Fecha del CVA	28/09/2020

Parte A. DATOS PERSONALES

Nombre y apellidos	**María Jesús Vicent Docón**		
DNI/NIE/pasaporte		Edad	
Núm. identificación del investigador	Researcher ID	A-9690-2014	
	Código Orcid	http://orcid.org/0000-0001-7771-3373	

A.1. Situación profesional actual

Organismo	Fundación CV Centro de Investigación Príncipe Felipe			
Dpto./Centro	Laboratorio de Polímeros Terapéuticos			
Dirección	Calle de Eduardo Primo Yufera,3 - C.P. 46012 Valencia			
Teléfono	963589680	correo electrónico	mjvicent@cipf.es	
Categoría profesional	Investigador Principal		Fecha inicio	19/06/2006
Espec. cód. UNESCO	230400			
Palabras clave	Polímeros Terapéuticos, Nanomedicina, Transporte Dirigido de Fármacos, Descubrimiento de Fármacos,			

A.2. Formación académica *(título, institución, fecha)*

Licenciatura/Grado/Doctorado	Universidad	Año
Grado de licenciado en Química	Universidad Valencia	1996
Doctorado en Química supramolecular y Materiales	Universidad Jaime I	2001

A.3. Indicadores generales de calidad de la producción científica

H Index: Google Scholar 38 Citations: 5961. By Scopus H Index 34, Citations: 4576
Publications: 117 (In last 5 years: 58, from those: in Q1 54 and as corresponding author 45)
Patents: 10 (3 licensed, 1 as foundation of spin off company PTS in 2012, 2 granted)
Projects as PI or Coordinator: 43 **Funding raised:** >7M€
PhD Thesis: 13 supervised (3 with prizes) and 10 ongoing.

Parte B. RESUMEN LIBRE DEL CURRÍCULUM *(máximo 3500 caracteres)*

Dr. Vicent received her Ph.D. degree in 2001 in chemistry on solid supports from Univ. Jaume I Castellón after several scientific stays in Prof. Fréchet's lab. Univ. California, Berkeley (USA). Then, she moved to more biomedically oriented research, initially with a company Instituto Biomar SA., and then at the Centre for Polymer Therapeutics with Prof. Duncan after the award of a Marie Curie Postdoctoral Fellowship in 2002. In 2004, María joined Centro de Investigación Príncipe Felipe (CIPF) as research associate through a Marie Curie Reintegration contract and was promoted to her current position, head of Polymer Therapeutics Lab at CIPF in 2006. Currently, she is the scientist responsible for the Screening Platform, a Specialist site in the ERIC EU-OPENSCREEN and also coordinates the Advanced Therapies Program at CIPF. She is also part of the Strategic Committee of the Valencian Agency of Innovation (AVI) from GVA, Member of the International Advisory Board of Institute of Nanoscience and Nanotechnology University Barcelona (IN2UB) and Consortium Fundation Hospital Provincial Castellón (CFHPC). Her research group focused on the development of novel nanopharmaceuticals for different therapeutic and diagnostic applications, in particular Polymer Therapeutics for unmet clinical needs and has been funded by national (i.e. Fund La Caixa-NanoPanTher) and European grants (including ERC Consolidator grant-MyNano and ERC-PoC-Polyimmune) from academia as well as industry. María received several prizes including the IVth and the IXth Idea awards. She is fellow of the American Institute for Medical and Biological Engineering (AIMBE) College of Fellows. She co-authored 117 peer reviewed publications and 10 patents, 3 of them licensed to the pharmaceutical industry and one used as foundation of the spin off company 'Polypeptide Therapeutic Solutions SL' in 2012. She is widely invited to talk in international conferences. She is currently vicepresident of the specialised Chemical Biology Section of the Spanish Royal Society of Chemistry (GQB-RSEQ) and the chair of key conferences on the nanomedicine field such as, the Int. Symp. on Polymer Therapeutics: From Lab. to Clinical Practice or CRS2019 Annual meeting. María is executive editor of Adv. Drug Deliv Rev, DDTR and board member of key journal in the field.

Parte C. MÉRITOS MÁS RELEVANTES *(ordenados por tipología)*

C.1. Publicaciones (*Corresponding author; Selection of Scientific Primary Papers last 5 years)

1. Juan J Arroyo-Crespo; et al. 2019. Characterization of Triple-Negative Breast Cancer Preclinical Models Provides Functional Evidence of Metastatic Progression.International Journal of Cancer. 10.1002/ijc.32270.
2. Anni Lepland; et al. 2020. Targeting pro-tumoral macrophages in early primary and metastatic breast tumors with CD206-binding mUNO peptide Molecular Pharmaceutics. ACS. 17-7, pp.2518-2531.
3. Gina Córdoba David; et al. 2020. Effective Nephroprotection Against Acute Kidney Injury with a Star-Shaped Polyglutamate-Curcuminoid Conjugate Scientific Reports. Nature Research. 10-1, pp.2016.
4. O. Zagorodko, V.J. Nebot*, M.J. Vicent.* The Generation of Stabilized Supramolecular Nanorods from Star-Shaped Polyglutamates (2019) Polymer Chemistry DOI:10.1039/c9py01442j
5. I Conejos-Sánchez*, E, Gallon, A Niño-Pariente….S, Pluchino, R, Franklin, MJ Vicent*.Polyornithine-based polyplexes to boost effective gene silencing in CNS disorders (2019) Nanoscale DOI:10.1039/C9NR06187H
6. LIF Moura, A. Malfanti, C. Peres, AI. Matos, E. Guegain, V. Sainz, W. Zloh, MJ. Vicent*, HF Florindo*. Functionalized Branched Polymers: Promising Immunomodulatory Tools for the Treatment of Cancer and Immune Disorders. (2019) Materials Horizons 6, 1956-1973
7. P. Brennecke, ….. M.J. Vicent, … P.Gribbon. EU-OPENSCREEN: A Novel Collaborative Approach to Facilitate Chemical Biology. (2019) SLAS Discovery, 7:2472555218816276
8. J.J. Arroyo-Crespo, A. Armiñán,* D. Charbonnier, … J. Forteza, A. Pineda-Lucena, M.J. Vicent*(2019) Characterization of Triple-Negative Breast Cancer Preclinical Models Provides Functional Evidence of Metastatic Progression. Int. J. Cancer. 145(8),2267-2281
9. J.J. Arroyo-Crespo, A. Armiñán*, D. Charbonnier, L. Balzano-Nogueira, F. Huertas-López, C. Martí, S. Tarazona, J. Forteza, A. Conesa, M.J. Vicent* (2018) Tumor Microenvironment-Targeted poly-L-glutamic acid-based Combination Conjugate for Enhanced Triple Negative Breast Cancer Treatment . Biomaterials 186: p8-21
10. A. Duro-Castaño, N. Han Lim, I. Tranchant, H. Wieland, O. Kingler, M. Herrmann, M. Narazé, O. Plettenburg, V. Dive*, M.J. Vicent*, H.Nagase*, In Vivo Imaging of MMP-13 Activity Using A Specific Polymer-FRET Peptide Conjugate Detects Early Osteoarthritis And Inhibitor Efficacy (2018) Advanced Functional Materials *28: p1802738*
11. T. Plyduang, A. Armiñán, J. Movellan, R. M. England, R. Wiwattanapatapee, M.J. Vicent* A polyacetal-based combination therapy for the treatment of prostate cancer (2018) Macrom. Rapid. Comm, *39: p1800265*
12. H.Y. Cheah, E. Gallon, F. Dumoulin, S.Z. Hoe, N. Japundžić-Žigon, S. Glumac, H.B. Lee, P. Anand, L.Y. Chung,* M.J. Vicent,* L.V. Kiew Near-infrared activatable phthalocyanine-poly-L-glutamic acid conjugate: enhanced in vivo safety and antitumor efficacy towards an effective photodynamic cancer therapy (2018) Mol. Pharm. 15(7), 2594-2605
13. J.J. Arroyo-Crespo, C. Deladriere, V. J. Nebot, D. Charbonnier, E. Masia, A. Paul, C. James, A. Armiñán*, M.J. Vicent* (2018) Anticancer Activity Driven by Drug Linker Modification in a Polyglutamic Acid-based Combination-drug Conjugate. Adv. Funct. Mat. 2018. 28: 1800931.
14. A. Armiñán, M. Palomino-Schatzlein, C. Deladriere, J.J. Arroyo-Crespo, S. Vicente-Ruiz, M. J. Vicent*, A. Pineda-Lucena* (2018) Metabolomics facilitates the discrimination of the specific anti-cancer effects of free- and polymer-conjugated doxorubicin in breast cancer models. Biomaterials 162, 144-153.
15. G. Rodriguez Escalona, J. Sanchis*, M. J. Vicent*. (2018). pH-Responsive Polyacetal–Protein Conjugates Designed for Polymer Masked–Unmasked Protein Therapy (PUMPT) Macromolecular Bioscience. 18(1) 1700302.
16. Duro-Castaño, A., Nebot, V.J., Niño-Pariente, A., Armiñán, A., Arroyo-Crespo, J. J., Paul, A., Feiner-Gracia, N., Albertazzi, L., Vicent, M.J.* Capturing Extraordinary Soft-Assembled Charge-Like Polypeptides as a Strategy for Nanocarrier Design. Adv Mater, 2017. 29(39): p. 1702888-n/a. ***Cover Page***
17. Armiñán, A., Mendes, L., Carrola, J., Movellan, J., Vicent, M.J.*, Duarte, I.F*. HIF-1alpha inhibition by diethylstilbestrol and its polyacetal conjugate in hypoxic prostate tumour cells: Insights from NMR metabolomics. J Drug Target, 2017. 25(9-10): p. 845-855.

18. Eldar-Boock, A., Blau, R., Ryppa, C., Baabur-Cohen, H., Many, A., Vicent, M.J., Kratz, F., Sanchis, J. and Satchi-Fainaro, R. Integrin-Targeted Nano-Sized Polymeric Systems for Paclitaxel Conjugation: A Comparative Study. J Drug Target, 2017. 25(9-10): p. 829-844.
19. Niño-Pariente, A., Armiñan, A., Reinhard, S., Scholz, C., Wagner, E. and Vicent, M.J.* Design of Poly-l-Glutamate-Based Complexes for pDNA Delivery. Macromolecular Bioscience, 2017. 17(10): p. 1700029-n/a.
20. Kiew, L.V., Cheah, H.Y., Voon, S.H., …. Vicent, M.J.*, and Chueldang, L.Y. Near-Infrared Activatable Phthalocyanine-Poly-L-Glutamic Acid Conjugate: Increased Cellular Uptake and Light-Dark Toxicity Ratio Towards An Effective Photodynamic Cancer Therapy. Nanomedicine, 2017. 13(4): p. 1447-1458.
21. Cheah, H.Y., Sarenac, O., Arroyo, J.J., Vasic, M., Lozic, M., Glumac, S., Hoe, S.Z., Hindmarch, C.C., Murphy, D., Kiew, L.V., Lee, H.B., Vicent, M.J., Chung, L.Y., and Japundzic-Zigon, N., Hemodynamic effects of HPMA copolymer based doxorubicin conjugate: A randomized controlled and comparative spectral study in conscious rats. Nanotoxicology, 2017. 11(2): p. 210-222.
22. Requejo-Aguilar R, Alastrue-Agudo A, Cases-Villar M, Lopez-Mocholi E, England R, Vicent MJ*, Moreno-Manzano V. (2017) Combined polymer-curcumin conjugate and ependymal progenitor/stem cell treatment enhances spinal cord injury functional recovery. Biomaterials 113: 18-30.
23. Roncador, A., Oppici, E., Talelli, M., Pariente, A.N., Donini, M., Dusi, S., Voltattorni, C.B., Vicent, M.J.*, and Cellini, B., Use of polymer conjugates for the intraperoxisomal delivery of engineered human alanine:glyoxylate aminotransferase as a protein therapy for primary hyperoxaluria type I. Nanomedicine, 2017. 13(3): p. 897-907.
24. Duro-Castaño, A., England, R. M., Razola, D., Romero, E., Oteo-Vives, M., Morcillo, M. A. and Vicent, M.J.* (2015). Well-Defined Star-Shaped Polyglutamates with Improved Pharmacokinetic Profiles as Excellent Candidates for Biomedical Applications. Mol Pharm 12(10), 3639-3649.
25. Santamaria, B., Ucero, A. C., Benito-Martin, A., Vicent, M.J., Orzaez, M., Celdran, A., Selgas, R., Ruiz-Ortega, M. and Ortiz, A. (2015). Biocompatibility reduces inflammation-induced apoptosis in mesothelial cells exposed to peritoneal dialysis fluid. Blood Purif 39, 200-209.
26. Conejos-Sánchez, I., Cardoso, I., Oteo-Vives, M., Romero-Sanz, E., Paul, A., Sauri, A.R., Morcillo, M.A., Saraiva, M.J., Vicent, M.J*. (2015) Polymer-doxycycline conjugates as fibril disrupters: An approach towards the treatment of a rare amyloidotic disease. J. Controlled Release. 198(1), 80-90
27. Gallon, E., Matini, T., Sasso, L., Mantovani, G., Arminan, A., Sanchis, J., Caliceti, P., Alexander, C.*, Vicent, M.J.* and Salmaso, S*. (2015). Triblock Copolymer Nanovesicles for pH-Responsive Targeted Delivery and Controlled Release of siRNA to Cancer Cells. Biomacromolecules 16(7), 1924-1937.
28. Casanova-Salas, I., …. Vicent, M.J.* and Lopez-Guerrero, J. A*. (2015) MiR-187 Targets the Androgen-Regulated Gene ALDH1A3 in Prostate Cancer. PLoS One 10(5), e0125576.

C.2. Participation in R&D and Innovation projects

1. Synergistic Approach for Metastatic Tumor and Neurodegenerative Disorder Treatments using Versatile PolyPeptide-based Conjugates (SynVerPPC) Ref PID2019-108806RB-I00. MICINN Plan Nacional I+D 2019. Maria Vicent.01/06/2020-31/05/2023. 200.000 €.
2. H2020-MSCA-ITN-2019. Proposal n. 850418, Molecular Machines Functioning in cells. Acronym: Biomolmacs. Coordinator: R. Bezer (Univ Warwick, UK) MJVicent Partner at CIPF, 2020-2022
3. INNVAL10/19/047, Agencia Valenciana de Innovación, Validación farmacológica *in vivo* de nanofármacos inhibidores de ROCK2 en cáncer de mama metastásico y lesión medular. PI: María J Vicent 144,740 €. 2019-2020
4. Sensitizing pancreatic cancer to immunotherapy with multimodal precision nanomedicines, HR18-00589, Health Research Fundación Bancaria La Caixa. Coordinator: MJ Vicent. 985.042€ (CIPF:378.900 €) October 2019-October 2022.
5. Off-the-Shelf Polypeptide-based Immunotherapy for Advanced Melanoma Treatment. ERC-2018-PoC DL2 2018-825798-POLYIMMUNE. 01/01/2018-01/05/2020 PI:M.J. Vicent.
6. Ensuring long-term sustainability of excellence in chemical biology within Europe and beyond- EU-OPENSCREEN-DRIVE. H2020- INFRADEV-03-2018-2019 Proposal number: SEP-210496506. Coordinator: Philip Gribbon (Univ. Berlin, Germany). 2018-2021

7. Desarrollo de terapias tópicas basadas en sistemas de transporte polipeptídicos. RETOS investigación. MICINN. 2018-2020. Ref.RTC-2017-6465-1. Coordinator: Polypeptide Therapeutic Solutions SL. MJV Academic partner at CIPF. 203450 (MJV)
8. Desarrollo de una plataforma de terapia génica para enfermedades genéticas renales, RETOS investigación. MICINN. 2018-2020. Ref. RTC-2017-6600-1. Coordinator: ViralGen Vector Core SL. MJV Academic partner at CIPF. 141.000 (MJV)
9. Tractament combinatori de les cèl·lules precursores neurals i un nanoconjugat de fasudil per a la l'aplicació clínica en lesió aguda de la medul·la espinal Marató TV3. F. Pellicé-M.J. Vicent. (Vall d'Hebron Hospital and CIPF). 01/03/2108-28/02/2021. 300.000 €.
10. Designing Personalised Polymer-based Combination Nanomedicines for Advanced Stage Cancer Patients. Acrónimo: MyNano. European Research Council (ERC-2014-CoG - 648831). IP: Dr María J. Vicent. 2015-2020. 1.724.169 €
11. Polímeros terapéuticos diseñados para cruzar la barrera hematoencefalica para el tratamiento de desordenes neurodegenerativos- explorando la ruta intranasal. Plan Nacional I+D. Ref. SAF2016-80427-R. IP: M.J. Vicent. MINECO. 2016 - 2019. 205.700€
12. Identificación de Biotipos Moleculares de Cáncer de Próstata como Base de una Medicina de Precisión. Acrónimo: BIOChiP. PROMETEO 2016/103, Generalitat Valenciana. IP: MJ. Vicent, A. Pineda, JA López Guerrero (Coord). 2016-2019.
13. Design of polyPEPtides diblock copolymers as macroemulsifiers to produce safe, controlled and reliable novel smart nanoCAPSules with triggered release of active ingredients for skin care applications. PeptiCaps. H2020 NMP-06-2015. 2015-2018. Coordinator: Damien Dupin. (MJV as CSO of PTS).420.000 €
14. Estrategia híbrida basada en el cateterismo y la conjugación polimérica del ácido docosahexaenoico para la prevención del daño miocárdico inducido por reperfusión (PREMICAT-DHA). ISCIII. DTS2017/00067. 2018-2020. IP: P. Sepúlveda. 80.410 €
15. Developing a strategy for prevention of ischaemia reperfusion injury based on the use of new generation catheters and polymer therapeutics. Acronym: PREMICAT.Instituto de Salud Carlos III. DTS2015/00083. 2016-2018. IP: MJ Vicent y P. Sepúlveda. 58.300 €
16. Polímeros Terapéuticos como agentes simples y en combinación para el tratamiento de cáncer y neurodegeneración. Plan Nacional I+D. Ref. SAF2013-44848-R. IP: M.J. Vicent. MINECO. 01/01/2014 - 31/12/2016. 217.800€
17. Desarrollo de un kit universal para liberación remota controlada de fármacos mediante hipertermia magnética en aplicaciones oncológicas (INNPACTOIPT-2012-0712-010000). Coordinador. N.Cassinelli; WP2 leader MJVicent. 2012-2015. 195.080 € (mjv)
18. Nanofármacos poliméricos utilizados como agentes simples y en terapia de combinación. MICINN Plan nacional I+D (CTQ2010-18195/BQU). IP: M.J. Vicent. 2011-2013, 119.790€
19. Light-based functional in vivo monitoring of diseases related enzymes ACRONYM: LIVIMODE. FP7-HEALTH-2009-single-stage. Collaborative project. Project nº. 241919. Coordinador: B.Turk WP2 Leader MJV. 2009-2013. 6.834.049€, 402.300€ MJV
20. Self-Assembling Therapeutics for Specific Nanoscale Interactions with the Sodium Pump ACRONYM: INANONAK. NanoSci-E+. Transnational Call for Collaborative Proposals. (EUI2008-03905). Coordinator. M.J. Vicent. 2009 - 2013. 657.000 €, 218.000 € MJV

C.3. Participation in R&D and Innovation contracts (selected last 5 years)

1. Diseño de nanofármacos Líticos para el tratamiento de cáncer de pulmón. CGB Lytimval SL. IP: MJVicent. 17/03/2014-16/03/2015.93.800€
2. Polymer-based combination conjugates for the treatment of NSCLC. University Malaya (Malasia). 15/03/2014- 14/03/2016. 73.000€ e investigador visitante Dr Lik Voon Kiew
3. TIME TO MOVE. Co-IPs: V. Moreno; M. J. Vicent- Fundación Step by Step 2013- 2015. 568.900 € Total.

C.4. Selected Patents

1. Maria J Vicent; Simo Schwartz Jr; Ibane Abasolo. EP19383184.9. Polyacetal based Conjugates of taxane drugs useful for the treatment of cancer 23/12/2019. Fundació VHIR.
2. Polymeric conjugates and uses thereof Application number: EP19382225.1. 28 March 2019
3. M.J. Vicent, et al. Cross polymers composed of polysaccharides and polyamino acids, and uses thereof European patent. EP17382498. Priority date July 2017. PTS.
4. Cross-linked Star-shaped self-assembled polyglutamates and its use as carriers in biomedical applications. WO2017025298A1. 08/08/2015. USA and EU granted.