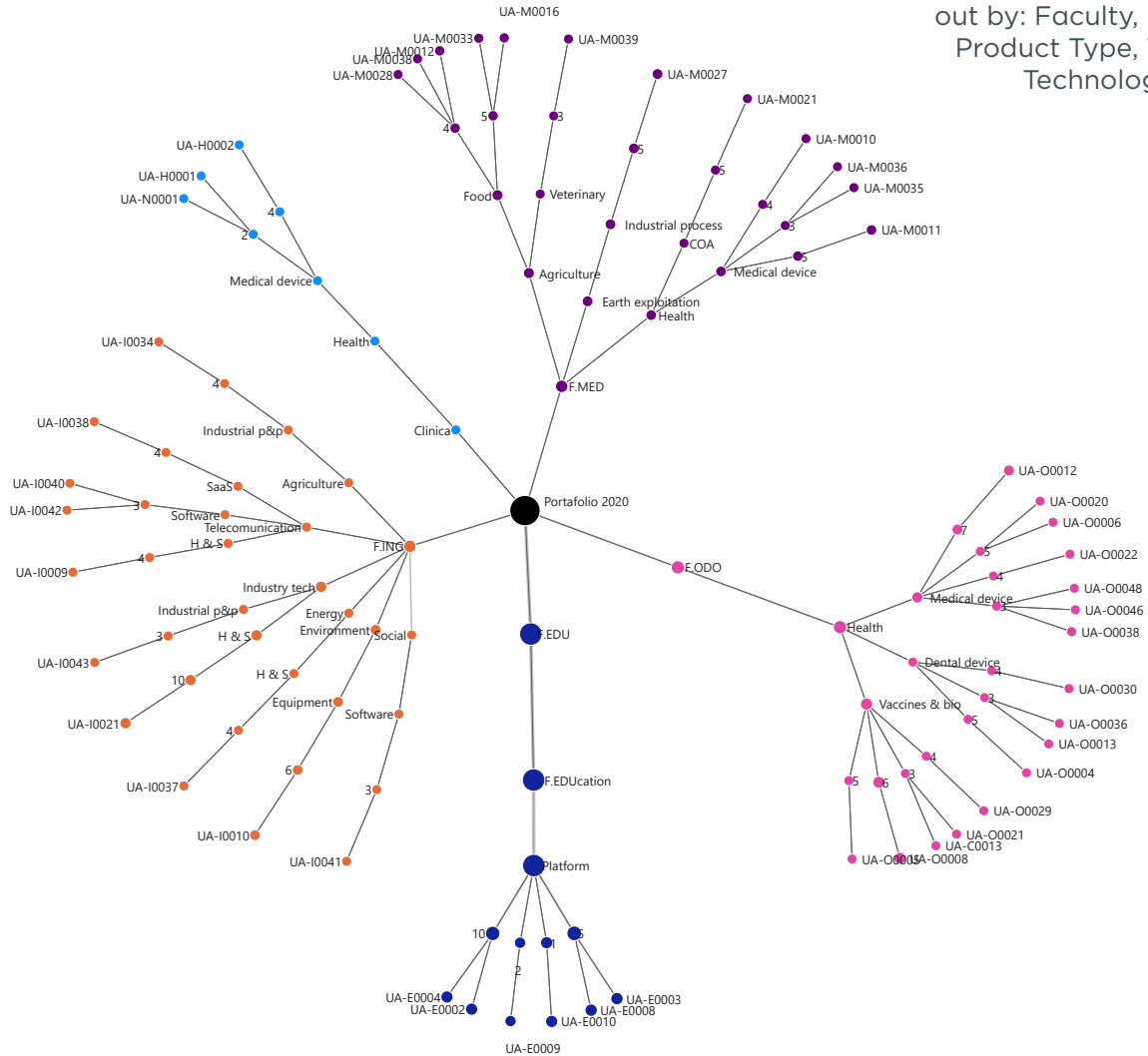
INNOVACIÓN UANDES

- In this document we present the portfolio of UANDES technologies developed by our researchers and spin-offs.
- Technologies were classified by product type considering regulations and definitions from the FDA and US and UK universities.
- Technological transfer success stories are shown (green - exit).

JOURNEY CHART OF OUR TECHNOLOGIES

● Clinica ● F.EDU ● F.ING ● F.MED ● F.ODO

Scheme of the University's portfolio classified inside out by: Faculty, Industry, Product Type, TRL and Technology Code.



VACCINES, BLOOD & BIOLOGICS

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-O0008	Cellistem ER	Biomaterial formulation for the encapsulation and release of allogeneic MSC and growth factors in the regeneration of vascularized dental pulp tissues.	Claudia Brizuela		
UA-O0021	GelX: Bone Tissue Engineering	New periodontal bone defects regeneration method using allogeneic MSC and GelX scaffold.	Alejandra Chaparro		
UA-O0029	nanoCu	Formulation and validation of copper-based nano-formulations for biomedical and regenerative medicine applications.	Ziyad Haidar		
UA-O0005	SG radioProtect	Directly injectable nanocapsules for the bi-phasic release of growth factors in the radioprotection of salivary glands of head and neck cancer patients.	Ziyad Haidar		
UA-C0004	Menistem's Exosomes: Antitumor Effect	Menistem's exosomes: antitumor effect Evaluation of anticancer effect of menstrual stem cells (Men-SC) exosomes and its derivatives in different cancers.	Francisca Alcayaga		
UA-C0005	Menistem: SDRA	Men-SC/secretome use for the treatment of SDRA.	Jimena Cuenca		
UA-C0012	STEN Tech	A method for producing a multilayered composite of fibers and biopolymer layers, capable of encapsulate cells and factors for the replacement or patching of different tissues.	Juan Pablo Acevedo		
UA-C00013	Cellistem™: Gum Regeneration	Gum regeneration method using allogeneic stem cells.	Alejandra Chaparro		
UA-R00001	Lupus Erythematosus	A therapy based on a especific UC-MSC subgroup for the treatment of lupus erythematosus.	Fernando Figueroa		
UA-R0004	Wound Healing	A technology that comprises Men-SC in a scaffold for improving the regeneration of skin ulcers.	Jimena Cuenca		

MEDICAL DEVICE

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-M0035	Bipolar disorder biomarkers	Protein biomarkers in peripheral blood for the diagnosis of bipolar disorder.	Úrsula Wyneken	●	
UA-M0036	Neuro developmental changes prenatal biomarkers	Biomarkers for early detection of prenatal stress-induced neurodevelopmental changes.	Federico Batiz	●	
UA-M0010	GelX: Life-Ink	A biomaterial with unique properties for 3D tissue printing.	Juan Pablo Acevedo	●	✓
UA-M0011	GelX: Biocomposite	Use of GelX matrix to improve the regeneration of skin ulcers.	Javier Enrione	●	✓
UA-O0006	PregnosticA: Preeclampsia	Use of oral fluids to predict the development of preeclampsia in early pregnancy.	Alejandra Chaparro	●	✓
UA-O0020	PregnosticA: Gestational Diabetes Mellitus	Use of oral fluids to predict the development of gestational diabetes in early pregnancy.	Alejandra Chaparro	●	✓
UA-O0046	PregnosticA: Premature Birth	Use of oral fluids to predict the a premature birth in early pregnancy.	Alejandra Chaparro	●	
UA-O0038	Oral fluids biomarkers for Chronic Periodontitis	Use of oral fluids microvesicles as biomarkers of chronic periodontitis progression.	Alejandra Chaparro	●	
UA-O0012	DFK	New method of forensic dentistry for obtaining genetic profiles, estimating data and cause of death without damaging the tooth.	Patricio Carrasco	●	✓
UA-O0022	Oro-Aid3	A bio-adhesive multi-compartmental thin-film membrane (Oroid).	Ziyad Haidar	●	

MEDICAL DEVICE

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-O0048	VitalOss	Electrostimulation for the regeneration of tissue.	Ziyad Haidar	●	
UA-N0001	Safe toilet	Design and implementation of a safety device for adult hospitalized patients who require assistance during their stay in the WC, safeguarding their security and privacy.	Pilar Martinez	●	
UA-H0001	Foot align	Establishment of optimal load range alignment in computed tomography Under load, and design of the optimal load range alignment module for the foot during a loaded radiograph.	Aarón Cortés	●	
UA-H0002	Anti-COVID19 mask with copper nanoparticles	EPP mask for protection against COVID-19 with copper nanoparticles.	Aarón Cortés	●	
UA-C0011	Stellium	A migration device that allows to evaluate stem cells potency by the quantification of uniaxial cell migration response.	Juan Pablo Acevedo	●	✓

DENTAL DEVICE

UA-O0004	X'PLANT 3Ss Dental	A combinatorial device for the safe and sound retrieval of osseointegrated dental implants from the jawbone (Combi-Head, Combi-Tip and Combi-Adapt).	Ziyad Haidar	●	✓
UA-O0013	SockGEL	A natural polymer-based, stimuli-responsive and injectable hydrogel formulation for use in dental extraction socket preservation.	Ziyad Haidar	●	
UA-O0030	BioFLOSS	A novel nano-enforced bioactive dental floss.	Ziyad Haidar	●	✓
UA-O0036	Pulp pathology diagnosis	Determination of non-invasive molecular biomarker for the early diagnosis of pulp pathology.	Claudia Brizuela	●	

COA (CLINICAL OUTCOME ASSESMENT)

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-M0021	R.A.D.A.R	Implementation of a network for the care and detection of adolescents at risk of suicide.	Francisco Bustamante	●	✓
UA-M0012	Bioactive Peptides from Quinoa	Obtaining functional activity peptides from quinoa proteins.	Javier Enrione	●	
UA-M0016	GelX: Gel-Coat	Development of edible coating for salmon fillets.	Javier Enrione	●	✓
UA-M0028	Starch-cellulose composites	New starch-cellulose biocomposite with low digestibility level and post-consumption glycemic index.	Paulo Díaz	●	
UA-M0033	Quinoa Flour	Process for obtaining quinoa functional flour.	Javier Enrione	●	
UA-M0038	GelX: hydrolyzed	Bioactive peptides from fishing industry waste (salmo salar skin).	Javier Enrione	●	
ANIMAL & VETERINARY					
UA-M0039	Sheep Chip	Device for the diagnosis of pregnancy or multiple pregnancy in sheep cattle.	Sebastián Illanes	●	

PLATFORM					
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-E0002	Dia+: Diamat for children from kinder to 4th grade	Technology platform for evaluation and assessment of math skills in children.	Kattia Muñoz	●	✓
UA-E0009	Dia+: Diamat for children from kinder to 5th to 8th grade	Technology platform for evaluation and assessment of math skills in children.	Kattia Muñoz	●	✓
UA-E0003	Dia+: Leer+	Platform to exercise reading skills based on reading lexiles: increases reading comprehension and vocabulary.	Pelusa Orellana	●	✓
UA-E0004 /8	Dia+: Dialect	Technology platform for the diagnosis and assessment of reading skills in students from kindergarten to 12th grade.	Pelusa Orellana	●	✓
UA-E0010	Dia+: Dialect home	Technology platform for the diagnosis and assessment of reading skills in children from kindergarten to 4th grade, for use at home.	Pelusa Orellana	●	✓

SOFTWARE

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-10040	Mapuche Cooperative	Preliminary conceptual development of an ABM model for modernization of the Mapuche agricultural cooperative.	Juan Pérez	●	
UA-10042	Transparency in public procedures	Web platform for transparency in public electronic procedures.	Carla Vairetti	●	
UA-10041	Public Transport	Computational tool that allows microscopic modeling of a sequence of bus stops on a highway.	Rodrigo Fernández	●	

SaaS

UA-10038	Detpax	Subway passengers density detection system through image analysis.	Sebastián Seriani	●	
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HARDWARE & SOFTWARE

UA-10009	Laser communications	Using laser technology as a secure communications system.	Jaime Anguita	●	
UA-10037	Predictive system for wind tower	Monitoring system for diagnosis and prognosis of structural damage in wind turbines.	Rodrigo Astroza	●	
UA-10021	Almond classifier	Classifies almonds according to size, shape and damage.	Pablo Zegers	●	

- DEVELOPMENT STAGE
- 1- Preliminary results and proof of concept ●
 - 2- Prototype ●
 - 3- Exit / Market adoption ●

INDUSTRIAL PROCESS & PRODUCT

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DL	IP PROTECTION
UA-10034	Enzymes for Biofuel and/or Food Industries	Characterization of psychophile enzymatic activity for industrial uses.	Felipe Scott	●	
UA-10043	Self Curing Concrete	Development of an additive for the auto-curing of concrete.	Álvaro Paul	●	

INDUSTRIAL PROCESS

UA-M0027	GelX	Biomaterial obtained from waste from the aquaculture industry.	Javier Enrione	●	✓
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INDUSTRIAL EQUIPMENT & HOME

UA-10010	Bio indoor air purifier	Biological technology for removing indoor air pollutants.	Alberto Vergara	●	✓
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SUCCESS STORIES

Dia+



LEVEL
Level Bioscience

regenero

**CELLS
FOR
CELLS**
EXPERTOS EN TERAPIA CELULAR

PREGNÓSTICA
Predecir para prevenir

**SORT
BOX**

DFK
DENTAL FORENSIC KIT



INNOVACIÓN UANDES

Proyecto apoyado por



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