PERSONAL INFORMATION

Name: Olga Cruz López
Current position: Associate Professor of in the Department of Medicinal and Organic Chemistry at the University of Granada
Research ID: F-3060-2017
URL for web site: http://www.researcherid.com/rid/F-3060-2017
Email: olgacl@ugr.es

EDUCATION

2005 **PhD in Medicinal Chemistry.** University of Granada, Spain. Title: " Diseño, síntesis y evaluación biológica de N-fenilindoles como inhibidores selectivos de la ciclooxigenasa 2". Award grade: Summa cum Laude.

2000 **BSc (Hons) in Pharmaceutical Sciences**. University of Granada, Spain. Marks: 2.859 (out of 4).

RESEARCH EXPERIENCE

2017 **Professor stay** in Dr. Unciti-Broceta group at the Edinburgh Cancer Research UK Centre-University of Edinburgh funded by the Spanish Ministry of Education, Culture and Sport (from March 2017 until May 2017).

2009 **Postdoctoral Research Assistant.** Postdoctoral contract from the University of Ferrara to work at the Dipartimento di Scienze Farmaceutiche of University of Granada (from Oct 2009 until Dec 2009).

2006/09 **Postdoctoral** fellowship of the *Ramón Areces Foundation* to work in Dr. Pier Giovanni Baraldi group at the Dipartimento di Scienze Farmaceutiche of the University of Ferrara (from Oct 2006 until Sep 2009).

2006 **Postdoctoral Research Assistant.** Postdoctoral contract from the University of Granada to work at the Department of Medicinal and Organic Chemistry of University of Granada (from Jun 2006 until Sep 2006).

2003 **Research stay** in the Chemistry Research Laboratory, Department of Chemistry of the University of Oxford to work in Prof. Christopher J. Schofield group funded by the Andalusian Regional Government - Innovation, Science and Enterprise Division (From Oct 2003 until Dec 2003).

2001/5 **PhD student** in the Department of Medicinal and Organic Chemistry of the University of Granada, with a 4-year scholarship funded by the Andalusian Regional Government - Innovation, Science and Enterprise Division (From June 2001 until May 2005)

1998/00 **Undergraduate Research Assistant** in the Department of Medicinal and Organic Chemistry of the University of Granada.

RESEARCH PROJECTS – most relevant

1. Desarrollo de un nanosistema antitumoral teranóstico basado en inhibidores del CD44. Ref: PR17/006. PI: Ana Conejo García. Funding entity: Oficina de Transferencia y Resultados de la Investigación, UGR. From 17/04/2018 to 17/04/2020.

2. Mejora de la actividad anticancerosa del bozepinib, bozinib y derivados, mediante la introducción del grupo trifluorometilo. Ref: CS2016.1. PI: Joaquín Campos Rosa. Funding entity: Junta de Andalucía. From 1/1/2017 to 31/05/2018.

3. O,N-Acetales del 5-Fluorouracilo y derivados Purínicos di- y tri-sustituidos como herramientas farmacológicas para el tratamiento de Células Madre Cancerosas. Ref: 10/00592. PI: Joaquín Campos Rosa. Funding entity: Instituto de Salud Carlos III. From 1/1/2011 to 31/12/2013

RESEARCH PUBLICATIONS – most relevant

1. Olga Cruz-*López*, Juan José Díaz-Mochón, Joaquín M. Campos, Antonio Entrena, María T. Nuñez, Luis Labeaga, Aurelio Orjales, Miguel A. Gallo, Antonio Espinosa. Design, Syntheses, Biological Evaluation, and Docking Studies of 2-Substituted 5-

Methylsulfonyl-1-Phenyl-1H-Indoles: Potent and Selective In Vitro Cyclooxygenase-2 Inhibitors. *ChemMed Chem*, 2, **2007**, 88-100.

2. Olga Cruz-López, Miguel A. Gallo, Antonio Espinosa, Joaquín M. Campos. 1H and 13C NMR Studies of 2-Functionalized 5-(Methyl sulfonyl)-1-Phenyl-1H-Indoles. *Magnetic Resonance in Chemistry*, 45, **2007**, 1066-1071.

3. Mónica Díaz-Gavilán, Ana Conejo-García, **Olga Cruz-López**, María C. Núñez, Duane Choquesillo-Lazarte, Josefa M. González-Pérez, Fernando Rodríguez-Serrano, Juan A. Marchal, Antonia Aránega, Miguel A. Gallo, Antonio Espinosa, Joaquín M. Campos. Synthesis and Anticancer Activity of (R,S)-9-(2,3-Dihydro-1,4-Benzoxathiin-3-ylmethyl)-9H-Purines. ChemMedChem, 3, **2008**, 127-135.

4. Romeo Romagnoli, Pier Giovanni Baraldi, **Olga Cruz-Lopez**, Delia Preti, Jaime Bermejo, Francisco Estevez. α-Bromoacrylamido N-Substituted Isatin Derivatives as Potent Inducers of Apoptosis in Human Myeloid Leukemia Cells. *ChemMedChem*, 4, **2009**, 1668-1676.

5. Romeo Romagnoli, Pier Giovanni Baraldi, **Olga Cruz-Lopez**, Maria Dora Carrion, Jan Balzarini, Ernest Hamel, Giuseppe Basso, Roberta Bortolozzi, Giampietro Viola. Hybrid α-bromoacryloylamido chalcones. Design, synthesis and biological evaluation. *Bioorganic and Medicinal Chemistry Letters*, 20, **2010**, 2022-2028.

6. Romeo Romagnoli, Pier Giovanni Baraldi, **Olga Cruz-Lopez**, Carlota Lopez Cara, Maria Dora Carrion, Andrea Brancale, Ernest Hamel, Longchuan Chen, Roberta Bortolozzi, Giuseppe Basso, Giampietro Viola. Synthesis and antitumor activity of 1,5-disubstituted 1,2,4-triazoles as cis-restricted combretastatin analogues. *Journal of Medicinal Chemistry*, 53, **2010**, 4248-4258.

7. López-Cara LC, Conejo-García A, Marchal JA, Macchione G, **Cruz-López O**, Boulaiz H, García MA, Rodríguez-Serrano F, Ramírez A, Cativiela C, Jiménez AI, García-Ruiz JM, Choquesillo-Lazarte D, Aránega A, Campos JM. New (RS)-Benzoxazepin-Purines with antitumour activity: The chiral switch from (RS)-2,6-Dichloro-9-[1-(p-Nitrobenzene sulfonyl)-1,2,3,5-Tetrahydro-4,1-Benzoxazepin-3-yl]-9H-Purine. *European Journal of Medicinal Chemistry*, 46, **2011**, 249-258.

8. Romeo Romagnoli, Pier Giovanni Baraldi, Maria Dora Carrion, Carlota Lopez Cara, **Olga Cruz-Lopez**, Maria Kimatrai Salvador, Delia Preti, Mojgan Aghazadeh Tabrizi, Allan R. Moorman, Fabrizio Vincenzi, Pier Andrea Borea, and Katia Varani. Synthesis and Biological Evaluation of 2‑Amino-3-(4-chlorobenzoyl)-4-[(4-arylpiperazin-1-yl)methyl]-5-substituted thiophenes. Effect of the 5‑Modification on Allosteric Enhancer Activity at the A1 Adenosine Receptor. *Journal of Medicinal Chemistry*, 55 (17), **2012**, 7719–7735.

9. Marchal JA, Carrasco E, Ramírez A, Jiménez G, Olmedo C, Peran M, Agil A, Conejo-García A, **Cruz-López O**, Campos JM, García MA. Bozepinib, a novel small antitumor agent, induces PKR-mediated apoptosis and synergizes with IFNα triggering apoptosis, autophagy and senescence. *Drug Design, Development and Therapy*, 7, **2013**, 1301-1313

10. Alberto Ramirez , Houria Boulaiz , Cynthia Morata-Tarifa , Macarena Peran , Gema Jimenez , Manuel Picon-Ruiz , Ahmad Agil , **Olga Cruz-Lopez** , Ana Conejo-Garcia , Joaquin Campos , Ana Sanchez , Maria Garcia, Juan Antonio Marchal. HER2-signaling pathway, JNK and ERKs kinases, and cancer stem-like cells are targets of Bozepinib small compound. *Oncotarget,* 5 (11), **2014**, 3590-3606j.

11. Romagnoli R, Baraldi PG, IJzerman AP, Massink A, **Cruz-Lopez O**, Lopez-Cara LC, Saponaro G, Preti D, Aghazadeh Tabrizi M, Baraldi S, Moorman AR, Vincenzi F, Borea PA, Varani K. Synthesis and Biological Evaluation of Novel Allosteric Enhancers of the A1 Adenosine Receptor Based on 2-Amino-3-(4'-Chlorobenzoyl)-4-Substituted-5-Arylethynyl Thiophene. *Journal of Medicinal Chemistry*, 57, **2014**, 7673-7686.

12. Romagnoli R, Baraldi PG, Lopez-Cara LC, **Cruz-Lopez O**, Moorman AR, Massink A., IJzerman AP, Vincenzi F, Borea PA, Varani K. Synthesis and biological evaluation of a new series of 2-amino-3-aroyl thiophene derivatives as agonist allosteric modulators of the A1 adenosine receptor. A position-dependent effect study. *European Journal of Medicinal Chemistry*, 101, **2015**, 185-204

13. Pastoriza de la Cueva S, Álvarez J, Végvári A, Montilla-Gómez J, **Cruz-López O**, Delgado-Andrade C, Rufián-Henares JA. Relationship between HMF intake and SMF formation in vivo: An animal and human study. *Molecular Nutrition and Food*

Research, 61 (3), **2017**, 1600773

14. Olga Cruz-*López*, Juan José Díaz-Mochón, Joaquín M. Campos, Antonio Entrena, María T. Nuñez, Luis Labeaga, Aurelio Orjales, Miguel A. Gallo, Antonio Espinosa. 1-(Benzenesulfonyl)-1,5-dihydro-4,1-benzoxazepine as a new scaffold for the design of antitumour compounds. *Future Medicinal Chemistry*, 9 (12), **2017**, 1129-1140.

CHAPTERS IN BOOKS

1. Joaquín M. Campos, M. Carmen Núñez, Ana Conejo-García, **Olga Cruz-López**. Benzo-Fused Seven- and Six-Membered Derivatives Linked to Pyrimidines or Purines Induce Apoptosis of Human Metastatic Breast Cancer MCF-7 Cells in Vitro. Breast Cancer - Current and Alternative Therapeutic Modalities, Editors: Esra Gunduz and Mehmet Gunduz. InTech Publisher. ISBN 979-953-307-182-3, 2011

2. Olga Cruz-López, Joaquín M. Campos , Ana Conejo-García. Synthesis of 1,4-benzoxathiin-9H-purine derivatives as antiproliferative agents - Targets In Heterocyclic Systems, Editors: Orazio A Attanasi, Domenico Spinelli. ISBN 978-8-88620-862-8, Vol. 21 (17), 2017.

PATENT APPLICATIONS

Authors: Marchal Corrales, J. A.; Aránega Jiménez, A.; Conejo García, A.; García Chaves M.A.; **Cruz López, Olga**; Boulaiz, H.; Rodríguez Serrano, F.; Cativiela Marín, C.; Perán Quesada, M.; Jiménez Sanz, A.I.; García Ruiz, J.M.; Choquesillo Lazarte, D.; Campos Rosa, J.M. Title: Enantiómeros De Derivados Benzoheteroepínicos Y Su Uso Como Agentes Anticancerígenos. No: P201030415. Priority Date: 22-03-2010.

TEACHING ACTIVITIES

2017/2018	Teaching in Organic Chemistry for undergraduates students of Degree in Pharmacy and the Degree in Science and Food Technology (195 hours). University of Granada, Spain.
2016/2017	Teaching in Organic Chemistry for undergraduates students of Degree in Pharmacy (120 hours). University of Granada, Spain.
2015/2016	Teaching in Medicinal Chemistry and Organic Chemistry for undergraduates students of the Degree in Pharmacy (150 hours). University of Granada, Spain.
2014/2015	Teaching in Medicinal Chemistry and Organic Chemistry for undergraduates students of the Degree in Pharmacy (160 hours). University of Granada, Spain.
2013/2014	Teaching in Medicinal Chemistry and Organic Chemistry for undergraduates students of the Degree in Pharmacy (125 hours). University of Granada, Spain.
2012/2013	Teaching in Organic Chemistry for undergraduates students of the Degree in Pharmacy (110 hours). University of Granada, Spain.
2011/2012	Teaching in Organic Chemistry for undergraduates students of the Degree in Pharmacy (120 hours). University of Granada, Spain.
2010/2011	Teaching in Medicinal Chemistry and Organic Chemistry for undergraduates students of the Degree in Pharmacy (240 hours). University of Granada, Spain.
2009/2010	Teaching in Organic Chemistry for undergraduates students of the Degree in Pharmacy and the Degree in Human and Dietary Nutrition (135 hours). University of Granada, Spain.
2008/2009	Teaching in Organic Chemistry for undergraduates students of the Degree in Pharmacy (110 hours). University of Granada, Spain.

SUPERVISION OF UNDERGRADUATE AND POSTGRADUATE STUDENTS

2017 Síntesis de nuevos derivados de la 4-Metilumbeliferona como inhibidores selectivos de la hialuronano sintasa con actividad antitumoral. Ana Rosa Fornell Jiménez.

2017 Sintesi di derivati 2,6-dicloropurine con frammento *N*-(prop-1-en-1-il)benzenesulfonamide. Franscesca Dessole

2012 Síntesis y actividad anticancerosa de 2-cloro-6-feniltiopurinas unidas a un anillo de seis miembros fusionados a un resto de benceno. Fernando Jesús Fernández Fuentes.

2011 Novel 2-chloro-6-substituted-9-[1(o-nitrobenzenesulfonil)-1,2,3,5-tetrahidro-4,1-benzoxazepin-3-l]-9H-purine as potent anticancer agents. Matilde Ner

Di- and Tri-substitutes purines with the phenylglycidyl ether moiety: Synthesis and anticancer activities. Angiola Barbara Pontrelli.

Purine di- e tri- sostituite: sintesi e attività antitumorale. Alessandra Lacetera.