







2021 - 2022

# UANDES Technology Portfolio



- 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).

# 2021 - 2022 OUR TECHNOLOGY PORTFOLIO

El Contraction

VACCINES, BLOOD & BIOLOGICS					
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- 00029	nanoCu	Copper-based nano-formulations for biomedical and regenerative medicine applications.	Ziyad Haidar	•	TS
UA- 00005	Radiotherapy protect	Injectable solution to prevent and treat xerostomia caused by radiation theray in head and neck cancer patients.	Ziyad Haidar	•	Ρ
UA- M0042	Lung Maturity	Cell therapy based on UC-MSC on the stimulation of fetal lung maturity.	Jimena Cuenca	•	Ρ
UA- C0007	Cellistem™	Treatment based on UC-MSC derived stem cells successfully isolated and expanded at GMP conditions.	Rafael Tapia		Ρ
UA- C0008	Cellistem™: Dilated Cardiomyopathy	UC-MSC derived stem cells for the treatment of heart failure.	Francisco Espinoza		Ρ
UA- C0010	Cellistem™: Osteoarthritis	UC-MSC derived stem cells for the treatment of osteoarthritis.	Francisco Espinoza		Ρ
UA- M0043	Cellistem: Glycostem	Acellular product based on extracellular nanovesicles derived from MSC induced for the treatment of osteoarthritis.	Patricia Luz	•	Ρ
UA- 00008	Cellistem ER (Ranokure)	Biomaterial formulation for the encapsulation and release of allogeneic UC-MSC and growth factors in the regeneration of vascularized dental pulp tissues.	Claudia Brizuela		Ρ
UA- R0007	Cellistem EXO	Using exosomes from UC-MSC for the treatment of osteoarthritis.	Francisca Alcayaga		Ρ
UA- C0012	STEN Tech: Veintis	Bioengineered and biodegradable vascular graft that mimics the anatomy and mechanical performance of human blood vessels.	Juan Pablo Acevedo	•	Ρ
GANADOR DE PREMIO AVONNI SALUD 2020*					
O3 P: patent C: copyright TM: trade mark TS: trade secret UANDES Technology Portfolio   2021 - 2022					lio   2021 - 20:

DEVELOPMENT STAGE 1. Preliminary results and proof of concept 2· Prototype 🔴

3. Exit / Market adoption 🔴

05

CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- C0017	STEN Tech: Carotid Patches	Composite of biomaterials that prevents the activation of coagulation in human vessels.	Juan Pablo Acevedo		Ρ
UA- R0001	Lupus Erythematosus Therapy	A therapy based on a especific UC-MSC subgroup for the treatment of lupus erythematosus.	Fernando Figueroa		Ρ
UA 00049	Laser Nerve Repair	Method for nerve repair by low power laser stimulated stem cell transplantation.	Carolina Inostroza		TS
MEDI	CAL DEVICE				
UA- 00022	Dental film: Oro-Aid3	Oral film indicated to prevent oral health. Designed with layers covered with polyelectrolytes loaded with different antimicrobial agents.	Ziyad Haidar	•	TS
UA- M0036	Prenatal NeuroBiomarkers	Biomarkers for early detection of prenatal stress-induced neurodevelopmental changes.	Federico Batiz		TS
UA- M0035	Bipolar disorder biomarkers	Using protein biomarkers in peripheral blood for the diagnosis of bipolar disorder and differentiation of depression (monopolar disorder).	Ursula Wyneken		TS
UA- 00012	DFK	New method of forensic dentistry for obtaining genetic profiles, estimating data and cause of death without damaging the tooth.	Patricio Carrasco		P   TM
UA- M0040	lschemia Diagnosis	Method to diagnosis of cardiac ischemia based on the quantification of extracellular vesicles.	Carlos Irarrázaval		TS
UA- N0001	Safe toilet	Hospital device for the safety of internal patients during their permanence in the toilet.	Ruby Anne Almarza		TS

MEDICAL DEVICE					
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- H0001	Foot align	Medical device used in the field of kinesiology to determine the optimal range of alignment for the foot during a loaded radiograph.	Aaron Cortés		TS
UA- H0002	C19 Mask	Mask antiCOVID19 with Cu nanoparticles.	Aaron Cortés		
UA- 00006	PregnosticA: Preeclampsia	Diagnososis tool that uses oral fluids to predict the development of preeclampsia in early pregnancy.	Alejandra Chaparro	•	Ρ
UA- 00046	PregnosticA: Premature birth	Diagnososis tool that uses oral fluids to predict a premature birth in early pregnancy.	Alejandra Chaparro		Ρ
UA- 00020	PregnosticA: Gestacional Diabetes Mellitus	Diagnososis tool that use oral fluids to predict the development of gestational diabetes in early pregnancy.	Alejandra Chaparro	•	Ρ
UA- R0006	Oxium	Culture medium to promote the production of stem cell exosomes.	Francisca Alcayaga		Ρ
UA_ C0016	Artropaint	Printing device for bio ink.	Juan Pablo Acevedo		TS
UA- M0010	GEL-X: Life-Ink	Biomaterial made with Gel-X with unique properties for 3D tissue printing.	Juan Pablo Acevedo	•	Ρ
UA- M0011	GEL-X: Biocomposite	Gel-X wound dressing to improve the regeneration of the wound healing.	Javier Enrione		Ρ
UA- M0044	GEL-X: Hard Bones	Biomaterial produced from salmon bone that is used as an allograft replacement in osteogenesis.	Javier Enrione		TS
UA- R0008	GEL-X: Bio-ink 2.0	New formulation of bio ink for the treatment of joint injuries.	Juan Pablo Acevedo		TS

DEVELOPMENT STAGE 1. Preliminary results and proof of concept 🔵 2· Prototype 😑

3. Exit / Market adoption 🔵

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

DENTAL DEVICE					
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- 00004	X'PLANT 3Ss Dental (Combi- Head)	A combinatorial device for the safe and sound retrieval of osseointegrated dental implants from the jawbone (Combi-Head, Combi-Tip. Combi-Adapt).	Ziyad Haidar	•	Ρ
UA- 00030	BioFLOSS	A novel nano-enforced bioactive dental floss.	Ziyad Haidar		Р
UA- 00050	SockGEL 2.0	Oral injectable hydrogel for painless dental extraction, socket healing and prevention of alveolar osteitis.	Ziyad Haidar		TS
SOFT	WARE				
UA- 10040	Tidy Crop	Preliminary conceptual development of an ABM model for modernization of the Mapuche agricultural cooperative.	Juan Pérez	•	С
UA- 10042	Transparency in public proceadures	Web platform that allows knowing the level of transparency that exists in the electronic procedures of tenders, services and calls for tenders.	Carla Vairetti		С
UA- 10044	IA Analytics	Integrated information analytics system for the prosecution of crimes against property: artificial intelligence to detect criminal structures.	Carla Vairetti		TS
UA- 10046	Always Clean Photovoltaic Panel	Automatic detection system for dirt in photovoltaic panels based on images.	Gustavo Funes		TS
UA- 10045	Arbocensus app	Application to receive information about urban trees from citizens.	José Francisco Delpiano		TS
UA- 10050	Arbocensus: Healthy	Computer vision for hazard tree identification and assessment.	José Francisco Delpiano		TS

PLAT	FORM				
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- 10049	Arbocensus: Massive evaluation	Computational tool that allows obtaining a massive evaluation of urban trees.	José Francisco Delpiano		TS
UA- 10047	Power lines vegetation management	System for monitoring and warning of invasion and growth of vegetation near electric transmission lines.	José Francisco Delpiano		TS
UA-D001	Legal Certainty	Computational tool for legal certainty to new project in environmental field.	José Ignacio Martínez		TS
UA- E0002	Dia+: Diamat for children from K° to 4th grade	Platform to evaluation of math skills in students from kindergarten to 4th grade.	Kattia Muñoz		C   TM
UA- E0009	Dia+: Diamat for children from 5th to 8th grade	Platform to evaluation of math skills in students from 5th to 8th grade.	Macarena Larraín		C   TM
UA- E0003	Leer+	Platform to exercise reading skills based on reading lexiles: increases reading comprehension, interest and vocabulary in students from 3th to 6th grade.	Pelusa Orellana		С   ТМ
UA- E0004/ UA- E0008	Dia+: Dialect from K° to 12th grade	Platform for the diagnosis of reading skills in students from kindergarten to 12th grade.	Pelusa Orellana		C   TM
UA- E0010	Dia+: Dialect Home	Extension of the Dialect platform adapted to evaluate students at home. For students in home education and in response to the COVID-19 pandemic.	Pelusa Orellana	•	TS   TM

GANADOR DE PREMIO AVONNI EDUCACIÓN 2021\*

07

DEVELOPMENT STAGE 1. Preliminary results and proof of concept 2. Prototype

3. Exit / Market adoption 🔵

## DEVELOPMENT STAGE 1. Preliminary results and proof of concept 🔵 2. Prototype 😑

3. Exit / Market adoption 🔵

HARDWARE & SOFTWARE					
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- 10009	Secure Comunications	Laser secure communication system.	Jaime Anguita	•	TS
UA- 10037	Wind Tower Damage Monitoring System	Monitoring system for diagnosis and prognosis of structural damage in wind turbines.	Rodrigo Astroza	•	TS
UA-10021	Almond Knows	System that classifies almonds according to their size, shape and damage.	Pablo Zegers		TS
SaaS					
UA- 10038	Detpax	Subway passengers density detection system through image analysis.	Sebastian Seriani		TS
ENGIN	NEERING				
UA-10051	Seismic Bridge Analyzer	Implementation of analysis procedures to estimate the seismic behavior and the demand on the critical components of the bridges.	Rodrigo Astroza		С
INDUS	STRIAL PRO	CESS & PRODUCT			
UA- 10043	Self Curing Concrete	Additive used in the curing process of concrete to produce a lighter concrete.	Alvaro Paul		TS
INDUS	TRIAL EQUI	IPMENT & HOME			
UA- 10010	Bio Indoor Air Purifier	Biological technology for removing indoor air pollutants.	Alberto Vergara		Ρ
INDUS	STRIAL PRO	CESS			
UA- M0027	GEL-X	Collagen obtained from cold species from the aquaculture industry that acts as a matrix for different uses.	Javier Enrione		Ρ

FOOD	)				
CODE	TECHNOLOGY	DESCRIPTION	LEAD RESEARCHER	DS	IP
UA- M0012	Quinoa plus	Bioactive peptides from quinoa proteins.	Javier Enrione		Ρ
UA- M0033	Quinoa Flour+	Process to obtain enrich quinoa fluor.	Javier Enrione	•	TS
UA- M0028	Starch-cellulose composites	New starch-cellulose biocomposite with low digestibility level and post-consumption glycemic index.	Paulo Diaz	•	TS
UA- M0016	GEL-X: Gel Coat	Edible coating that increases the shelflife of meat foods.	Javier Enrione		TS
UA- M0038	GEL-X: hydrolyzed	Nutraceutical produced from cold species skin for the modulation of diabetes and hypertension.	Javier Enrione	•	TS
COA (	(CLINICAL O	UTCOME ASSESMENT)			
UA- M0021	R.A.D.A.R.	Implementation of a network for the care and detection of adolescents at risk of suicide.	Francisco Bustamante	•	C   TM
ANIM	AL & VETER	INARY			
UA- M0039	Sheep chip	Device for the diagnosis of pregnancy or multiple pregnancy in sheep.	Sebastían Illanes		TS
TRAN	SPORT				
UA- 10048	Senior Move	Practices for the mobility of the elderly in public transport in Chile.	Rodrigo Fernández		TS

09

UA- M0039	Sheep chip	Device for the diagnosis of pregnancy or multiple pregnancy in sheep.
TRAN	ISPORT	
UA- 10048	Senior Move	Practices for the mobility of the elderly in public transport in Chile.

DEVELOPMENT STAGE

1. Preliminary results and proof of concept 🔵

2· Prototype 😑

3. Exit / Market adoption 🔵

## SUCCESS STORIES











# **TTO CONTACT**

Silvana Becerra Deputy director of development and marketing • sbecerra@uandes.cl • +56 2 2618 1209

> **Kritsye Leiva** Technology Transfer Manager • kleiva@uandes.cl • +56 2 2618 2191

> > More info: innovacion.uandes.cl







