CV Date	17/01/2023

Part A. PERSONAL INFORMATION

First Name *	MIGUEL		
Family Name *	ALAMINOS MINGORANCE		
Sex *	Male	Date of Birth *	
ID number Social Security, Passport *		Phone Number *	958-241000 - 20461
URL Web			
Email Address	malaminos@ugr.es		
Researcher's identification number	Open Researcher and Contributor ID (ORCID) *	0000-0003-4876-2672	
	Researcher ID	N-9960-2016	
	Scopus Author ID	6602357049	

* Mandatory

A.1. Current position

Job Title	Catedrático de Universidad		
Starting date	2012		
Institution	Universidad de Granada		
Department / Centre	Histología e Ingeniería Tisular / Facultad de Medicina		
Country		Phone Number	958-241000 (ext. 20461)
Keywords	Biomaterials; Cell culture; Tissue culture; Histology		

A.3. Education

Degree/Master/PhD	University / Country	Year
Máster Univ. en Genética y Evolución	Universidad de Granada	2016
Doctor en Medicina y Cirugía	Universidad de Granada	2001
Doctor en Ciencias Biológicas	Universidad de Granada	2000
Licenciado en Ciencias Biológicas	Universidad de Granada	1996
Licenciado en Medicina y Cirugía	Universidad de Granada	1994

Part B. CV SUMMARY

4 National research periods (CNEAI six-year sexenios), 1 CNEAI transfer period, 5 Autonomous research periods (CAECA), 3 UGR teaching five-year periods. Publication of more than 170 scientific articles in PubMed, with 100 of them published in the last 10 years and most of these in first-quartile journals. Principal Investigator of more than 20 regional, national and international research projects in the field of tissue engineering, including a European project as coordinator. 12 patents, some of which have been licensed to the industry. Some of the artificial tissues generated and patented by the applicant (cornea and skin) are being generated as Advanced Therapies Medicinal Products in GMP rooms of the Public Health System and are being used clinically in patients with the approval of the Spanish Agency for Medicines and Health Products. The clinical use of both types of artificial tissues has achieved great scientific, health and social importance. More than 30 Doctoral Theses supervised (11 in the last 10 years). Numerous awards and recognitions, including the Medal of Andalusia 2018 and the Gold Medal of the City of Granada 2017. This curriculum shows only a selection of articles and projects from the last 5 years.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Publications

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

1 Campos F; et al.2018. Conceptions of learning factors in postgraduate health sciences master students: a comparative study...BMC Med Educ. 18-1, pp.128. https://doi.org/10.1186/s12909-018-1227-x
2 Díaz E; et al.2018. Evaluation of freeze-drying and cryopreservation protocols for long-term storage of biomat based on dec.J Biomed Mater Res B Appl Biomater. 106-2, pp.488-500. https://doi.org/10.1002/jbm.b.33861
3 Carriel V; et al.2018. Ex Vivo and In Vivo Stem Cells-Based Tissue Engineering Strategies for Their Use in Regen Med.Stem Cells Int. Apr 15, pp.7143930. https://doi.org/10.1155/2018/7143930
4 2022. Artificial tissues as medicine of the future Anales RANM. https://doi.org/10.32440/ar.2022.139.01.ed01
5 2022. Biological Effects of Maslinic Acid on Human Epithelial Cells Used in Tissue Engineering Front Bioeng Biotechnol. 27-10, pp.876734. https://doi.org/10.3389/fbioe.2022.876734
6 2022. Development of secretome-based strategies to improve cell culture protocols in tissue engineering Sci Rep. https://doi.org/10.1038/s41598-022-14115-y
7 2022. Histological Profiling of the Human Umbilical Cord: A Potential Alternative Cell Source in Tissue Engineering J Pers Med. https://doi.org/10.3390/jpm12040648
8 Garzón I; et al.2021. Biofabrication of a Tubular Model of Human Urothelial Mucosa Using Human Wharton Jelly Mesenchymal Stromal Cells Polymers (Basel). 13-10, pp.1568. WOS (0) https://doi.org/10.3390/ijms22041923
9 Irastorza A; et al.2021. Evaluation of Marine Agarose Biomaterials for Tissue Engineering Applications.Int J Mol Sci. 22-4, pp.1923. WOS (0) https://doi.org/10.3390/ijms22041923
10 2021. Generation and Evaluation of Novel Biomaterials Based on Decellularized Sturgeon Cartilage for Use in Tissue Engineering Biomedicines. https://doi.org/10.3390/biomedicines9070775
11 2021. Generation of a Biomimetic Substitute of the Corneal Limbus Using Decellularized Scaffolds Pharmaceutics. https://doi.org/10.3390/pharmaceutics13101718
12 2021. Improvement of Cell Culture Methods for the Successful Generation of Human Keratinocyte Primary Cell Cultures Using EGF-Loaded Nanostructured Lipid Carriers Biomedicines. https://doi.org/10.3390/biomedicines9111634
13 Campos F; et al.2021. In vivo time-course biocompatibility assessment of biomagnetic nanoparticles-based biomaterials for...Mater Sci Eng C Mater Biol Appl. 118, pp.111476. WOS (0) https://doi.org/10.1016/j.msec.2020.111476
14 2021. Injectable Magnetic-Responsive Short-Peptide Supramolecular Hydrogels: Ex Vivo and In Vivo Evaluation ACS Appl Mater Interfaces. 13-42, pp.49692-49704. https://doi.org/10.1021/acsami.1c13972
15 2021. Usefulness of a Nanostructured Fibrin-Agarose Bone Substitute in a Model of Severely Critical Mandible Bone Defect Polymers. https://doi.org/10.3390/polym13223939
16 Chato-Astrain J; et al.2020. Detergent-based decel. periph. nerve allografts: An in vivo precl. study in the rat sciatic nerve injury model.J Tissue Eng Regen Med. 14-6, pp.789-806. WOS (4) https://doi.org/10.1002/term.3043
17 Campos F; et al.2020. Evaluation of Fibrin-Agarose Tissue-Like Hydrogels Biocompatibility for Tissue Engineering Applications.Front Bioeng Biotechnol. 8, pp.596. WOS (5) https://doi.org/10.3389/fbioe.2020.00596
18 Rodriguez-Pozo JA; et al.2020. Evaluation of myopic cornea lenticules. A histochemical and clinical correlation.Exp Eye Res. 196, pp.108066. WOS (0) https://doi.org/10.1016/j.exer.2020.108066
19 Ionescu AM; et al.2020. Evaluation of the optical and biomech. properties of bioengineered human skin generated with FA biomat.J Biomed Opt. 25-5, pp.1-16. WOS (1) https://doi.org/10.1117/1.JBO.25.5.055002
20 Garzon I; et al.2020. Expanded Differentiation Capability of Human Wharton's Jelly Stem Cells Toward Pluripotency: A Systematic Review.Tissue Eng Part B Rev. 26-4, pp.301-312. WOS (1) https://doi.org/10.1089/ten.TEB.2019.0257

21 Chato-Astrain J; et al.2020. Generation of a novel human dermal substitute functionalized with antibiotic-loaded nanostructured lipid carriers (NLCs) with antimicrobial properties for tissue engineering.J Nanobiotechnology. 18-1, pp.174. WOS (0) https://doi.org/10.1186/s12951-020-00732-0
22 Blanco-Elices C; et al.2020. In Vitro Generation of Novel Functionalized Biomaterials for Use in Oral and Dental Regenerative Medicine Applications.Materials. 13-7, pp.1692. WOS (0) https://doi.org/10.3390/ma13071692
23 Garzon I; et al.2020. Long-Term in vivo Evaluation of Orthotypical and Heterotypical Bioengineered Human Corneas.Front Bioeng Biotechnol. 8, pp.681. WOS (0) https://doi.org/10.3389/fbioe.2020.00681
24 Segura-Rodriguez D; et al.2020. Myocardial fibrosis in arrhythmogenic cardiomyopathy: a genotype-phenotype correlation study.Eur Heart J Cardiovasc Imaging. 21-4, pp.378-386. WOS (6) https://doi.org/10.1093/ehjci/jez277
25 Barczak M; et al.2020. Revealing importance of particles' surface functionalization on the properties of magnetic alginate hydrogels.Carbohydr Polym. 247, pp.116747. https://doi.org/10.1016/j.carbpol.2020.116747
26 Gila-Vilchez C; et al.2019. Anisotropic magnetic hydrogels: design, structure and mechanical properties.Philos Trans A Math Phys Eng Sci. 377-2143, pp.20180217. https://doi.org/10.1098/rsta.2018.0217
27 Vela-Romera A; et al.2019. Characterization of human ridged and non-ridged skin: a comprehensive histol, HC and IHC analysis.Histochem Cell Biol. 151, pp.57-73. https://doi.org/10.1007/s00418-018-1701-x
28 Martin-Piedra MA; et al.2019. Effective use of mesenchymal stem cells in human skin substitutes generated by tissue engineering.Eur Cell Mater. 37, pp.233-249. https://doi.org/10.22203/eCM.v037a14
29 Sola M; et al.2019. Evaluation of the awareness of novel advanced therapies among family medicine residents in Spain.PLoS One. 14-4, pp.e0214950. https://doi.org/10.1371/journal.pone.0214950
30 Nieto-Aguilar R; et al.2019. In vitro retention efficiency of temporary type zinc oxide cement for orthodontic forced eruption.Int Orthod. 17-1, pp.96-102. https://doi.org/10.1016/j.ortho.2019.01.020
31 Segura-Rodríguez D; et al.2019. Myocardial fibrosis in arrhythmogenic cardiomyopathy: a genotype-phenotype correlation study.Eur Heart J Cardiovasc Imaging. https://doi.org/10.1093/ehjci/jez277
32 Campos-Cuerva R; et al.2019. Nanostructured fibrin agarose hydrogel as a novel haemostatic agent.J Tissue Eng Regen Med. 13, pp.664-673. https://doi.org/10.1002/term.2831
33 Carriel V; et al.2019. Scleral surgical repair through the use of nanostructured fibrin/agarose-based films in rabbits.Exp Eye Res. 186, pp.107717. https://doi.org/10.1016/j.exer.2019.107717
34 Rico-Sánchez L; et al.2019. Successful development and clinical translation of a novel anterior lamellar artificial cornea.J Tissue Eng Regen Med. 51, pp.3047-3050. https://doi.org/10.1002/term.2951
35 Egea-Guerrero JJ; et al.2019. Transplant of Tissue-Engineered Artificial Autologous Human Skin in Andalusia...Transplant Proc. 51-9, pp.3047-3050. https://doi.org/10.1016/j.transproceed.2019.08.014
36 Garzon I; et al.2018. Bioactive injectable aggregates with nanofibrous microspheres and human dental pulp stem cells...J Tissue Eng Regen Med. 12, pp.204-216. https://doi.org/10.1002/term.2397
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40 Jaimes-Parra B; et al.2018. Membranes derived from human umbilical cord Wharton's jelly stem cells as novel bioeng. tissue-like constructs.Histol & Histopathol. 33, pp.147-156. https://doi.org/10.14670/HH-11-897

41 Zubarev A; et al.2018. Rheological properties of magnetic biogels.Arch Appl Mech. 89, pp.91-103. https://doi.org/10.1007/s00419-018-1450-2

42 Durand-Herrera D; et al.2018. Wharton's jelly-derived MSC as a new source for the generation of microtissues for TE applications.Histochem Cell Biol. 150-4, pp.379-393. https://doi.org/10.1007/s00418-018-1685-6

43 Durand-Herrera D; et al.;. 2018. Wharton's jelly-derived mesenchymal cells as a new source for the generation of microtissues...Histochem Cell Biol. 150-4, pp.379-393. https://doi.org/10.1007/s00418-018-1685-6

C.3. Research projects and contracts

1 **Project**. Utilidad clínica de un modelo de córnea artificial de fibrina-agarosa nanoestructurada en pacientes con graves úlceras corneales (NANOULCOR ICI21/00010). Instituto de Salud Carlos III. González Gallardo C (IP). 01/01/2022-31/12/2025. 50.000 €.

2 **Project**. Generación mediante ingeniería tisular de un modelo bioartificial de limbo esclerocorneal para el tratamiento de la insuficiencia límbica (CSyF PI-0086-2020). Consejería de Salud JA. Alaminos M (IP). 01/01/2021-31/12/2023. 149.999,9 €.

3 **Project**. Generation of novel bioactive functionalized human artificial corneas for clinical use as advanced therapies medical products (FIS PI20/317). Instituto de Salud Carlos III.. Alaminos M (IP). 01/01/2021-31/12/2023. 189.970 €.

4 **Project**. Generación de nuevos modelos de piel medicalizada a partir de la piel artificial de fibrina-agarosa... (PE-0395-2019). Consejería de Salud JA. Alaminos M (IP). 01/01/2020-31/12/2023. 195.600 €.

5 **Project**. Desarrollo de un limbo artificial para la resolución de la ceguera por insuficiencia limbar irreversible (B-CTS-504-UGR20). Consejería de Transformación Económica, Industria, Conocimiento y Universidades (Junta de Andalucía) y FEDER (UE). Alaminos M (IP). 01/07/2021-30/06/2023. 50.000 €.

6 **Project**. Medicina regenerativa aplicada a lesiones traumáticas del nervio periférico. Desarrollo de un nuevo medicamento de ingeniería tisular para uso clínico (Pr. Excelencia Junta Andalucia P18-RT-5059). Carriel V (IP). 01/01/2020-31/12/2022. 119.652 €.

7 **Project**. Mucosa palatina humana generada mediante ingeniería tisular para el tratamiento de la fisura palatina (BIOCLEFT). ICI19/00024. ISCIII. Alaminos M (IP). 01/01/2020-31/12/2022. 648.811,9 €.

8 **Project**. Generación por ingeniería tisular de modelos biomiméticos de cáncer de piel no melanoma para la evaluación de protocolos terapéuticos (OTRI.35A-07). OTRI-UGR y Fund. Anticáncer SFJSC.. Alaminos M (IP). 01/01/2019-31/12/2022. 74.000 €.

9 **Project**. Transversal tissue engineering and nanomedicine approach towards an improved chronic wound therapy (NanoGSkin).. Proyecto Europeo EuroNanoMed3. Alaminos M (Coordinador). 02/03/2018-01/03/2021. 2.948.217 €.

10 **Project**. Desarrollo de nuevas agarosas como matriz de proliferación de células cutáneas AGARMATRIZ (CDETI IDI-20180052). Alaminos M (IP). 01/01/2018-31/12/2020. 90.220 €.

11 **Project**. Elaboración de un sustituto de cartílago hialino de microtejidos condrogénicos, MSC y biomateriales naturales de base nanotecnológica (Junta de Andalucia PI0257-2017).. Carriel V (IP). 01/01/2018-31/12/2020. 60.375 €.

12 **Project**. Generación y optimización de nuevos modelos de córnea artificial. Estudio comparado con córneas artificiales humanas implantadas en un ensayo clínico (FIS PI17/391). Instituto de Salud Carlos III.. Alaminos M (IP). 01/01/2018-31/12/2020. 105.270 €.

13 **Project**. Parche hemostático y sellante mejorado para su uso hospitalario en cirugías abiertas (3728-20). Fundación FIPSE (Minist. Sanidad, ISCIII, Abbvie, Gilead, Jansen, MSD y Sanofi). C.-Cuerva R (IP). 12/05/2020-12/11/2020. 28.000 €.

14 **Contract**. Desarrollo de nuevas agarosas como matriz de proliferación de células cutáneas AGARMATRIZ (CDTI IDI-20180052) Hispanagar, SA. 01/01/2018-01/01/2021. 90.220 €.

C.4. Activities of technology / knowledge transfer and results exploitation

1 EP22382231.3. HYDROGEL SUITABLE TO PRODUCE ARTIFICIAL TISSUES Spain. 11/03/2022. Universidad de Granada.
2 P202130793. DISPOSITIVO PARA GENERAR CRIPTAS LIMBARES ARTIFICIALES Spain. 13/08/2021. Univ Granada y Serv Andaluz Salud (SAS).
3 P202031250. NUEVO BIOMATERIAL PARA INGENIERÍA TISULAR (osículos de holturia) Spain. 15/12/2020. Univ Granada y Serv Andaluz Salud (SAS).
4 P202031030. NUEVO BIOMATERIAL PARA INGENIERÍA TISULAR (cartílago de esturión) Spain. 09/10/2020. Univ Granada y Serv Andaluz Salud (SAS).
5 P201830169. LIMBO ESCLEROCORNEAL DESCELULARIZADO Spain. 23/02/2018. Univ Granada y Serv Andaluz Salud (SAS).