



## Rafael María Bargiela Bargiela Bargiela

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## Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

### Educational and scientific story

**Dr. Rafael Bargiela** earned his Bachelor Degree in Biological Science at the Complutense University of Madrid, on September 2007.

He obtained a **Master degree in Bioinformatics and Biological Systems** at the Complutense University of Madrid on September 2008, including a practice period of 3 months at the Conway Institute – University College Dublin (UCD – Ireland), under the supervision of Prof. Des Higgins.

Received a Rafael Calvo Rodés fellowship (2009-2011) at the Center for Astrobiology (CAB-CSIC), working in the Bioinformatics Unit.

Hired at Institute of Catalysis (ICP) from the Spanish National Research Council (CSIC) as bioinformatician in the Systems Biotechnology group, lead by Prof. Manuel Ferrer (January 2011 – July 2017). During this period, Dr. Rafael Bargiela completed a **Master degree in Microbiology** at the Autonomous University of Madrid, after defending the master degree thesis titled "Gut microbiota disturbance during antibiotic treatment" (2012), and received his **PhD with in Microbiology with Honors** at the Autonomous University of Madrid, after defending the Doctoral Thesis titled "Effects of the chronical pollution, biogeochemical factors and bioestimulation on the hydrocarbon catabolism from marine polluted environments: a multi-omics approach" (2016). He stayed at ICP as Bioinformatician Postdoctoral Researcher until July 2017.

On August 2017 Dr. Rafael Bargiela moved to Bangor University (Wales, UK), starting a Postdoctoral period as **Research Software Engineer** in the group lead by Prof. Peter Golyshin at the Center of Environmental Biotechnology, where he is currently located.

His research activities resulted in 45 peer-reviewed accepted publications, 29 on the first quartile (Q1), and 6 book chapters. His work has been cited 1,463 times on 1,260 publications, reaching an **H-index of 18** (WOS database).

He has participated in 13 national and international congress (12 poster contributions and 1 oral presentation) and collaborated in 5 Research Projects (3 European and 2 National).

### Research background

**Dr. Bargiela** has developed his scientific career as bioinformatician, applying bioinformatics analysis for the integration of meta-omics data on microbial biotechnology.

At the Center for Astrobiology (CAB) he focused on genome assembly, prediction and functional annotation of genes from bacteria isolated at Rio Tinto (Spain). Then, at the Institute of Catalysis (ICP), he applied computational analysis on studies from biological systems from microbial communities from oil-polluted marine sites and human gut microbiome. These studies included the integration of metagenomics, metaproteomics and metabolomics data; development of an automatic network reconstruction method for the analysis of hydrocarbons biodegradation; and in silico analysis of gene sequences for the detection of enzymes with interesting catabolic activities and their further genetic modification for biocatalytic enhancement.

At the Center of Environmental Biotechnology (CEB) **Dr. Bargiela** applied bioinformatics analysis on studies of microbial communities from extremely acidic environments, with



special interest on Archaea. These studies included processing of sequencing NGS data from metabarcoding and metagenomics experiments; taxonomic and functional analysis of metagenomics data; phylogenetics analysis of 16S rRNA gene sequences; and the integration of data from metagenomics, proteomics and metabolics experiments.



## General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

**H-index:** 18

**Nr of publications:** 50; 45 papers and 6 book chapters

**Nr of publications on first quartile (Q1):** 29

**Impact factor range:** from 0.892 to 30.471

**Nr of citations:** 1,463 in 1,260 papers

**Rafael María Bargiela Bargiela Bargiela**

Surname(s): **Bargiela Bargiela Bargiela**  
 Name: **Rafael María**  
 ORCID: **0000-0003-1442-3269**  
 ScopusID: **53876742200**  
 ResearcherID: **K-6783-2014**  
 Contact aut. region/reg.: **Galicia**  
 Email: **blodybono@hotmail.com**

**Current professional situation**

**Employing entity:** Bangor University **Type of entity:** University  
**Department:** School of Natural Science  
**Professional category:** Research Software Engineer **Educational Management (Yes/No):** No

**City employing entity:** Bangor, United Kingdom

**Email:** f.bargiela@bangor.ac.uk

**Start date:** 01/08/2017

**Type of contract:** Temporary employment contract **Dedication regime:** Full time

**Primary (UNESCO code):** 240401 - Biostatistics; 241400 - Microbiology

**Performed tasks:** Processing sequencing results from Illumina Next Generation Sequencing (NGS) analysis of environmental samples, using both barcoding and Whole Shotgun Metagenomics (WSM) sequencing techniques. Taxonomic and diversity analysis of the most abundant taxonomic groups on the environmental samples analyzed. Phylogenomics study of undescribed archaeal groups detected on samples isolated from extremely acidic environments. Functional and metabolic analysis of archaeal groups from extreme environments. Genomics and proteomics analysis comparing microbial samples using different types of enrichments.

**Identify key words:** Phylogeny; Computational biology; Proteomics; Microbiology; Genomics

**Field of management activity:** University

**Applicability in teaching and/or research:** Following my prior work developed at ICP-CSIC, my current research in Bangor University goes deeper in the analysis of extreme environments, specially extremely acidic environments. During the last years we have been able to get a better understanding of the phylogenetic classification of poorly described archaeal groups present in these type of environments, like Terrestrial Miscellaneous Environmental Group (TMEG) or groups inside the order Thermoplasmatales, known as alphabet-plasma (G-plasma, E-plasma, etc). Also, the study of these special extreme environments allow us to make metabolic screenings over the microbial communities isolated on the samples, in search of new enzymes with catalytic capabilities which could improve current industrial catalytic processes or discover new metabolic pathways that remain unknown.

**Previous positions and activities**

	<b>Employing entity</b>	<b>Professional category</b>	<b>Start date</b>
<b>1</b>	Instituto de Catálisis y Petroleoquímica	Titulado superior de actividades técnicas y profesionales	01/01/2011

	Employing entity	Professional category	Start date
2	Centro de Astrobiología	Becario	01/01/2009

- 1** **Employing entity:** Instituto de Catálisis y Petroleoquímica **Type of entity:** State agency  
**City employing entity:** Madrid, Community of Madrid, Spain  
**Professional category:** Titulado superior de actividades técnicas y profesionales **Educational Management (Yes/No):** No  
**Phone:** (+34) 915854360  
**Start-End date:** 01/01/2011 - 31/07/2017 **Duration:** 6 years - 7 months  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time  
**Primary (UNESCO code):** 240400 - Biomathematics; 241400 - Microbiology; 241500 - Molecular biology  
**Performed tasks:** Analysis of Next Generation Sequencing (NGS) results, gene prediction and automatic functional annotation of genes Processing data from different meta-omics origin: metagenomics, metaproteomics and metabolomics. In-silico search of genes in environmental samples and microbial consortia coding enzymes which activities are related with hydrocarbons or carbohydrates degradation, like oxygenases and glyoxyl hydroxylases. Metabolic reconstruction of hydrocarbon degradation through metagenomics, metaproteomics and mebolomics analysis of microbial communities inhabiting highly and chronically contaminated marine areas.  
**Identify key words:** Oil pollution; Computational biology; Genomics; Proteomics; Marine biodiversity; Biodegradation  
**Field of management activity:** General State Administration  
**Applicability in teaching and/or research:** My research on these years could be of high interest for a better understanding of the behaviour and response of marine microbial communities when their environment is contaminated with hydrocarbons, like when an oil spill happens. Moreover, this research has been developed on different chronically polluted sites all along the Mediterranean Sea and also one location on the Red Sea, establishing a probe of concept on the analysis of this type of communities in this specific area. On the other hand, the analysis performed during this research helped to discover and characterized new enzymes related with hydrocarbons degradation, which can be of interest in the field of biorremediation but also for the industrial sector to improve their biocatalytic processes.
- 2** **Employing entity:** Centro de Astrobiología **Type of entity:** State agency  
**Professional category:** Becario **Educational Management (Yes/No):** No  
**Start-End date:** 01/01/2009 - 31/12/2010 **Duration:** 2 years  
**Type of contract:** Grant-assisted student (pre or post-doctoral, others)  
**Dedication regime:** Full time  
**Primary (UNESCO code):** 240401 - Biostatistics; 241400 - Microbiology  
**Performed tasks:** Bioinformatics analysis of new extremophile species and strains isolated from Tinto River (Huelva, Spain) Genomic assembly of new genomes after sequencing processes Gene prediction and functional annotation of assembled genomes Search and analysis of the presence of genes with metabolic interest on these new strains or species  
**Identify key words:** Computational biology; Genomics; Microbiology; Biotechnology  
**Applicability in teaching and/or research:** During my research activity here I helped to assemble and analyze new species and strains from extreme environments. The genomic assembly and later analysis of their metabolic capabilities helped to get better understanding of how the metabolic cycles work on this extremely acidic environment.



## Education

### University education

#### 1st and 2nd cycle studies and pre-Bologna degrees

- 1 University degree:** Higher degree  
**Name of qualification:** Máster en Microbiología  
**City degree awarding entity:** Madrid, Community of Madrid, Spain  
**Degree awarding entity:** Universidad Autónoma de Madrid **Type of entity:** University  
**Date of qualification:** 30/06/2012
- 2 University degree:** Higher degree  
**Name of qualification:** Máster en Bioinformática y Biología Computacional  
**City degree awarding entity:** Madrid, Community of Madrid, Spain  
**Degree awarding entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Date of qualification:** 01/08/2008
- 3 University degree:** Higher degree  
**Name of qualification:** Licenciado en Biología Especialidad Genética  
**City degree awarding entity:** Madrid, Community of Madrid, Spain  
**Degree awarding entity:** Universidad Complutense de Madrid **Type of entity:** University  
**Date of qualification:** 01/09/2007

#### Doctorates

**Doctorate programme:** Programa Oficial de Doctorado en Microbiología  
**Degree awarding entity:** Universidad Autónoma de Madrid **Type of entity:** University  
**City degree awarding entity:** Madrid, Community of Madrid, Spain  
**Date of degree:** 19/02/2016  
**Thesis title:** Efectos de la contaminación crónica, factores geoquímicos y bioestimulación en el catabolismo de hidrocarburos en ambientes marinos contaminados: una aproximación multi-ómica  
**Thesis director:** Manuel Ferrer Martínez  
**Obtained qualification:** Sobresaliente cum laude  
**Special doctorate award:** Yes **Date of award:** 04/05/2017



## Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	B2	B2	B2	B2	B2
Gallegan	C2	C2	C2	C2	C2

## Scientific and technological experience

### Scientific or technological activities

#### R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** Catálogo de enzimas marinas: plataformas integradoras de rastreo, producción y desarrollo de enzimas y procesos para un nuevo crecimiento económico [BIO2014-54494-R]  
**Entity where project took place:** Instituto de Catálisis y Petroleoquímica **Type of entity:** State agency  
**City of entity:** Madrid, Community of Madrid, Spain  
**Name principal investigator (PI, Co-PI....):** Manuel Ferrer  
**Start-End date:** 01/01/2015 - 31/12/2017  
**Total amount:** 270.000 €
- 2 Name of the project:** KILLSPILL - Integrated Biotechnological Solutions for Combating Marine Oil Spills  
**Identify key words:** Microbiology; Water pollution  
**Type of project:** Demonstration, pilot projects, conceptual formulations and design of processes and services **Geographical area:** European Union  
**Entity where project took place:** Instituto de Catálisis y Petroleoquímica **Type of entity:** State agency  
**Type of participation:** Team member  
**Code according to the funding entity:** FP7-KBBE.2012.3.5-01  
**Start-End date:** 01/01/2013 - 01/01/2017  
**Participating entity/entities:** Instituto de Catálisis y Petroleoquímica  
**Total amount:** 259.583 €  
**Dedication regime:** Full time
- 3 Name of the project:** ULIXES - Unravelling and exploiting Mediterranean Sea microbial diversity and ecology fro Xenobiotics and pollutants clean up  
**Identify key words:** Water pollution; Microbiology; Biotechnology  
**Geographical area:** European Union  
**Entity where project took place:** Instituto de Catálisis y Petroleoquímica **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Daniele Daffonchio  
**Code according to the funding entity:** KBBE.2012.3.5-01  
**Start-End date:** 01/01/2011 - 01/02/2014  
**Total amount:** 294.880 €





- 4** **Name of the project:** Dinámica y evolución de los elementos móviles del genoma en poblaciones microbianas extremófilas  
**Entity where project took place:** Centro de Astrobiología **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Francisco Javier López de Saro  
**Funding entity or bodies:** Ministerio de Economía y Competitividad  
**Start-End date:** 01/01/2011 - 31/12/2013  
**Total amount:** 80.000 €
- 5** **Name of the project:** METAGUT, development, prevention and early diagnostic detection of Clostridium difficile associated colitis – an interdisciplinary network  
**Geographical area:** European Union  
**Entity where project took place:** Instituto de Catálisis y Petroleoquímica **Type of entity:** State agency  
**Name principal investigator (PI, Co-PI....):** Stephan Johannes Ott  
**Type of participation:** Team member  
**Code according to the funding entity:** BFU2008-04398-E  
**Start-End date:** 01/03/2009 - 31/07/2012  
**Participating entity/entities:** Era-Net PathoGenoMics; ministerio de Economía y Competitividad  
**Total amount:** 190.000 €  
**Dedication regime:** Full time

## Scientific and technological activities

### Scientific production

#### Publications, scientific and technical documents

- 1** Carolina I Giunta; Isabel Cea Rama; Sandra Alonso; Manon L Briand; Rafael María Bargiela Bargiela; Cristina Coscolín Galán; Philippe F-X Corvini; Manuel Ferrer Martínez; Julia Sanz Aparicio; Patrick Shahgaldian. Tuning the Properties of Natural Promiscuous Enzymes by Engineering Their Nano-environment. ACS Nano. 14 - 12, pp. 17652 - 17664. ACS Publications, 11/12/2020.  
**Type of production:** Scientific paper **Format:** Journal  
**Position of signature:** 5 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Total no. authors:** 10  
**Impact source:** ISI **Category:** Science Edition - CHEMISTRY, MULTIDISCIPLINARY  
**Impact index in year of publication:** 14.588 **Journal in the top 25%:** Yes  
**Position of publication:** 14 **No. of journals in the cat.:** 177  
**Relevant publication:** Yes
- 2** Tatyana N. Chernikova; Rafael María Bargiela Bargiela; Stepan V. Toshchakov; Vignesh Shivaraman; Evgenii A. Lunev; Michail M. Yakimov; David N. Thomas; Peter N. Golyshin. Hydrocarbon-Degrading Bacteria Alcanivorax and Marinobacter Associated With Microalgae Pavlova lutheri and Nannochloropsis oculata. Frontiers in Microbiology. 11, FRONTIERS MEDIA SA, AVENUE DU TRIBUNAL FEDERAL 34, LAUSANNE, CH-1015, SWITZERLAND, 28/10/2020.

**Type of production:** Scientific paper  
**Position of signature:** 2

**Total no. authors:** 8

**Impact source:** ISI

**Impact index in year of publication:** 4.236

**Position of publication:** 34

**Relevant publication:** Yes

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 136

- 3** Rafael María Bargiela Bargiela; Karin Lanthaler; Colin M. Potter; Manuel Ferrer Martínez; Alexander F. Yakunin; Bela Paizs; Peter N. Golyshin; Olga V. Golyshina. Proteome Cold-Shock Response in the Extremely Acidophilic Archaeon, *Cuniculiplasma divulgatum*. *Microorganisms*. 8 - 5, MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND, 19/05/2020.

**Type of production:** Scientific paper

**Position of signature:** 1

**Total no. authors:** 8

**Impact source:** ISI

**Impact index in year of publication:** 4.152

**Position of publication:** 37

**Relevant publication:** Yes

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**No. of journals in the cat.:** 136

- 4** Sandra Alonso; Gerard Santiago; Isabel Cea Rama; Laura Fernández López; Cristina Coscolín Galán; Jan Modregger; Anna K. Resselmann; Mónica Martínez Martínez; Helena Marrero; Rafael María Bargiela Bargiela; Marcos Pita; Jose L. González Alfonso; Manon L. Briand; David Rojo; Coral Barbas; Francisco J. Plou Gasca; Peter N. Golyshin; Patrick Shahgaldian; Julia Sanz Aparicio; Víctor Guallar; Manuel Ferrer Martínez. Genetically engineered proteins with two active sites for enhanced biocatalysis and synergistic chemo- and biocatalysis. *Nature Catalysis*. 3 - 3, pp. 319 - 328. ATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND, 16/03/2020.

**Type of production:** Scientific paper

**Position of signature:** 10

**Total no. authors:** 21

**Impact source:** ISI

**Impact index in year of publication:** 30.471

**Position of publication:** 2

**Source of citations:** WOS

**Relevant publication:** Yes

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - CHEMISTRY, PHYSICAL

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 159

**Citations:** 6

- 5** Aleksei A. Korzhenkov; Stepan V. Toshchakov; Rafael María Bargiela Bargiela; Huw Gibbard; Manuel Ferrer Martínez; Alina V. Teplyuk; David L. Jones; Ilya V. Kublanov; Peter N. Golyshin; Olga V. Golyshina. Archaea dominate the microbial community in an ecosystem with low-to-moderate temperature and extreme acidity. *Microbiome*. 7 - 11, BMC, CAMPUS, 4 CRINAN ST, LONDON N1 9XW, ENGLAND, 2019.

**Type of production:** Scientific paper

**Position of signature:** 3

**Total no. authors:** 10

**Impact source:** ISI

**Impact index in year of publication:** 11.607

**Position of publication:** 8

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 136

**Source of citations:** WOS**Citations:** 8**Relevant publication:** Yes

- 6** Sergey N. Gavrilov; Aleksei A. Korzhenkov; Ilya V. Kublanov; Rafael María Bargiela Bargiela; Leonid V. Zamana; Alexandra A. Popova; Stepan V. Toshchakov; Peter N. Golyshin; Olga V. Golyshina. Microbial communities of polymetallic deposits' acidic ecosystems of continental climatic zone with high temperature contrasts. *Frontiers in Microbiology*. 10, FRONTIERS MEDIA SA, AVENUE DU TRIBUNAL FEDERAL 34, LAUSANNE, CH-1015, SWITZERLAND, 2019.

**Type of production:** Scientific paper**Format:** Journal**Position of signature:** 4**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 9**Impact source:** ISI**Category:** Science Edition - MICROBIOLOGY**Impact index in year of publication:** 4.236**Journal in the top 25%:** Yes**Position of publication:** 34**No. of journals in the cat.:** 136**Source of citations:** WOS**Citations:** 1**Relevant publication:** Yes

- 7** Sergio Serrano Villar; David Rojo; Mónica Martínez Martínez; Simon Deusch; Jorge F. Vázquez Castellanos; Rafael Bargiela; Talía Sainz; Mar Vera; Santiago Moreno; Vicente Estrada; María José Gosalbes; Amparo Latorre; Jana Seifert; Coral Barbas; Andrés Moya; Manuel Ferrer. Gut bacteria metabolism impacts immune recovery in HIV-infected individuals. *Ebiomedicine*. 8, pp. 203 - 216. 28/04/2016.

**DOI:** 10.1016/j.ebiom.2016.04.033**Type of production:** Scientific paper**Format:** Scientific and technical document or report**Position of signature:** 6**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 16**Impact source:** SCOPUS**Category:** Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL**Impact index in year of publication:** 6.292**Journal in the top 25%:** Yes**Position of publication:** 18**No. of journals in the cat.:** 139**Source of citations:** WOS**Citations:** 49**Relevant publication:** Yes

- 8** Rafael Bargiela; Christoph Gertler; Mirko Magagnini; Francesca Mapelli; Jianwei Chen; Daniele Daffonchio; Peter N. Golyshin; Manuel Ferrer. Degradation network reconstruction in uric acid and ammonium amendments in oil-degrading marine microcosms guided by metagenomic data. *Frontiers in microbiology*. 6 - 1270, Frontiers, 24/11/2015.

**DOI:** 10.3389/fmicb.2015.01270**Type of production:** Scientific paper**Format:** Scientific and technical document or report**Position of signature:** 1**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 8**Impact source:** ISI**Category:** Microbiology**Impact index in year of publication:** 4,165**Journal in the top 25%:** Yes**Position of publication:** 34**No. of journals in the cat.:** 136**Source of citations:** WOS**Citations:** 14**Relevant publication:** Yes

- 9** Christoph Gertler; Rafael Bargiela; Francesca Mapelli; Xifang Han; Jianwei Chen; Tran Hai; Ranya A. Amer; Mouna Mahjoubi; Hanan Malkawi; Mirko Magagnini; Ameer Cherif; Yasser R. Abdel-Fattah; Nicolas Kalogerakis; Daniele Daffonchio; Manuel Ferrer; Peter N. Golyshin. Conversion of uric acid into ammonium in oil-degrading marine microbial Communities: a possible role of Halomonads. *Microbial ecology*. 70 - 3, pp. 724 - 740. Springer, 09/2015.  
**DOI:** 10.1007/s00248-015-0606-7  
**Type of production:** Scientific paper  
**Position of signature:** 2  
**Total no. authors:** 16  
**Impact source:** ISI  
**Impact index in year of publication:** 3,232  
**Position of publication:** 10  
**Source of citations:** WOS  
**Relevant publication:** Yes  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - MARINE & FRESHWATER BIOLOGY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 107  
**Citations:** 6
- 10** Rafael Bargiela; Florian Alexander Herbst; Mónica Martínez Martínez; Jana Seifert; David Rojo; Simone Cappello; María Genovese; Francesca Crisafi; Renata Denaro; Tatyana N. Chernikova; Coral Barbas; Martin von Bergen; Michail M. Yakimov; Manuel Ferrer; Peter N. Golyshin. Metaproteomics and metabolomics analyses of chronically petroleum-polluted sites reveal the importance of general anaerobic processes uncoupled with degradation. *Proteomics*. 15 - 20, pp. 3508 - 352. Wiley Online Library, 27/08/2015.  
**DOI:** 10.1002/pmic.201400614  
**Type of production:** Scientific paper  
**Position of signature:** 1  
**Total no. authors:** 15  
**Impact source:** ISI  
**Impact index in year of publication:** 4,079  
**Position of publication:** 23  
**Source of citations:** WOS  
**Relevant publication:** Yes  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - BIOCHEMICAL RESEARCH METHODS  
**No. of journals in the cat.:** 77  
**Citations:** 16
- 11** Rafael Bargiela; Francesca Mapelli; David Rojo; Bessem Chouaia; Jesús Tornés; Sara Borin; Michael Richter; Mercedes Verónica Del Pozo; Simone Cappello; Christoph Gertler; María Genovese; Renata Denaro; Mónica Martínez Martínez; Stilianos Fodelianakis; Rayna A. Amer; David Bigazzi; Xifang Han; Jianwei Chen; Tatyana N. Chernikova; Olga V. Golyshina; Mouna Mahjoubi; Atef Jaouani; Fatima Benzha; Mirko Magagnini; Emad Hussein; Fuad Al-Horani; Ameer Cherif; Mohamed Blaghen; Yasser R. Abdel-Fattah; Nicolas Kalogerakis; Coral Barbas; Hanan I. Malkawi; Peter N. Golyshin; Michail M. Yakimov; Daniele Daffonchio; Manuel Ferrer. Bacterial population and biodegradation potential in chronically crude oil-contaminated marine sediments are strongly linked to temperature. *Scientific reports*. 5 - 11651, Nature, 29/06/2015.  
**DOI:** 10.1038/srep11651  
**Type of production:** Scientific paper  
**Position of signature:** 1  
**Total no. authors:** 36  
**Impact source:** ISI  
**Impact index in year of publication:** 5,228  
**Position of publication:** 17  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - MULTIDISCIPLINARY SCIENCES  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 71

**Source of citations:** WOS**Citations:** 54**Relevant publication:** Yes

- 12** Ana Elena Pérez Cobas; María José Gosalbes; Anette Friedrichs; Henrik Knecht; Alejandro Artacho; Kathleen Erismann; Wolfgang Otto; David Rojo; Rafael Bargiela; Martin von Bergen; Sven C. Neulinger; Carolin Däumer; Fremke Anouska Heinsen; Amparo Latorre; Coral Barbas; Jana Seifert; Vitor Martins dos Santos; Stephan J. Ott; Manuel Ferrer; Andrés Moya. Gut microbiota disturbance during antibiotic therapy: a multi-omic approach. *Gut*. 62 - 11, pp. 1591 - 1601. *BMJ Journals*, 01/11/2013.

**DOI:** 10.1136/gutjnl-2012-303184**Type of production:** Scientific paper**Position of signature:** 9**Total no. authors:** 20**Impact source:** ISI**Impact index in year of publication:** 13.319**Position of publication:** 3**Source of citations:** WOS**Relevant publication:** Yes**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Science Edition - GASTROENTEROLOGY & HEPATOLOGY**Journal in the top 25%:** Yes**No. of journals in the cat.:** 88**Citations:** 277

- 13** María Eugenia Guazzaroni; Florian-Alexander Herbst; Ivan Lores; Javier Tamames; Ana Isabel Peláez; Nieves López Cortés; María Alcaide; Mercedes Verónica Del Pozo; José María Vieites; Martin von Bergen; José Luis Gallego; Rafael Bargiela; Arantxa López López; Dietmar H. Pieper; Ramón Roselló Mora; Jesús Sánchez; Jana Seifert; Manuel Ferrer. Metaproteogenomic insights beyond bacterial response to naphthalene exposure and bio-stimulation. *ISME Journal*. 7 - 1, pp. 122 - 136. *Nature Publishing Group*, 01/01/2013.

**DOI:** 10.1038/ismej.2012.82**Type of production:** Scientific paper**Position of signature:** 12**Total no. authors:** 18**Impact source:** ISI**Impact index in year of publication:** 9,267**Position of publication:** 5**Source of citations:** WOS**Relevant publication:** Yes**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Ecology**Journal in the top 25%:** Yes**No. of journals in the cat.:** 169**Citations:** 73

- 14** Marco A. Distaso; Tatyana N. Chernikova; Rafael María Bargiela Bargiela; Evgenii A. Lunev; Aleksei A. Korzhenkov; Stepan V. Toshchakov; David Rojo; Coral Barbas; Manuel Ferrer Martínez; Olga V. Golyshina; Peter N. Golyshin; David L. Jones. Utilization of low molecular weight organic compounds by the filterable fraction of a lotic microbiome. *FEMS Microbiology Ecology*. OXFORD UNIV PRESS. GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAN, 02/12/2020.

**Type of production:** Scientific paper**Position of signature:** 3**Total no. authors:** 12**Impact source:** ISI**Impact index in year of publication:** 3.675**Position of publication:** 44**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Science Edition - MICROBIOLOGY**No. of journals in the cat.:** 136





- 15** Susana Ruiz Ruiz; Sergio Sánchez Carrillo; Sergio Ciordia; María C. Mena; Celia Méndez García; David Rojo; Rafael María Bargiela Bargiela; Elisa Zubeldia Varela; Mónica Martínez Martínez; Coral Barbas; Manuel Ferrer Martínez; Andrés Moya. Functional microbiome deficits associated with ageing: Chronological age threshold. *Aging Cell*. 19 - 1, WILEY, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA, 01/2020.

**Type of production:** Scientific paper

**Format:** Journal

**Position of signature:** 7

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Total no. authors:** 12

**Impact source:** ISI

**Category:** Science Edition - CELL BIOLOGY

**Impact index in year of publication:** 7.238

**Journal in the top 25%:** Yes

**Position of publication:** 34

**No. of journals in the cat.:** 195

**Source of citations:** WOS

**Citations:** 2

- 16** Olga V. Golyshina; Rafael María Bargiela Bargiela; Stepan V. Toshchakov; Kikolay A. Chernyh; Soshila Ramayah; Aleksei A. Korzhenkov; Ilya V. Kublanov; Peter N. Golyshin. Diversity of "Ca. Micrarchaeota" in Two Distinct Types of Acidic Environments and Their Associations with Thermoplasmatales. *Genes*. 10 - 6, MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND, 15/06/2019.

**Type of production:** Scientific paper

**Format:** Journal

**Position of signature:** 2

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Total no. authors:** 8

**Impact source:** ISI

**Category:** Science Edition - GENETICS & HEREDITY

**Impact index in year of publication:** 3.759

**No. of journals in the cat.:** 178

**Position of publication:** 54

**Source of citations:** WOS

**Citations:** 3

- 17** Cristina Coscolín Galán; Nadine Katzke; Antonio García Moyano; Jose Navarro Fernández; David Almendral; Mónica Martínez Martínez; Alexander Bollinger; Rafael María Bargiela Bargiela; Christoph Gertler; Tatyana N. Chernikova; David Rojo; Coral Barbas; Hai Tran; Olga V. Golyshina; Rainhard Koch; Michail M. Yakimov; Gro E.K. Bjerga; Peter N. Golyshin; Karl-Erich Jaeger; Manuel Ferrer Martínez. Bioprospecting reveals class  $\omega$ -transaminases converting bulky ketones and environmentally relevant polyamines. *Applied and Environmental Microbiology*. 85 - 2, AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA, 01/2019.

**Type of production:** Scientific paper

**Format:** Journal

**Position of signature:** 8

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Total no. authors:** 20

**Impact source:** ISI

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Impact index in year of publication:** 4.016

**Journal in the top 25%:** Yes

**Position of publication:** 37

**No. of journals in the cat.:** 156

**Source of citations:** WOS

**Citations:** 3

- 18** Manuel Ferrer Martínez; Celia Méndez García; Rafael María Bargiela Bargiela; Jennifer Chow; Sandra Alonso; Antonio García Moyano; Gro E.K. Bjerga; Ida H. Steen; Tatjana Schwabe; Charlotte Blom; Jan Vester; Andrea Weckbecker; Patrick Shahgaldian; Carla C.C.R. de Carvalho; Rolandas Meskys; Giulio Zanaroli; Frank O. Glockner; Antonio Fernández Guerra; Siva Thambisetty; Fernando de la Calle; Olga V. Golyshina; Michail M. Yakimov; Karl-Erich Jaeger; Alexander F. Yakunin; Wolfgang R. Streit; Oonagh McMeel; Jan-Bart Calewaert; Nathalie Tonne; Peter N. Golyshin. Decoding the ocean's microbiological secrets for marine enzyme biodecovery.



FEMS Microbiology Letters. 366 - 1, OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND, 01/2019.

**Type of production:** Scientific paper

**Position of signature:** 3

**Total no. authors:** 29

**Impact source:** ISI

**Impact index in year of publication:** 1.987

**Position of publication:** 99

**Source of citations:** WOS

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**No. of journals in the cat.:** 136

**Citations:** 6

- 19** Olga V. Golyshina; Rafael María Bargiela Bargiela; Peter N. Golyshin. Cuniculiplasmataceae, their ecogenomic and metabolic patterns, and interactions with 'ARMAN'. Extremophiles. 23 - 1, pp. 1 - 7. SPRINGER JAPAN KK, CHIYODA FIRST BLDG EAST, 3-8-1 NISHI-KANDA, CHIYODA-KU, TOKYO, 101-0065, JAPAN, 2019.

**Type of production:** Scientific paper

**Position of signature:** 2

**Total no. authors:** 3

**Impact source:** ISI

**Impact index in year of publication:** 2.462

**Position of publication:** 84

**Source of citations:** WOS

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**No. of journals in the cat.:** 136

**Citations:** 4

- 20** Cristina Coscolín Galán; Ana Beloqui; Mónica Martínez Martínez; Rafael María Bargiela Bargiela; Gerard Santiago; Rosa M. Blanco; Guillaume Delittre; Carlos Márquez Álvarez; Manuel Ferrer Martínez. Controlled manipulation of enzyme specificity through immobilization-induced flexibility constraints. Applied Catalysis A-General. 565, pp. 59 - 67. ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS, 05/09/2018.

**Type of production:** Scientific paper

**Position of signature:** 4

**Total no. authors:** 9

**Impact source:** ISI

**Impact index in year of publication:** 4.630

**Position of publication:** 41

**Source of citations:** WOS

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - ENVIRONMENTAL SCIENCES

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 265

**Citations:** 5

- 21** Simon Deusch; Sergio Serrano Villar; David Rojo; Mónica Martínez Martínez; Rafael María Bargiela Bargiela; Jorge F. Vázquez Castellanos; Talia Sainz; Coral Barbas; Andrés Moya; Santiago Moreno; María J. Gosalbes; Vicente Estrada; Jana Seifert; Manuel Ferrer Martínez. Effects of HIV, antiretroviral therapy and prebiotics on the active fraction of the gut microbiota. AIDS. 32 - 10, pp. 1229 - 1237. 19/06/2018.

**Type of production:** Scientific paper

**Position of signature:** 5

**Total no. authors:** 14

**Impact source:** ISI

**Impact index in year of publication:** 4.499

**Position of publication:** 7

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - VIROLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 37



**Source of citations:** WOS**Citations:** 8

- 22** Gerard Santiago; Mónica Martínez Martínez; Sandra Alonso; Rafael María Bargiela Bargiela; Cristina Coscolín Galán; Peter N. Golyshin; Víctor Guallar; Manuel Ferrer Martínez. Rational Engineering of Multiple Active Sites in an Ester Hydrolase. *Biochemistry*. 57 - 15, pp. 2245 - 2255. AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA, 17/04/2018.
- Type of production:** Scientific paper  
**Position of signature:** 4
- Total no. authors:** 8  
**Impact source:** ISI  
**Impact index in year of publication:** 2.952  
**Position of publication:** 169
- Format:** Journal  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY  
**No. of journals in the cat.:** 297
- 23** Mónica Martínez Martínez; Cristina Coscolín Galán; Gerard Santiago; Jennifer Chow; Peter J. Stogios; Rafael María Bargiela Bargiela; Christoph Gertler; José Navarro Fernández; Alexander Bollinger; Stephan Thies; Pablo Pérez García; Tran Hai; Mercedes V. Del Pozo; Runar Stokke; Ida H. Steen; Hong Cui; Xiaohui Xu; Boguslaw P. Nocek; María Alcaide; Marco Distaso; Victoria Mesa; Ana I. Peláez; Jesús Sánchez; Patrick C.F. Buchholz; Jürgen Pleiss; Antonio Fernández Guerra; Frank O. Glöckner; Olga V. Golyshina; Michail M. Yakimov; Alexei Savchenko; Karl-Erich Jaeger; Alexander F. Yakunin; Wolfgang R. Streit; Peter N. Golyshin; Victor Guallar; Manuel Ferrer Martínez; The Inmare Consortium. Determinants and Prediction of Esterase Substrate Promiscuity Patterns. *ACS Chemical Biology*. 13 - 1, pp. 225 - 234. ACS, 19/01/2018.
- Type of production:** Scientific paper  
**Position of signature:** 6
- Total no. authors:** 37  
**Impact source:** ISI  
**Impact index in year of publication:** 4.374  
**Position of publication:** 79
- Source of citations:** WOS  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY  
**No. of journals in the cat.:** 297  
**Citations:** 29
- 24** Manuel Ferrer Martínez; Dmitry Y. Sorokin; Yuri I. Wolf; Sergio Ciordia; María C. Mena; Rafael María Bargiela Bargiela; Eugene V. Koonin; Kira S. Makarova. Proteomic Analysis of Methanonatronarchaeum thermophilum AMET1, a Representative of a Putative New Class of Euryarchaeota, "Methanonatronarchaeia". *Genes*. 9 - 2, MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAN, 01/2018.
- Type of production:** Scientific paper  
**Impact source:** ISI  
**Impact index in year of publication:** 3.331  
**Position of publication:** 54
- Source of citations:** WOS  
**Format:** Journal  
**Category:** Science Edition - GENETICS & HEREDITY  
**No. of journals in the cat.:** 178  
**Citations:** 4
- 25** Cristina Coscolín Galán; Mónica Martínez Martínez; Jennifer Chow; Rafael María Bargiela Bargiela; Antonio García Moyano; Gro E.K. Bjerga; Alexander Bollinger; Runar Stokke; Ida H. Steen; Olga V. Golyshina; Michail M. Yakimov; Karl-Erich Jaeger; Alenxander F. Yakunin; Wolfgang R. Streit; Peter N. Golyshin; Manuel Ferrer Martínez. Relationships between substrate promiscuity and chiral selectivity of esterases from phylogenetically and environmentally diverse microorganisms. *Catalysts*. 8 - 1, MDPI AG, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND, 01/2018.
- Type of production:** Scientific paper  
**Format:** Journal

**Position of signature:** 4

**Total no. authors:** 16

**Impact source:** ISI

**Impact index in year of publication:** 3.444

**Position of publication:** 65

**Source of citations:** WOS

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - CHEMISTRY, PHYSICAL

**No. of journals in the cat.:** 159

**Citations:** 3

- 26** Tatyana N. Chernikova; Nikos Kyrpides; Rafael María Bargiela Bargiela; Tanja Woyke; Nicole Shapiro; William B. Whitman; Peter N. Golyshin. Draft genome sequence of *Monaibacterium marinum* C7<sup>T</sup>, isolated from seawater from the menai straits, Wales, United Kingdom. *Microbiology Resource Announcements*. 6 - 5, American Society of Microbiology, 2018.

**Type of production:** Scientific paper

**Position of signature:** 3

**Total no. authors:** 7

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

- 27** David Rojo; Celia Méndez-García; Beta Anna Raczkowska; Rafael Bargiela; Andrés Moya; Manuel Ferrer; Coral Barbas. Exploring the human microbiome from multiple perspectives: factors altering its composition and function. *FEMS in Microbiology Reviews*. Oxford Academic, 25/02/2017.

**DOI:** 10.1093/femsre/fuw046

**Type of production:** Scientific paper

**Position of signature:** 4

**Total no. authors:** 7

**Impact source:** ISI

**Impact index in year of publication:** 11.392

**Position of publication:** 5

**Source of citations:** WOS

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of review

**Corresponding author:** No

**Category:** Microbiology

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 136

**Citations:** 49

- 28** Natalia Bourguignon; Rafael Bargiela; David Rojo; Tatyana N. Chernikova; Sara A. López de Rodas; Jesús García Cantalejo; Daniela J. Näther; Peter N. Golyshin; Coral Barbas; Marcela Ferrero; Manuel Ferrer. Insights into the degradation capacities of *Amycolatopsis tucumanensis* DSM 45259 guided by microarray data. *World journal of microbiology and biotechnology*. 32 - 12, pp. 201. Springer, 26/10/2016.

**DOI:** 10.1007/s11274-016-2163-8

**Type of production:** Scientific paper

**Position of signature:** 2

**Total no. authors:** 11

**Impact source:** ISI

**Impact index in year of publication:** 1,532

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Biotechnology

- 29** Manuel Ferrer; Mónica Martínez Martínez; Rafael Bargiela; Wolfgang R. Streit; Olga V. Golyshina; Peter N. Golyshin. Estimating the success of enzyme bioprospecting through metagenomics: current status and future trends. *microbial biotechnology*. 9 - 1, pp. 22 - 34. Wiley Online Library, 14/08/2015.

**DOI:** 10.1111/1751-7915.12309

**Type of production:** Scientific paper

**Position of signature:** 3

**Total no. authors:** 6

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Impact source:** ISI

**Impact index in year of publication:** 3,991

**Position of publication:** 21

**Source of citations:** WOS

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 156

**Citations:** 91

- 30** Luis Tobalina; Rafael Bargiela; Jon Pey; Florian Alexander Herbst; Iván Lores; David Rojo; Coral Barbas; Ana Isabel Peláez; Jesús Sánchez; Martin von Bergen; Jana Seifert; Manuel Ferrer; Francisco J. Planes. Context-specific metabolic network reconstruction of a naphthalene-degrading bacterial community guided by metaproteomic data. *Bioinformatics*. 31 - 1, pp. 1771 - 1779. Oxford journals, 01/06/2015.

**DOI:** 10.1093/bioinformatics/btv036

**Type of production:** Scientific paper

**Position of signature:** 2

**Total no. authors:** 13

**Impact source:** ISI

**Impact index in year of publication:** 5,766

**Position of publication:** 20

**Source of citations:** WOS

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 156

**Citations:** 16

- 31** María Alcaide; Anatoli Tchigvintsev; Mónica Martínez Martínez; Ana Popovic; Oleg N. Reva; Álvaro Lafraya; Rafael Bargiela; Taras Y. Nechitaylo; Ruth Matesanz; Marie-Anne Cambon-Bonavita; Mohamed Jebbar; Michail M. Yakimov; Alexei Savchenko; Olga V. Golyshina; Alexander F. Yakunin; Peter N. Golyshin; Manuel Ferrer. Identification and characterization of carboxyl esterases of gill chamber-associated microbiota in the deep-sea shrimp *Rimicaris exoculata* by using functional metagenomics. *Applied and environmental microbiology*. 83 - 6, pp. 2125 - 2136. American society for microbiology, 03/2015.

**DOI:** 10.1128/AEM.03387-14

**Type of production:** Scientific paper

**Position of signature:** 7

**Total no. authors:** 17

**Impact source:** ISI

**Impact index in year of publication:** 3,823

**Impact source:** ISI

**Impact index in year of publication:** 3,823

**Position of publication:** 37

**Source of citations:** WOS

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Journal in the top 25%:** Yes

**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 156

**Citations:** 17

- 32** David Rojo; Arancha Hevia; Rafael Bargiela; Patricia López; Adriana Cuervo; Sonia González; Ana Suárez; Borja Sánchez; Mónica Martínez Martínez; Christian Milani; Marco Ventura; Coral Barbas; Andrés Moya; Antonio Suárez; Abelardo Margolles; Manuel Ferrer. Ranking the impact of human health disorders on gut metabolism: Systemic lupus erythematosus and obesity as study cases. *Scientific reports*. 5 - 8310, Nature, 06/02/2015.

**DOI:** 10.1038/srep08310

**Type of production:** Scientific paper

**Position of signature:** 3

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Total no. authors:** 16**Impact source:** ISI**Impact index in year of publication:** 5,228**Position of publication:** 17**Source of citations:** WOS**Category:** Science Edition - MULTIDISCIPLINARY SCIENCES**Journal in the top 25%:** Yes**No. of journals in the cat.:** 71**Citations:** 40

- 33** María Alcaide; Peter J. Stogios; Álvaro Lafraya; Anatoli Tchigvintsev; Robert Flick; Rafael Bargiela; Tatyana N. Chernikova; Oleg N. Reva; Tran Hai; Christian C. Leggewie; Nadine katzke; Violetta La Cono; Ruth Matesanz; Mohamed Jebbar; Karl-Erich Jaeger; Michail M. Yakimov; Alexander F. Yakunin; Peter N. Golyshin; Olga V. Golyshina; Alexei Savchenko; Manuel Ferrer. Pressure adaptation is linked to thermal adaptation in salt-saturated marine habitats. *Environmental microbiology*. 17 - 2, pp. 332 - 345. Society for applied microbiology, 02/2015.

**DOI:** 10.1111/1462-2920.12660**Type of production:** Scientific paper**Position of signature:** 6**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 21**Impact source:** ISI**Impact index in year of publication:** 5,932**Position of publication:** 27**Source of citations:** WOS**Category:** Microbiology**Journal in the top 25%:** Yes**No. of journals in the cat.:** 136**Citations:** 26

- 34** Michail M. Yakimov; Violetta La Cono; Francesco Smedile; Francesca Crisafi; Erika Arcadi; Marcella Leonardi; Franco Decembrini; Maurizio Catalfamo; Rafael Bargiela; Manuel Ferrer; Peter N. Golyshin; Laura Giuliano. Heterotrophic bicarbonate assimilation is the main process of de novo organic carbon synthesis in hadal zone of the Hellenic Trench, the deepest part of Mediterranean Sea. *Environmental microbiology reports*. 6 - 6, pp. 709 - 722. Society for applied microbiology, 28/07/2014.

**DOI:** 10.1111/1758-2229.12192**Type of production:** Scientific paper**Position of signature:** 9**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 12**Impact source:** ISI**Impact index in year of publication:** 3,293**Position of publication:** 68**Source of citations:** WOS**Category:** Science Edition - MICROBIOLOGY**Journal in the top 25%:** No**No. of journals in the cat.:** 136**Citations:** 12

- 35** Anna Kubacka; María Suárez Diez; David Rojo; Rafael Bargiela; Sergio Ciordia; Inés Zapico; Juan P. Albar; Coral Barbas; Vitor A.P. Martins dos Santos; Marcos Fernández García; Manuel Ferrer. Understanding the antimicrobial mechanism of TiO<sub>2</sub>-based nanocomposite films in a pathogenic bacterium. *Scientific reports*. 4, pp. 4134. Nature, 19/02/2014.

**DOI:** 10.1038/srep04134**Type of production:** Scientific paper**Position of signature:** 4**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 11**Impact source:** ISI**Impact index in year of publication:** 5,228**Category:** Science Edition - MULTIDISCIPLINARY SCIENCES**Journal in the top 25%:** Yes

**Position of publication:** 17**No. of journals in the cat.:** 71**Source of citations:** WOS**Citations:** 179

- 36** Celia Méndez García; Victoria Mesa; Richard R. Sprenger; Michael Richter; María Suárez Diez; Jennifer Solano; Rafael Bargiela; Olga V. Golyshina; Ángel Manteca; Juan Luis Ramos; José R. Gallego; Irene Llorente; Vitor AP Martins dos Santos; Ole N. Jensen; Ana Isabel Peláez; Jesús Sánchez; Manuel Ferrer. Microbial stratification in low pH oxic and suboxic macroscopic growths along an acid mine drainage. ISME Journal. 8 - 6, pp. 1259 - 1274. Nature, 16/01/2014.

**DOI:** 10.1038/ismej.2013.242**Type of production:** Scientific paper**Position of signature:** 7**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 17**Impact source:** ISI**Impact index in year of publication:** 9,302**Position of publication:** 5**Category:** Ecology**Journal in the top 25%:** Yes**No. of journals in the cat.:** 169**Source of citations:** WOS**Citations:** 51

- 37** Mónica Martínez Martínez; Iván Lores; Carlina Peña García; Rafael Bargiela; Dolores Reyes Duarte; María Eugenia Guazzaroni; Ana Isabel Peláez; Jesús Sánchez; Manuel Ferrer. Biochemical studies on a versatile esterase that is most catalytically active with polyaromatic esters. Microbial biotechnology. 7 - 2, pp. 184 - 191. Wiley Online Library, 13/01/2014.

**DOI:** 10.1111/1751-7915.12107**Type of production:** Scientific paper**Position of signature:** 4**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 9**Impact source:** ISI**Impact index in year of publication:** 3,081**Position of publication:** 25**Category:** Microbiology**Journal in the top 25%:** Yes**No. of journals in the cat.:** 136**Source of citations:** WOS**Citations:** 16

- 38** María Alcaide; Jesús Tornés; Peter J. Stogios; Xiaohui Xu; Christoph Gertler; Rosa Di Leo; Rafael Bargiela; Álvaro Lafraya; María Eugenia Guazzaroni; Nieves López Cortés; Tatyana N. Chernikova; Olga V. Golyshina; Taras Y. Nechitaylo; Iris Plumeier; Dietmar H. Pieper; Michael M. Yakimov; Alexei Savchenko; Peter N. Golyshin; Manuel Ferrer. Single residues dictate the co-evolution of dual esterases: MCP hydrolases from the Alpha/Beta hydrolase family. Biochemical Journal. 454 - 1, pp. 157 - 166. Portland press, 15/08/2013.

**DOI:** 10.1042/BJ20130552**Type of production:** Scientific paper**Position of signature:** 7**Format:** Scientific and technical document or report**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Total no. authors:** 19**Impact source:** ISI**Impact index in year of publication:** 4.779**Position of publication:** 95**Category:** Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY**No. of journals in the cat.:** 297**Source of citations:** WOS**Citations:** 19





- 39** Han-Pil Choi; Silvia Juárez; Sergio Ciordia; Marisol Fernández; Rafael Bargiela; Juan P. Albar; Varun Mazumdar; Brian P. Anton; Simon Kasif; Manuel Ferrer Martínez; Martin Steffen. Biochemical characterization of hypothetical proteins from *Helicobacter pylori*. *Plos One*. 8 - 6, pp. e66605. PLOS, 18/06/2013.  
**DOI:** 10.1371/journal.pone.0066605  
**Type of production:** Scientific paper  
**Position of signature:** 5  
**Total no. authors:** 11  
**Impact source:** ISI  
**Impact index in year of publication:** 3,524  
**Position of publication:** 27  
**Source of citations:** WOS  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - MULTIDISCIPLINARY SCIENCES  
**Journal in the top 25%:** No  
**No. of journals in the cat.:** 27  
**Citations:** 41
- 40** Ester Hernández; Rafael Bargiela; María Suárez Diez; Anette Friedrichs; Ana Elena Pérez Cobas; María José Gosalbes; Henrik Knecht; Mónica Martínez Martínez; Jana Seifert; Martin von Bergen; Alejandro Artacho; Alicia Ruiz; Cristina Campoy; Amparo Latorre; Stephan J. Ott; Andrés Moya; Antonio Suárez; Vitor A.P. Martins dos Santos; Manuel Ferrer. Functional consequences of microbial shifts in the human gastrointestinal tract linked to antibiotic treatment and obesity. *Gut Microbes*. 4 - 4, pp. 306 - 315. Taylor and Francis Online, 12/06/2013.  
**DOI:** 10.4161/gmic.25321  
**Type of production:** Scientific paper  
**Position of signature:** 2  
**Total no. authors:** 19  
**Impact source:** SCOPUS  
**Impact index in year of publication:** 7.740  
**Position of publication:** 11  
**Source of citations:** WOS  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Gastroenterology  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 88  
**Citations:** 49
- 41** Mónica Martínez Martínez; María Alcaide; Anatoli Tchigvintsev; Oleg Reva; Julio Polaina; Rafael Bargiela; María Eugenia Guazzaroni; Álvaro Chicote; Albert Canet; Francisco Valero; Eugenio Rico Eguizabal; María del Carmen Guerrero; Alexander F. Yakunin; Manuel Ferrer. Biochemical diversity of carboxyl esterases and lipases from Lake Arreo (Spain): a metagenomic approach. *Applied and Environmental Microbiology*. 79 - 12, pp. 3553 - 3562. American Society for Microbiology, 01/06/2013.  
**DOI:** 10.1128/AEM.00240-13  
**Type of production:** Scientific paper  
**Position of signature:** 6  
**Total no. authors:** 14  
**Impact source:** ISI  
**Impact index in year of publication:** 3,952  
**Position of publication:** 37  
**Source of citations:** WOS  
**Format:** Scientific and technical document or report  
**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee  
**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY  
**Journal in the top 25%:** Yes  
**No. of journals in the cat.:** 156  
**Citations:** 36
- 42** Manuel Ferrer; Alicia Ruiz; Francesca Lanza; Sven Bastiaan Haange; Andreas Oberbach; Holger Till; Rafael Bargiela; Cristina Campoy; María Teresa Segura; Martin von Bergen; Jana Seifert; Antonio Suarez. Microbiota from the distal guts of lean and obese adolescents exhibit partial functional redundancy besides clear differences in community structure. *Environmental Microbiology*. 15 - 1, pp. 211 - 226. Society of Applied Microbiology, 01/01/2013.

**DOI:** 10.1111/j.1462-2920.2012.02845.x

**Type of production:** Scientific paper

**Position of signature:** 7

**Total no. authors:** 12

**Impact source:** ISI

**Impact index in year of publication:** 6.240

**Position of publication:** 27

**Source of citations:** WOS

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Microbiology

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 136

**Citations:** 124

- 43** María Alcaide; Enzo Messina; Michael Richter; Rafael Bargiela; Jörg Peplies; Sharon A. Huws; Charles J. Newbold; Peter N. Golyshin; Miguel A. Simón; Guillermo López; Michail M. Yakimov; Manuel Ferrer. Gene sets for utilization of primary and secondary nutrition supplies in the distal gut of endangered iberian lynx. *Plos one*. 7 - 12, pp. e51521. Public Library of Science, 01/12/2012.

**DOI:** 10.1371/journal.pone.0051521

**Type of production:** Scientific paper

**Position of signature:** 4

**Total no. authors:** 12

**Impact source:** ISI

**Impact index in year of publication:** 3.730

**Position of publication:** 27

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Corresponding author:** No

**Category:** Science Edition - MULTIDISCIPLINARY SCIENCES

**Journal in the top 25%:** No

**No. of journals in the cat.:** 71

- 44** Manuel Ferrer; Johannes Werner; Tatyana N. Chernikova; Rafael Bargiela; Lucía Fernández; Violetta La Cono; Jost Waldmann; Hanno Teeling; Olga V. Golyshina; Frank Olive Glöckner; Michail M. Yakimov; Peter Golyshin. Unveiling microbial life in the new deep-sea hypersaline Lake Thetis. Part II: a metagenomic study. *Environmental microbiology*. 14 - 1, pp. 268 - 281. Society for Applied Microbiology, 01/01/2012.

**DOI:** 10.1111/j.1462-2920.2011.02634.x

**Type of production:** Scientific paper

**Position of signature:** 4

**Total no. authors:** 12

**Impact source:** ISI

**Impact index in year of publication:** 5.756

**Position of publication:** 27

**Source of citations:** WOS

**Format:** Scientific and technical document or report

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Microbiology

**Journal in the top 25%:** Yes

**No. of journals in the cat.:** 136

**Citations:** 35

- 45** Patxi San Martín Uriz; Manuel J. Gómez; Aida Arcas; Rafael Bargiela; Ricardo Amils. Draft genome sequence of the electricigen *Acidiphilium* sp. strain PM (DSM 24941). *Journal of Bacteriology*. 193 - 9, pp. 5585 - 5586. American Society for Microbiology, 01/10/2011.

**Type of production:** Scientific paper

**Position of signature:** 4

**Total no. authors:** 5

**Impact source:** ISI

**Impact index in year of publication:** 3.326

**Position of publication:** 66

**Source of citations:** WOS

**Format:** Journal

**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

**Category:** Science Edition - MICROBIOLOGY

**Journal in the top 25%:** No

**No. of journals in the cat.:** 136

**Citations:** 15





- 46** Cristina Coscolín Galán; Rafael María Bargiela Bargiela; Mónica Martínez Martínez; Sandra Alonso; Alexander Bollinger; Stephan Thies; Tatyana N. Chernikova; Olga V. Golyshina; Karl-Erich Jaeger; Michail M. Yakimov; Peter N. Golyshin; Manuel Ferrer Martínez. Hydrocarbon-Degrading Microbes as Sources of New Biocatalysts. Taxonomy, Genomics and Ecophysiology of Hydrocarbon-Degrading Microbes. pp. 353 - 373. Springer, Cham, 01/11/2019. ISBN 978-3-030-14795-2  
**DOI:** [https://doi.org/10.1007/978-3-030-14796-9\\_13](https://doi.org/10.1007/978-3-030-14796-9_13)  
**Type of production:** Book chapter  
**Position of signature:** 2  
**Total no. authors:** 12  
**Format:** Book  
**Degree of contribution:** Author or co-author of chapter in book
- 47** Celia Méndez García; Rafel María Bargiela Bargiela; Mónica Martínez Martínez; Manuel Ferrer Martínez. Metagenomic Protocols and Strategies. Metagenomics. pp. 15 - 54. Academic Press, 2018.  
**Type of production:** Book chapter  
**Position of signature:** 2  
**Total no. authors:** 4  
**Format:** Book  
**Degree of contribution:** Author or co-author of chapter in book
- 48** Rafael Bargiela; Michail M Yakimov; Peter N Golyshin; Manuel Ferrer. Distribution of hydrocarbon degradation pathways in the sea. Handbook of Hydrocarbon and Lipid Microbiology. pp. 1 - 23. 2017.  
**Type of production:** Book chapter  
**Position of signature:** 1  
**Total no. authors:** 4  
**Format:** Scientific and technical document or report
- 49** Mónica Martínez Martínez; Rafael Bargiela; Cristina Coscolín; José Navarro Fernández; Peter N Golyshin; Manuel Ferrer. Functionalization and modification of hydrocarbon-like molecules guided by metagenomics: Enzymes most requested at the industrial scale for chemical synthesis as study cases. Handbook of Hydrocarbon and Lipid Microbiology. 2017.  
**Type of production:** Book chapter  
**Position of signature:** 2  
**Total no. authors:** 6  
**Format:** Scientific and technical document or report
- 50** 1; Mónica Martínez Martínez; Rafael Bargiela; Manuel Ferrer. Metagenomics and the search for industrial enzymes. Biotechnology of Microbial Enzymes. pp. 167 - 184. 2017.  
**Type of production:** Book chapter  
**Position of signature:** 2  
**Total no. authors:** 3  
**Format:** Scientific and technical document or report
- 51** Rafael Bargiela; Manuel Ferrer. Degradation network reconstruction guided by metagenomic data. Methods in molecular biology. 1539, pp. 145 - 157. 30/11/2016. ISSN 1064-3745  
**DOI:** [10.1007/978-1-4939-6691-2\\_9](https://doi.org/10.1007/978-1-4939-6691-2_9)  
**Type of production:** Book chapter  
**Position of signature:** 1  
**Total no. authors:** 2  
**Impact source:** ISI  
**Impact index in year of publication:** 1.658  
**Position of publication:** 80  
**Source of citations:** WOS  
**Degree of contribution:** Author or co-author of chapter in book  
**Category:** Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY  
**No. of journals in the cat.:** 156  
**Citations:** 4



## Works submitted to national or international conferences

- 1** **Title of the work:** Planktonic marine bacteria degrading high molecular weight aliphatic hydrocarbons  
**Name of the conference:** 2nd International meeting on New Strategies in Bioremediation Processes (BioRemid2019)  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Porto, Portugal  
**Date of event:** 24/10/2019  
**End date:** 25/10/2019  
**Organising entity:** Universidade do Porto  
Tatyana Chernikova; Rafael María Bargiela Bargiela; A. Lene; T. Regan; J. Ycheng; Evgenii Lunev; Peter N. Golyshin.
- 2** **Title of the work:** Filterable lotic microorganisms and their role in cycling dissolved organic carbon (DOC)  
**Name of the conference:** Microbiology Society's Annual Conference 2019  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Belfast, Northern Ireland, United Kingdom  
**Date of event:** 08/04/2019  
**End date:** 11/04/2019  
**Organising entity:** Microbiology Society  
Lydia-Ann Ghuneim; Rafael María Bargiela Bargiela; Tatyana Chernikova; Stephan V. Toshchakov; Manuel Ferrer Martínez; Olga V. Golyshina; Peter N. Golyshin; David L. Jones.
- 3** **Title of the work:** Creating an extensive catalogue of new biocatalysts through genome and metagenome mining  
**Name of the conference:** Primeras jornadas españolas de Biocatálisis  
**Type of event:** Conference **Geographical area:** National  
**Type of participation:** 'Participatory - poster  
**City of event:** Madrid, Community of Madrid, Spain  
**Date of event:** 02/07/2015  
**End date:** 03/07/2015  
**Organising entity:** SOCIEDAD ESPAÑOLA DE BIOTECNOLOGIA  
Rafael María Bargiela Bargiela; Mónica Martínez Martínez; María Alcaide; Mercedes Verónica Del Pozo; Manuel Ferrer Martínez.
- 4** **Title of the work:** Marine enzymes:re-directing biothech opporunities  
**Name of the conference:** BIOPROSP 2015 - 7th International conference in marine bioprospecting  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Tromso, Norway  
**Date of event:** 18/02/2015  
**End date:** 20/02/2015  
**Organising entity:** University of Tromso **Type of entity:** University  
María Alcaide; Mónica Martínez Martínez; Rafael María Bargiela Bargiela; Mercedes Verónica Del Pozo; Manuel Ferrer Martínez.

- 5** **Title of the work:** Functional enzyme diversity in a number of extreme and non-extreme environments  
**Name of the conference:** 10th International congress of extremophiles  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** San Petersburgo, Russia  
**Date of event:** 07/09/2014  
**End date:** 11/09/2014  
**Organising entity:** International society of extremophiles  
**Type of entity:** Associations and Groups  
Mercedes Verónica Del Pozo; Mónica Martínez Martínez; María Alcaide; Rafael María Bargiela Bargiela; Tatyana N. Chernikova; Peter N. Golyshin; Michail M. Yakimov; Francesca Mapelli; Daniele Daffonchio; Olga V. Golyshina; Manuel Ferrer Martínez.
- 6** **Title of the work:** Promiscuity and extremophily: expanding the pool of substrates available to extremophiles that mineralize aromatic pollutants  
**Name of the conference:** 10th International congress of extremophiles  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** San Petersburgo, Russia  
**Date of event:** 07/09/2014  
**End date:** 11/09/2014  
**Organising entity:** International society of extremophiles  
**Type of entity:** Associations and Groups  
María Alcaide; Jesús Tornés; Peter J. Stogios; Xiaohui Xu; Christoph Gertler; Rosa Di Leo; Rafael María Bargiela Bargiela; Álvaro Lafraya; Tatyana N. Chernikova; Olga V. Golyshina; Taras Y. Nechitaylo; Iris Plumeier; Dietmar H. Pieper; Michail M. Yakimov; Alexei Savchenko; Peter N. Golyshin; Manuel Ferrer.
- 7** **Title of the work:** The ULIXES, MAGICPAH and KILLSPILL Projects: methodology and initial computational results  
**Name of the conference:** MedRem - 2014 Microbial Resource Management for Polluted Marine environments and Bioremediation  
**Type of event:** Conference  
**Type of participation:** Participatory - oral communication  
**City of event:** Hammamet, Tunisia  
**Date of event:** 16/01/2014  
**End date:** 18/01/2014  
**Organising entity:** ULIXES consortium  
**Type of entity:** Associations and Groups  
Rafael María Bargiela Bargiela; Jesús Tornés; Mercedes Verónica Del Pozo; Mónica Martínez Martínez; Manuel Ferrer Martínez.
- 8** **Title of the work:** The ULIXES, MAGICPAH and KILLSPILL Projects: methodology and initial computational results  
**Name of the conference:** MedRem - 2014 Microbial Resource Management for Polluted Marine Environments and Bioremediation  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Hammamet, Tunisia  
**Date of event:** 16/01/2014  
**End date:** 18/01/2014  
**Organising entity:** ULIXES consortium  
**Type of entity:** Associations and Groups  
Rafael María Bargiela Bargiela; Jesus Tornés; Mercedes Verónica Del Pozo; Mónica Martínez Martínez; Manuel Ferrer Martínez.



- 9** **Title of the work:** Microbiota from the distal guts of lean and obese adolescents exhibit partial functional redundancy besides clear differences in community structure  
**Name of the conference:** Current Trends in Biomedicine - The Microbiome: Role in health and disease  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Baeza, Andalusia, Spain  
**Date of event:** 09/10/2012  
**End date:** 10/10/2012  
**Organising entity:** Universidad Internacional de Andalucía **Type of entity:** University  
Manuel Ferrer Martínez; Alicia Ruiz; Francesca Lanza; Sven-Bastiaan Haange; Andreas Oberbach; Holger Till; Rafael María Bargiela Bargiela; Cristina Campoy; María Teresa Segura; Michael Richter; Martin von Bergen; Jana Seifert; Antonio Suarez.
- 10** **Title of the work:** Functional diversity of microbial (meta-) genomes in the Iberian Peninsula  
**Name of the conference:** 9th International Congress of Extremophiles  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Seville, Andalusia, Spain  
**Date of event:** 10/09/2012  
**End date:** 13/09/2012  
**Organising entity:** International society of extremophiles **Type of entity:** Associations and Groups  
Mónica Martínez Martínez; María Alcaide; Mercedes Verónica Del Pozo; Rafael María Bargiela Bargiela; Iván Lores; Celia Méndez; Jesús Sánchez; Manuel Ferrer Martínez.
- 11** **Title of the work:** Unveiling microbial life and functional diversity in Mediterranean deep-sea hypersaline lakes  
**Name of the conference:** 9th International Congress of Extremophiles  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Sevilla, Andalusia, Spain  
**Date of event:** 10/09/2012  
**End date:** 13/09/2012  
**Organising entity:** International society of extremophiles **Type of entity:** Associations and Groups  
María Alcaide; Mercedes Verónica Del Pozo; Álvaro Lafraya; Rafael María Bargiela Bargiela; Jesús Tornés; Tatyana N. Chernikova; Violetta LaCono; Olga V. Golyshina; Michail M. Yakimov; Peter N. Golyshin; Manuel Ferrer Martínez.
- 12** **Title of the work:** Functional diversity in saline and hypersaline marine and freshwater environments  
**Name of the conference:** 14th International Symposium of Microbial Ecology  
**Type of event:** Conference  
**Type of participation:** 'Participatory - poster  
**City of event:** Copenhagen, Denmark, Denmark  
**Date of event:** 19/08/2012  
**End date:** 24/08/2012  
**Organising entity:** University of Copenhagen **Type of entity:** University  
Álvaro Lafraya; Mónica Martínez Martínez; María Alcaide; Rafael María Bargiela Bargiela; Tatyana N. Chernikova; Violetta LaCono; Olga V. Golyshina; Michail M. Yakimov; Peter N. Golyshin; Manuel Ferrer Martínez.



**13** **Title of the work:** Metaproteogenomics insights beyond bacterial response to naphthalene exposure and bio-stimulation

**Name of the conference:** 14th International Symposium of Microbial Ecology

**Type of event:** Conference

**Geographical area:** European Union

**Type of participation:** 'Participatory - poster

**City of event:** Copenhagen, Danmark, Denmark

**Date of event:** 19/08/2012

**End date:** 24/08/2012

**Organising entity:** University of Copenhagen

**Type of entity:** University

María Eugenia Guazzaroni; Florian-Alexander Herbst; Iván Lores; Javier Tamames; Ana Isabel Peláez; María Alcaide; Mercedes V. del Pozo; Martin von Bergen; José Luis R. Gallego; Rafael María Bargiela Bargiela; Dietmar H. Pieper; Ramón Rosselló Móra; Jesús Sánchez; Manuel Ferrer Martínez; Jana Seifert.