

Part A. PERSONAL INFORMATION		CV date		21-12-2021
First and Family name	Carlos Jiménez González			
Social Security, Passport, ID number	34940670J	Age	61	
Researcher numbers	Researcher ID	G-9622-2015		
	Orcid code	0000-0003-2628-303X		

A.1. Current position

Name of University/Institution	Universidad de A Coruña		
Department	Dpt Chemistry/Centro de Investigaciones Científicas Avanzadas		
Address and Country	Rua das Carballeiras s/n. Campus de Elviña. 15071		
Phone number	881 01 2170	e-mail	carlos.jimenez@udc.es
Current position	Full Professor	From	14/01/2010
UNESCO code	2306		
Key words	Marine Natural products, siderophores of pathogenic bacteria, New NMR methodologies		

A.2. Education

Degree/PhD	University	Year
Degree in Chemistry	Universidad de Santiago de Compostela	1984
PhD in Chemistry	Universidad de Santiago de Compostela	1988

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

Thesis (PhD) supervised in the last 10 years: 11

Total Citations: 2818 in Publons (Web of Science); 2967 (Scopus); 4033 (Google Scholarship). **Citations in the last 5 years 2017-2021:** 1010 (Publons), 1032 (Scopus), 1463 (Google Scholarship). **Average Citations/year (2017-21):** 202 (Publons), 206 (Scopus), 292 (Google Scholarship).

H-Index: 30 in Publons (WOS), 31 (Scopus), 38 (Google Scholarship).

Publications in JCR: 131

Sexenios from ANECA: 5 (1989-2018). Date of the last sexenio: 05/06/2019 and 1 **Sexenio de transferencia:** Date (15/04/2020)

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

a) Positions. After obtaining my Bachelor's and Doctorate in Chemistry at University of Santiago de Compostela, I moved to the USA for two postdoctoral stays during three years: two years (1988-1990) in the Dept. of Chemistry and Biochemistry of the University of California in Santa Cruz (UCSC) and one year (1990-91) at the Scripps Clinic and Research Foundation Research Institute La Jolla, California. I returned as Assistant to the University of Santiago (1991-92) and then, I became Associate Professor at the University of A Coruña (UDC) (1993-2009). Since 2010, I am Full Professor at the Department of Chemistry of the Faculty of Sciences of the University of A Coruña (UDC). I have been Invited Professor in several Universities in the USA (UCSC, UCSB in California and FAU in Florida), Brazil (UFBA in Salvador de Bahía), Colombia (U Nacional de Colombia in Bogotá), Bolivia (U Mayor de San Simón in Cochabamba), Mexico (UNAM), etc.

b) Research. I am the author/co-author of 136 scientific contributions in scientific journals (130), books (1) and book chapters (5), and four patents. I was the Principal Investigator / responsible in 20 research projects (one belonging to the VIII Framework Program) and in 7 agreements signed with pharmacological companies through the University. I have participated as a researcher in other 17 projects. I have given 9 plenary conferences in Congresses, one of them in Gordon Research Conferences 2014 in the USA. I have presented more than 135 oral/posters communications to Chemistry Meetings, participating in two of them as Secretary and being the coordinator of three Symposium of Natural Products at three Chemistry Meetings of the RSEQ. I have been the coordinator of the Research Group PRONAMAR, (2005-2012) which is now integrated as a team (www.pronamar.com) within the

Research Group QUIMOLMAT (Ref: G000670) in the UDC. Main lines of research: (1) Siderophores of pathogenic bacteria in aquaculture fish, main objective: search for new treatments against the infectious diseases based on Fe (III) uptake mechanisms. Achievements: isolation, structural characterization and synthesis of the involved siderophores and a patent against photobacteriosis. (2) Isolation, structural elucidation and synthesis of bioactive natural products, main objective: search for new compounds with biological activity, mainly antitumor. Achievements: identification of new bioactive compounds and 2 patents of antitumor compounds and one patent of antiviral compounds. (3) Development of new NMR methodologies, main objective: new strategies in the determination of relative stereochemistry in acyclic or flexible systems by NMR and Molecular Mechanics.

c) **Management.** I was the Vice Dean of Chemistry of the Faculty of Sciences of the UDC (six years, between 1999 and 2005), the Director of the Department of Fundamental Chemistry (4 years, between 2009 and 2013) and the President of the Executive Board of the Specialized Group of Natural Products Chemistry of the Spanish Royal Society of Chemistry (RSQE) (4 years, between 2015 and 2019).

d) **Teaching.** I was granted with 6 quinquennia (1986-2015). I am teaching in the Degree of Chemistry and in three University Master's Degrees, one of them in Advanced Biotechnology. I am the coordinator at UDC of the Interuniversity (Universities of A Coruña, Santiago and Vigo) Master in Chemical Research and Industrial Chemistry. I was the supervisor of 17 PhD students.

Part C. RELEVANT MERITS

C.1. Publications (including books).

C.1.1 Chapter books

1. **CARLOS JIMÉNEZ** "Siderophores from Fish Pathogenic Bacteria" pag. 175-207, **2021** In: Kiyota H. (eds) Marine Natural Products. Topics in Heterocyclic Chemistry, vol 58. Springer, Singapore. ISBN 978-981-16-4636-2

C.1.2 Journal articles

Profile. Siderophores from Pathogenic Bacteria in aquiculture.

2. Authors: DIEGO REY-VARELA, JAVIER CISNEROS-SUREDA, MIGUEL BALADO, JAIME RODRÍGUEZ, MANUEL L. LEMOS AND CARLOS JIMÉNEZ

Title: "The Outer Membrane Protein FstC of *Aeromonas salmonicida* subsp. *salmonicida* Acts as Receptor for Amonabactin Siderophores and Displays a Wide Ligand Plasticity. Structure-Activity Relationships of Synthetic Amonabactin Analogues"

Journal **ACS Infectious Diseases** Volumen: 5 Pages, initial: 1936 final: 1951 Date: **2019**

Cited: 3 JCR® Category Quartile Q1 in MEDICINAL CHEMISTRY

3. Authors: MIGUEL BALADO, ALBA SOUTO, ANA VENCES, VALERIA P. CAREAGA, KATHERINE VALDERRAMA, YURI SEGADE, JAIME RODRÍGUEZ, CARLOS R. OSORIO, CARLOS JIMÉNEZ AND MANUEL L. LEMOS

Title: "Two Catechol Siderophores, Acinetobactin and Amonabactin, Are Simultaneously Produced by *Aeromonas salmonicida* subsp *salmonicida* Sharing Part of the Biosynthetic Pathway"

Journal **ACS Chemical & Biology** Volumen: 10 Pages, initial: 2850 final: 2860 Date: **2015**

Cited: 26 JCR® Category Quartile Q1 in BIOCHEM. & MOLECULAR BIOLOGY

4. Authors: ALBA SOUTO; MARCOS A. MONTAOS; AMABLE J. RIVAS; MANUEL BALADO; CARLOS G. OSORIO; JAIME RODRÍGUEZ, MANUEL. L. LEMOS AND CARLOS JIMÉNEZ

Title: "Structure and Biosynthetic Assembly of Piscibactin, a Siderophore from *Photobacterium damsela* subsp *piscicida*, predicted from genome analysis"

Journal: **Eur. J. Org. Chem.** Pages, initial: 5693 final: 5700 Date: **2012**

Cited: 29 JCR® Category Quartile Q1 in CHEMISTRY, ORGANIC

Profile. Isolation and Structural elucidation of natural products:

5.- Authors: NILAMONI NATH, JUAN CARLOS FUENTES-MONTEVERDE, DAWRIN PECH-PUCH, JAIME RODRÍGUEZ, CARLOS JIMÉNEZ, MARKUS NOLL, ALEXANDER KREITER, MICHAEL REGGELIN, ARMANDO NAVARRO-VÁZQUEZ, AND CHRISTIAN GRIESINGER.

Title: " Relative configuration of micrograms of natural compounds using proton residual chemical shift anisotropy"

Journal: **Nature Communications**. Volumen: 11, Article: 4372, Date: **2020**

Cited: 3. JCR® Category Quartile Q1 in Category. INTERDISCIPLINARY CHEMISTRY,

6. Authors: JAIME RODRIGUEZ, CARLOS JIMÉNEZ, MARIA BLANCO, GUILLERMO TARAZONA, ROGELIO FERNANDEZ AND CARMEN CUEVAS.

Title: "Lanesoic Acid: An Cytotoxic Zwitterion from Theonella sp"

Journal: **Organic Letters**. Volumen: 18, Pages, initial: 5832, final: 5835, Date: **2016**

Cited: 11. JCR® Category Quartile Q1 in Category. CHEMISTRY, ORGANIC

7. Authors: RAMON NOVOA-CARBALLAL, EDUARDO FERNANDEZ-MEGIA, CARLOS JIMENEZ AND RICARDO RIGUERA

Title: "NMR methods for unravelling the spectra of complex mixtures"

Journal: **Nat. Prod. Rep.**, Vol. 28 Pages, initial: 78 final: 98 Date: **2011**

Cited: 84 JCR® Category Quartile Q1 in CHEMISTRY, ORGANIC

8. Authors: GUILLERMO TARAZONA, ROGELIO FERNANDEZ, PATRICIA CRUZ, MARTA PÉREZ, JAIME RODRIGUEZ, **CARLOS JIMÉNEZ**, CARMEN CUEVAS."

Title: Combining JCBA and Marfey's Methodology to Determine the Absolute Configuration of Threonines: The case of Gunungamide A, a New Cyclic Depsipeptide Containing Chloropyrrole from the Sponge *Discodermia* sp"

Journal: **Organic Chemistry Frontiers**. Vol.: 6, Pages, initial: 15, final: 21, Date: **2019**

Cited: 1 JCR® Category Quartile Q1 in CHEMISTRY, ORGANIC

Profile. Synthesis of natural products.

9. Authors: TOBIAS SEITZ, RAMÓN E. MILLÁN, DIETER LENTZ, CARLOS JIMÉNEZ, JAIME RODRÍGUEZ AND MATHIAS CHRISTMANN

Title: "Synthesis of Thelepamide via Catalyst-Controlled 1,4-Addition of Cysteine Derivatives and Structure Revision of Thelepamide"

Journal: **Organic Letters** Volumen: 20 Pages, initial: 594 final: 597 Date: **2018**

Citas: 6 JCR® Category Quartile Q1 in Category CHEMISTRY, ORGANIC

10. Authors: YURI SEGADE, MARCOS A. MONTAOS, JAIME RODRÍGUEZ, AND CARLOS JIMÉNEZ

Title: "A Short Stereoselective Synthesis of Prepiscibactin using a Sml2-Mediated Reformatsky Reaction and Zn2+-Induced Asymmetric Thiazolidine Formation"

Journal: **Organic Letters**, Volumen: 16 Pages, initial: 5820 final: 5823. Date: **2014**

Citas: 16, JCR® Category Quartile Q1 in Category, CHEMISTRY, ORGANIC

C.2. Research projects and grants (Current)

1. Reference of the Grant: RTI2018-093634-B-C22

Period: from 01-01-2019 to 31-12-2021

Title: Bacterial virulence factors as therapeutic targets in fish: characterization of Siderophores and development of new treatments against Furunculosis and tenacibaculosis (SIDEROTREAT)".

Founded by: Ministerio de Ciencia, Innovación y Universidades.

Center of Advanced Scientific Research (CICA) and Department of Microbiología of Universidad of Santiago de Compostela

Amount: 169.400 €

Principal Investigators: Carlos Jiménez González and Jaime Rodríguez González.

2. Reference of the Grant: AGL2015-63740-C2-2-R

Period: from 01-01-2016 to 30-06-2019

Title: Development of applications of siderophores and their membrane receptors for the rational design of new methods for control of bacterial infections in aquaculture (SIDEROVAC)".

Founded by: Ministerio de Economía y Competitividad.

Center of Advanced Scientific Research (CICA) and Department of Microbiología of Universidad of Santiago de Compostela

Amount: 145.200€

Principal Investigators: Carlos Jiménez González and Jaime Rodríguez González.

3. Reference of the Grant: RTC-2016-4611-1

Period: from 03-03-2016 to 31-03-2020

Title: Discovery of innovative antitumour drugs directed against oncological targets: Topoisomerase system and regulation of immune response-INMUNOTOP.

Founded by: Ministerio de Economía y Competitividad.

Center of Advanced Scientific Research (CICA)-Universidad de A Coruña, Universidad de Sevilla, Universidad Autónoma de Madrid and PharmaMar SA

Amount: 3.057.083,75€. **CICA-UDC:** 347.250€

Principal Investigators: Jaime Rodríguez González.

4. Reference of the Grant: PIIF-GA-2010-274660

Period, from 15-09-2011 to 14-09-2013

Title: "Studies on the Bacterial Stress response and stress-induced cross-resistance (Bacterial Stress)" (Marie Curie International Incoming Fellowship), VII Framework Program of the European Union.

Founded by: VII Framework Program of the European Union

Research Group PRONAMAR from Department of Fundamental Chemistry of University of A Coruña. **Amount:** 167.065,60 €

Investigator Responsible: Dr. Carlos Jiménez González,

Principal Investigator: Dr. Antón Vila Sanjurjo

C.3. Contracts

Title: "NMR studies of New Compounds".

Contract between University of A Coruña-Pharma Mar SA

Founded by: Pharmamar SA

Period: from 1/01/2014 to 31/12/2017

Principal Investigators: Jaime Rodríguez González and Carlos Jiménez González

Amount: 100.500 €

C.4. International Patents

- Title: "Recombinant ferri-piscibactin receptor protein for vaccination against pasteurelosis in fish"

Inventors: Manuel Luis Lemos Ramos, Miguel Balado Dacosta, **Carlos Jiménez González**, Jaime Rodríguez González, Antón Vila Sanjurjo and Andrea Katherine Valderrama Pereira.

University of A Coruña and University of Santiago de Compostela

Patent Type: International Number: PCT Int. Appl. (2017), WO 2017/009511 A1 20170119 (19/01/2017).

- Title: "Furan, thiophene or γ -lactam sesterterpene tetronic acids useful as antiviral compounds against infections caused by human adenovirus"

Inventores: Dawrin Jesús Pech Puch, **Carlos Jiménez González**, Jaime Rodríguez González, Jerónimo Pachón Díaz, Judith Berastegui Cabrera, Javier Sanchez Cespedes

University of A Coruña and IBIS Campus Hospital Universitario Virgen del Rocío, Servicio Andaluz de Salud

Patent Type: International Number: PCT Int. Appl PCT/EP2020/071980 (05/08/2020)