

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>		30/09/2021
First and Family name	Ezequiel Perez-Inestrosa			
ID number	24899117F	Age	61	
Researcher numbers	Researcher ID	H-9801-2015		
	Orcid code	0000-0001-7546-5273		

### A.1. Current position

Name of University/Institution	Universidad de Málaga		
Department	Departamento de Química Orgánica / Facultad de Ciencias		
Address and Country	Campus de Teatinos, 29071-Málaga. Spain		
Current position	Catedrático de Universidad	From	09/07/2011
Espec. cód. UNESCO	2306		
Key words	Organic Chemistry. Molecular and Supramolecular Photochemistry. Photoinduced Electron Transfer. Molecular recognition. Dendrimers and Dendrons. Sensors and biosensors. Fluorescent systems. Multiphotonics Excitation Processes. Nanoscience. Nanomedicine.		

### A.2. Education

Degree	University	Year
B.Sc.	Universidad de Granada	1983
Ph.D....	Universidad de Malaga	1991

### A.3. JCR articles, h Index, thesis supervised...

Number of articles: 119

Total number of citations: 3183

H index: 32

PhD theses supervised: 8 (4 in progress)

Book chapters: 6

Tramos: 5 (sexenios). Proximo: 2019-2024.

### Part B. CV SUMMARY (max. 3500 characters, including spaces)

Currently I am Scientific Director of the Andalusian Center for Nanomedicine and Biotechnology-BIONAND and responsible for the Research Group "Biomimetic Dendrimers and Photonics Laboratory" ([www.lbf.uma.es](http://www.lbf.uma.es)). The Research Group (RG) is part of the Dept. of Organic Chemistry of the UMA. The RG is part of the Biomedical Research Institute of Malaga-IBIMA ([www.ibima.es](http://www.ibima.es)), accredited as a Research Institute by the ISCiii. At IBIMA I am the coordinator of Research Area -6: Advanced Therapies and New Technologies, where I coordinate eight research groups and I am part of the Advisory Committee to the Management. The main lines of work of the RG are two. One, the synthesis, characterization and functionalization of dendrimeric structures for biomedical applications and, two, the development of fluorescent markers for the monitoring of this type of processes. The first line has led to the development of a new model of dendrimeric structure based on amide bonds (BAPAD) and three patents. The second line focuses on the development of fluorescent probes that can work in the NIR and / or under the two-photon excitation regime. I have participated in 30 research projects, regional, national and European funding, participating as both a researcher and IP. Since its constitution my RG is part of the Research Network of ASMA RESEARCH NETWORK, ADVERSE AND ALLERGIC REACTIONS (ARADYAL) (RD16 / 0006/0012) of ISCiii. I have participated in the COST Dendrimers in Biomedical Applications-TD0802 action and in the NANOMEDICINE DOCTORAL PROGRAM - COFUND (NanoMedPhD). No 713721 (European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement). I am IP of a H2020 project" - DrNanoDAll EURONANOMED 2019-086 framework of the ERA-NET EuroNanoMed III. I participate in two projects funded by the Network Biomedical Research Center. Bioengineering, Biomaterials and Nanomedicine-Ciber-bbn, as an Associated Group for



Intramural Project (a requested third party). I have participated in eight OTRI research contracts with companies. I have published 119 research papers, 6 book chapters and registered six patents. I have given 35 Plenary or Guest Conferences and 41 Oral Communications. I have directed 8 Doctoral Theses (Doctorate with a Quality Mention, European or International Doctorate) and I am currently directing 4. I have directed 8 Bachelor Thesis (thesis mode), 4 PhD Research Works (DEA-12 credits), 3 Final Master Projects, and tutored 3 external doctoral theses. I am evaluator of the ANEP (2006-continuous), the General Directorate of Quality, Research and Knowledge Management; Health counseling; Junta de Andalucía (2007-continuous), the Agency for the Quality of the University System of Castilla y León (2009-continuous), the Georgia National Science Foundation, the Agence Nationale de la Recherche-France and the National Agency for Scientific and Technological Promotion - Argentina. Evaluator of Post-Doctoral Stages, Progreso Foundation and Health; Health counseling; Junta de Andalucía (2009-continuous). Since 2015 I am an ATTACHED in the Advanced Therapies Panel (TCMR, GEN, NANO) for the evaluation of Research Projects, Coordination Commission for Scientific Evaluation, Equality, Health and Social Policies. Junta de Andalucía.

## **Part C. RELEVANT MERITS**

### **C.1. Publications**

P Mesa-Antúnez, D Collado, Y Vida, F Najera, T Fernandez, M J Torres, E Perez-Inestrosa. Fluorescent BAPAD Dendrimeric Antigens Are Efficiently Internalized by Human Dendritic Cells.

*Polymers*, **2016**, 8(4), 111

Alcaide, M; Santos, F; Pais, V; Carvalho, J; Collado, D; E Perez-Inestrosa Arteaga, J; Bosca, F; Gois, P; Pischel, U. Electronic and Functional Scope of Boronic Acid Derived Salicylidenehydrazone (BASHY) Complexes as Fluorescent Dyes.

*Journal of Organic Chemistry*. **2017**, 82, 7151-7158

I Torres-Moya, C Benitez-Martin, B Donoso, C Tardio, R Martin, J R Carrillo, A Diaz-Ortiz, F Najera, P Prieto, E Perez-Inestrosa. Extended Alkenyl and Alkynyl Benzotriazoles with enhanced Two-Photon Absorption properties as a promising alternative to Benzothiadiazoles *Chemistry a European Journal*, **2019**, 25, 15572-15579

N Molina, F Nájera, J A. Guadix, J M. Perez-Pomares, Y Vida and E Perez-Inestrosa. Synthesis of Amino Terminal Clicked Dendrimers. Approaches to the Application as a Biomarker.

*J. Org. Chem*, **2019**, 84, 10197-10208

N Molina, A González, D Monopoli, B Mentado, J Becerra, L Santos-Ruiz, Y Vida, E Perez-Inestrosa. Dendritic Scaffold onto Titanium implants. A Versatile Strategy Increasing Biocompatibility

*Polymers*, **2020**, 12, 770

A Martín-Serrano, C Mayorga, E Barrionuevo, N Pérez, A Romano, E Moreno, A Ariza, E Pérez-Inestrosa, M J Torres, M I Montañez. Design of an antigenic determinant of cefaclor: Chemical structure-IgE recognition relationship.

*J Allergy Clin Immunol*, **2019**, 145, 1301-1304

Benitez-Martin, C; Guadix, J A; Pearson, J R.; Najera, F; Perez-Pomares, J M; Perez-Inestrosa, E. Indolenine-based derivatives as customizable two-photon fluorescent probes for pH bioimaging in living cells.

*ACS Sensors*, **2020**, 5, 1068-1074

Benitez-Martin, C; Li, S; Dominguez-Alfaro, A; Najera, F; Perez-Inestrosa, E; Pischel, U; Andréasson, J. Towards two-photon absorbing dyes with unusually potentiated nonlinear fluorescence response

*Journal of the American Chemical Society*, **2020**, 142, 14854–14858

DOI: 10.1021/jacs.0c07377

**C.2. Research projects and grants. Selected (2003-2018).**

Síntesis y funcionalización de estructuras dendrimericas bapad solubles y fijadas en superficies solidas. Aplicaciones en diagnostico y biotecnologia. (CTQ2013-41339-P). Ministerio de Economía y Competitividad  
UMA. Desde: 01/01/2014 hasta: 31/12/2016 (Prorrogado 31/12/2017). 105.270 €. IP: E Perez-Inestrosa

Red de Investigación de Reacciones Adversas a Alergenos y Fármacos-RIRAAF (RD12/0013/0003). FIS-ISCiii  
Desde: 01/01/201 hasta: 12/12/2016. 39.956 €/año para el grupo UMA. IP: E Perez-Inestrosa (Coordinador de Red M. Blanca)

Red De Investigación De Asma, Reacciones Adversas y Alérgicas-ARADYAL (RD16/0006/0012). ISCiii.  
Desde: 01/01/2017 hasta 31/12/2021. Cuantía: 109.312,50 €.  
IP: Ezequiel Perez-Inestrosa. Coordinador: M J Torres.

Nuevos dendrimeros y marcadores fluorescentes para aplicaciones biomedicas. (CTQ2016-75870-P). Ministerio de Economía y Competitividad  
Duración, desde: 01/01/2017 hasta: 31/12/2019 Cuantía de la subvención: 100.430 €  
IP: E Perez-Inestrosa

Desarrollo de Nuevos Nanobiosensores para el Diagnostico de Reacciones Adversas A Medicamentos. PI-0250-2016. Consejería de Salud-Junta de Andalucía  
Duración, desde: 01/01/2017 hasta: 31/12/2019 Cuantía de la subvención: 57.500 €

Plataforma de Síntesis y Caracterización de Nanomateriales Biocompatibles y Magnéticos. (EQC2018-004851-P). Ministerio de Ciencia, Innovación y Universidades  
Desde: 01/01/2019 hasta: 31/12/2019 Cuantía de la subvención: 448,085.11 €  
IP: E Perez-Inestrosa

Nuevos Marcadores Fluorescentes para microscopía multifotónica. Aplicaciones en regeneración tisular y diagnóstico. (UMA18-FEDERJA-007). Consejería de Economía y Conocimiento. Junta de Andalucía.  
Desde: 01/01/2020 hasta: 31/12/2021 Cuantía de la subvención: 64.028,64€  
IP: E Perez-Inestrosa

Nanodiagnosis for Betalactam Hypersensitivity-DrNanoDAII (EURONANOMED2019-086; H2020). MICIU under the frame of EuroNanoMed III  
Desde: 01/01/2020 hasta: 31/12/2022 Cuantía de la subvención: 149.640 €  
IP: E Perez-Inestrosa

NANOMEDICINE DOCTORAL PROGRAMME - COFUND (NanoMedPhD). No 713721. <http://www.nanomed-cofund.eu/>. European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement. Entidades participantes: UMA – BIONAND. Duración, desde: 01/01/2017 hasta: 31/12/2020. Cuantía de la subvención: 962.000 €. IP: Ezequiel PEREZ-INESTROSA; Chair of the Action: J. Becerra.

Nanodiagnosis for Betalactam Hypersensitivity-DrNanoDAII (EURONANOMED 2019-086; H2020). MICIU under the frame of EuroNanoMed III  
Desde: 01/01/2020 hasta: 31/12/2022 Cuantía de la subvención: 149.640 €  
IP: E Perez-Inestrosa

Dendrimeros biomimeticos y sistemas bifotonicos para nanomedicina PID2019-104293GB-I00  
Desde: 01/01/2020 hasta: 31/12/2022 Cuantía de la subvención: 114.950€  
IP: Ezequiel Pérez-Inestrosa y Francisco Nájera

Nanodiagnostico para hipersensibilidad a betalactamicos. Ministerio de Ciencia e Innovación:  
Programación Conjunta Internacional: Programa EuroNanoMed 2019 (PCI2019-111825-2)  
Desde: 01/01/2020 hasta: 01/01/2022 Cuantía de la subvención: 149.640€  
IP: Ezequiel Pérez-Inestrosa

### C.3. Contracts

Programa de investigación en colaboración en el área del diagnóstico “in vivo” e “in vitro” de reacciones alérgicas a medicamentos y alimentos. (8.06/5.81.5151; nº de proyecto 2018/359.)  
Laboratorio de Diagnóstico y Aplicaciones Terapéuticas S.A. (DIATER S.A.)  
Duración, desde: 23/07/2018 hasta: continúa. IP: E Perez-Inestrosa

### C.4. Patents

Blanca, M.; Torres, MJ; Mayorga, C; Montañez, MI; Perez-Inestrosa, E.  
Compuestos útiles en la detección de anticuerpos IgE contra cefalosporinas.  
N. de solicitud: P201130469. País de prioridad: España. Fecha de concesión: 22-03-2011.  
Entidad titular: Servicio Andaluz de Salud, UMA.

Perez-Inestrosa, E.; Ruiz, A.J.; Najera, F.; Vida, Y.; Collado, D.; Mesa, P  
Estructuras dendríticas BAPAD, basadas en la conexión repetitiva de 2,2'-Bis(aminoalquil)carboxiamidas; procedimiento de obtención y aplicaciones.  
N. de solicitud: PCT/ES2012/000136. País de prioridad: España. Fecha de concesión: 2012-06-13. Entidad titular: UMA. Empresa/s que la están explotando: Firmado CND con la empresa NanoSynthons LLC. D A Tomalia-CEO, Michigan, USA.

Y Vida, M I. Montañez, D Collado, F Najera, A Ariza, M Blanca, M J Torres, C Mayorga, E Perez-Inestrosa  
Nanoconjugated dendrimeric antigens, preparation method and use thereof.  
N. de solicitud: ES 201400333. País de prioridad: España. Fecha de solicitud: 2014-04-23.  
Entidad titular: UMA y Servicio Andaluz de Salud.

Collado, D; Remón, P M; Vida, Y; Nájera, F; Pischel, U; Perez-Inestrosa, E  
Fluorescent dyads integrating 4-aminonaphthalimide and BODIPY chromophores.  
N. de solicitud: ES P201400991. País de prioridad: España. Fecha de solicitud: 2014-12-05.  
Entidad titular: UMA y UHU.

M I. Montañez, C Mayorga, M J Torres, T Fernandez, A Ariza, M Salas, E Perez-Inestrosa, F Najera, N Barbero, Y Vida  
Composición útil en la detección de alergia a Acido Clavulánico..  
N. de solicitud: P201631133. País de prioridad: España. Fecha de solicitud: 2016-08-29.  
Entidad titular: Servicio Andaluz de Salud and Universidad de Malaga

### C.5 Participation in international committees and representations

NRM Nanoroadmap Project (ver [www.nanoroadmap.it](http://www.nanoroadmap.it)). 6th Framework Programme; European Comisión- Research Directorate-General; Directorate G-Industrial Technologies: Nanosciences and Nanotechnologies.  
miembro del “Delphi panel”, experto en el área de Dendrimeros. 2005-2006

Fundacion OPTI. Observatorio de Prospectiva Tecnologica Industrial. Ministerio de Industria, Turismo y Comercio. Prospectivas tecnologicas sobre Aplicaciones de las Nanotecnologias en España en el Horizonte 2020. Fecha: 2007.

European Technology Platform for Nanomedicine (ETP-Nanomedicine). European Commission. Responsable/Representante de la Institucion (uma). 2009-continua.

Working group: Knowledge generation in Nanomedicine. Regional Ministry of Health of Andalucía. Tema: Strategy and Action Plan 2010/2015 of the Andalusian Initiative for Advanced Therapies. 2010.