

'We adore chaos because we love to produce order'  
M.C. Escher



## Empar Vengut Climent, PhD

Researcher at [ScienceFlows Group](#), University of Valencia  
E-mail: [empar.vengut@uv.es](mailto:empar.vengut@uv.es)

@emparvengut

Linkedin: [www.linkedin.com/in/emparvengutcliment/](https://www.linkedin.com/in/emparvengutcliment/)

Researchgate: [www.researchgate.net/profile/Empar\\_Vengut-Climent](https://www.researchgate.net/profile/Empar_Vengut-Climent)

## Education

- MSc., Journalism and Communication of Science, Technology, Environment and Health, *University Carlos III of Madrid*, Spain Sept 2018
- Ph.D., Chemistry, *University of Seville*, Spain Jan. 2015
- MSc., Organic, Experimental & Industrial Chemistry (Hons), *University of Valencia*, Spain Jul. 2011
- BSc., Pharmacy (Hons), *University of Valencia*, Spain Jul. 2009

## Work Experience

### Research

- Researcher at Scienceflows group, *University of Valencia*, Spain (Prof C. Moreno-Castro) 2018-present  
*Currently working on the communication role on perception and beliefs about Science*
- Martín Escudero Postdoctoral fellowship, *McGill University*, Canada (Prof H. F. Sleiman). 2016-2018
- COST Action Short Research stay, *VU University Amsterdam*, Netherlands (Prof M. Bickelhaupt, Assis. Prof Célia Fonseca-Guerra). 2015
- FPU research stay, *Nucleic Acid Center*, Syddansk Universitet, Denmark (Prof J. Wengel). 2013
- Research stay, *Institute for Research in Biomedicine*, Spain (Prof R. Eritja). 2012
- Research stay, *Institute of Physical Chemistry*, CSIC, Spain (Prof C. González). 2011
- Ph.D. research (FPU grant), *Chemical Research Inst.*, CSIC, Spain (Dr J.C. Morales). 2011-2015
- Starting Research Grant (JAE-intro), *Chemical Research Inst. CSIC*, Spain (Dr N. Khiar & Dr J.C. Morales). 2008
- Starting Research Grant, *Univ. of Valencia*, Spain (Prof R. Ballesteros & B. Abarca). 2008-2009

---

Scientific PublicationsPapers

- Vengut-Climent, E. ; Moreno-Castro, C. Información sobre salud y mensajes preventivos en los medios de comunicación. **2019**. *Submitted to FML*
- Lacroix, A.; Vengut-Climent, E. ; de Rochambeau, D. ; Sleiman, H.F. Uptake and Fate of Fluorescently Labeled DNA Nanostructures in Cellular Environments: A Cautionary Tale. *ACS Central Science*. **2019**. *In press*
- Vengut-Climent, E. Newspaper portrayal of mental illness in England, Canada, Portugal, Spain and Japan. *Revista española de comunicación en salud*. **2018**, 9(2), 78-89. <https://doi.org/10.20318/recs.2018.4495>
- Vengut-Climent, E.; Peñalver, P.; Lucas, R.; Gómez-Pinto, I.; Aviñó, A.; Muro-Pastor, A.M.; Galbis, E.; Violante de Paz, M.; Fonseca Guerra, C.; Bickelhaupt, M.; Eritja, R.; González, C.; Morales, J.C. Glucose-nucleobase pairs within DNA: impact of hydrophobicity, alternative linking unit and DNA polymerase nucleotide insertion studies. *Chem. Sci.* **2018**, 9, 3544-3554. doi: [10.1039/c7sc04850e](https://doi.org/10.1039/c7sc04850e).
- Rahbani, J.F.; Vengut-Climent, E.; Chidchob, P.; Gidi, Y.; Trinh, T.; Cosa, G.; Sleiman, H.F. DNA Nanotubes with Hydrophobic Environments: Toward New Platforms for Guest Encapsulation and Cellular Delivery. *Adv. Healthc. Mater.* **2018**, 7, 1701049. <https://doi.org/10.1002/adhm.201701049>
- Recio, R.; Vengut-Climent, E.; Mouillac, B.; Orcel, H.; López-Lázaro, M.; Calderón-Montaña, J.M.; Álvarez, E.; Khiar, N.; Fernández, I. Design, synthesis and biological studies of a library of NK1-Receptor Ligands Based on a 5-arylthiosubstituted 2-amino-4,6-diaryl-3-cyano-4H-pyran core: Switch from antagonist to agonist effect by chemical modification. *Eur. J. Med. Chem.* **2017**, 138, 644-660. doi: [10.1016/j.ejmech.2017.06.056](https://doi.org/10.1016/j.ejmech.2017.06.056)
- Ries, A.; Kumar, R.; Lou, C.; Kosbar, T.; Vengut-Climent, E.; Jørgensen, P.T.; Morales, J.C.; Wengel, J. Synthesis and Biophysical Investigations of Oligonucleotides Containing Galactose-Modified DNA, LNA, and 2'-Amino-LNA Monomers. *J. Org. Chem.*, **2016**, 81, 10845–10856. <https://doi.org/10.1021/acs.joc.6b01917>
- Vengut-Climent, E.; Lucas, R.; Peñalver, P.; Gómez-Pinto, I.; Aviñó, A.; Fonseca-Guerra, C.; Bickelhaupt, M.; Eritja, R.; González, C.; Morales, J.C. Glucose–Nucleobase Pseudo Base Pairs: Biomolecular Interactions within DNA. *Angewandte Chemie Int. Ed.* **2016**, 55, 8643-8647. doi: [10.1002/anie.201603510](https://doi.org/10.1002/anie.201603510)
- Lucas, R.; Peñalver, P.; Gómez-Pinto, I.; Vengut-Climent, E.; Mtashobya, L.; Cousin, J.; Maldonado, O.S.; Perez, V.; Reynes, V.; Aviño, A.; Eritja, R.; González, C.; Linclau, B.; Morales, J.C. Effects of sugar functional groups, hydrophobicity and fluorination on carbohydrate-DNA stacking interactions in water. *J. Org. Chem.* **2014**, 79, 2419-2429. doi: [10.1021/jo402700y](https://doi.org/10.1021/jo402700y)
- Vengut-Climent, E.; Terrazas, M.; Lucas, R.; Arévalo-Ruiz, M.; Eritja, R.; Morales, J.C. Synthesis, RNAi activity and nuclease-resistant properties of apolar carbohydrates siRNA conjugates. *Bioorg. Med. Chem. Lett.* **2013**, 23, 4048-4051. doi: [10.1016/j.bmcl.2013.05.065](https://doi.org/10.1016/j.bmcl.2013.05.065)
- Gómez-Pinto,I.; Vengut-Climent,E.; Lucas,R.; Aviñó, A.; González,C.; Eritja,R.; Morales, J.C. Carbohydrates stack on a G-quadruplex platform: thrombin binding aptamers containing sugars at the 5'-end. *Chem. Eur. J.* **2013**, 19, 1920-1927. <https://doi.org/10.1002/chem.201203902>
- Lucas, R.; Gómez-Pinto, I.; Vengut-Climent, E.; Aviñó, A.; González,C.; Eritja, R.; Morales, J.C. Apolar carbohydrates as DNA capping agents. *Chem. Comm.* **2012**, 48, 2991-2993. doi: [10.1039/c2cc17093k](https://doi.org/10.1039/c2cc17093k)

### Book chapters

- Recio, R.; Vengut-Climent, E.; Borrego, L.G.; Khiar, N.; Fernández, I. Biologically Active Isothiocyanates: Protecting Plants and Healing Humans. In *Studies in Natural Products Chemistry*. Ed. Atta-Ur-Rahman, Elsevier, Science Publishers, Amsterdam. 2017, Vol. 53, Chap. 6, p. 167. <https://doi.org/10.1016/B978-0-444-63930-1.00006-5>

### Conference abstracts

- Benito E., Recio R., Valdivia V., Begines B., Borrego L. G., Romero-Azogil L., Alcudia A., Molina I., Vega-Holm M., Vengut-Climent, E. Bueno M. Case Study: Medicinal Chemistry. DOI: 10.21125/iceri.2017.1425. Conference: 10th annual International Conference of Education, Research and Innovation November 2017.
- Valdivia V., Begines B., Recio R., Benito E., Romero-Azogil L., Borrego L. G., Alcudia A., Molina I., Vega-Holm M., Vengut-Climent, E., Bueno M. ICT as useful tools to improve the teaching of Organic Chemistry. DOI: 10.21125/iceri.2017.1446. Conference: 10th annual International Conference of Education, Research and Innovation November 2017.
- Begines B., Valdivia V., Benito E., Recio R., Borrego L. G., Romero-Azogil L., Alcudia A., Molina I., Vega-Holm M., Vengut-Climent, E. Bueno M. New strategies for Cheminformatics teaching based on collaborative e-learning. DOI: 10.21125/iceri.2017.1409. Conference: 10th annual International Conference of Education, Research and Innovation November 2017.
- Recio R., Benito E., Valdivia V., Begines B., Borrego L. G., Romero-Azogil L., Alcudia A., Molina I., Vega-Holm M., Vengut-Climent, E. Bueno M. Computer assisted drug design by using problem-based learning methodologies. DOI: 10.21125/iceri.2017.1444. Conference: 10th annual International Conference of Education, Research and Innovation November 2017.

### *Conference communications*

11 poster and 6 oral communications in national and international conferences

### ***Science Communication***

- MSc Internship, Research & Innovation Unit,  
*University Jaume I Castelló, Spain* July-Sept 2018  
Writing press releases, making videonews, covering events  
and creating content for the radio programme of the Science Communication Unit

### *Science Outreach and Journalism*

- Vengut-Climent, E. ¿Cómo sería la vida si Dios hubiera trabajado el séptimo día? Online Edition of 'Muy Interesante'.
- Vengut-Climent, E. Entrevista a Javier Ordóñez. "Las guerras siempre empiezan con palabras." *Mètode*.
- Vengut Climent, E. Polibienestar recibe 4 millones de euros para investigar sobre los cuidados paliativos en las personas mayores con enfermedades crónicas. *La Vanguardia*.
- Collaborator in the Science Outreach section of Setmanari de l'Ebre.

### *Science Communication Activities*

- February 11th. International Day of Women and Girls in Science. Talk "Química en Acción" February 11-15<sup>th</sup> 2019
- 40th anniversary of Gabriel Ciscar High School. Dissemination talk about the scientific career. Oliva. April 15<sup>th</sup> 2015

- European Researchers' Night 2014. *Workshop "Broccoli: ¿food or medicine?"* Seville, September 26<sup>th</sup> 2014
- XII Week of Science and Technology 2012. *Centro de Investigaciones Científicas Isla de la Cartuja.* Seville, 2012
- Science Fair, IX Edition. *Sociedad Andaluza para la Divulgación de la Ciencia.* Seville. May 12-14<sup>th</sup> 2011

#### *Other communication and managing skills*

- Organisation of "VIII Reunión Bianual de ácidos nucleicos y nucleosídos". Sevilla, June 8-10<sup>th</sup> 2011
- Organisation of kick-off meeting of the Erasmus + project PERSIST EU and the Horizon2020 project CONCISE
- Sourcing grant funding including a recently awarded Marie Skłodowska-Curie Actions Seal of Excellence Marie Curie Project call H2020-MSCA-IF-2016
- Day-to-day management of the laboratory. Maintenance of cell culture room, UV-vis spectrophotometer. Ordering and testing new equipment and consumables
- Supervision of PhD, master, undergraduate and college students
- Student representative for the Faculty of Pharmacy. Academic year 2008-2009

#### *Teaching experience*

- *Organic Chemistry Laboratory. Faculty of Pharmacy, University of Seville.* 2013-2014
- Accredited as an Assistant Professor by the National Agency for Quality Assessment and Accreditation (ANECA)
- Honorary assistant of the Department of Organic and Pharmaceutical Chemistry. University of Seville. Academic Year 2018/2019

#### *Professional body memberships*

- Spanish Royal Society of Chemistry (RSEQ)
- Biological Chemistry Group of RSEQ
- Young Researchers in Chemistry of RSEQ
- Carbohydrates Group of RSEQ
- Spanish Association of Science Communication (AECC)

#### **Languages**

- Spanish and Catalan as native languages (C2 level of Catalan, EOI, September 2018)
- English C1 level (September 2018)  
IELTS 7.5 (October 2015)  
Grade A of First Certificate in English (equivalent to C1 European level, July 2012)
- French, currently studying B2 level at the Language Centre of the University of Valencia