Vibrio2016 POSTER sessions

Poster Page

SESSION 1: ECOLOGY AND EVOLUTION

P1.1 57 ***Vibrio cidicii,* a novel *Vibrio* species closely related to *Vibrio navarrensis***

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P1.2 58 **Vibrios in shellfish hatcheries: friends & foes**

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P1.3 59 **Study of survival strategies of *Vibrio toranzoniae***

Aide Lasa[1], Mesrop Ayrapetyan[2], Britney Phippen[2], Tiffany Williams[2], Jesús Romalde[1], James Oliver[2]
1 : Universidad de Santiago de Compostela - USC (SPAIN)
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P1.4 60 **Vibrio barjae sp. nov., a new species of the *Mediterranei* clade isolated in a shellfish hatchery.**

Javier Dubert[1], Sabela Balboa[1], Maria Regueira[1], Adrián Gonzalez-Castillo[2], Bruno Gomez-Gil[2], Jesús Romalde[1*]
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P1.5 61 **Occurrence and diversity of *Vibrio parahaemolyticus, Vibrio vulnificus*, and *Vibrio cholerae* in the Biguglia Lagoon, Corsica, France**

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P1.6 62 **Detection and antimicrobial susceptibility of *Vibrio cholerae* non-O1/non-O139 in rivers of western France**

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P1.7 63 **Housekeeping gene targets and NGS to explore *Vibrio* spp. communities in coastal environments**

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P1.8 64 Identification of reservoirs for *Vibrio splendidus* in the Thau lagoon, France: a potential role for Ciliates as vectors favouring oyster infection.

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P1.9 65 Direct genotyping of low abundance *Vibrio cholerae* cells from a natural river sample by whole-genome enrichment and sequencing

Giovanni Tassistro 1, Chiara Grande 1 , Ingrid Brettar 2 , Manfred Hofle 2 , Pereira Rui2, Douglas W. Mushi2, Alberto Pallavicini3, Carla Pruzzo1, Luigi Vezzulli1*

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P1.10 66 Vibrio tapetis, the causative agent of Brown Ring Disease, forms biofilms with spherical components

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P1.11 67 Discovery of an environmental driver of *Vibrio* blooms in tropical marine waters

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P1.12 68 Detection and quantification of *Vibrio cholerae*, *Vibrio parahaemolyticus*, and *Vibrio vulnificus* in coastal waters of Guinea-Bissau (West Africa)

Ana Machado[1], Adriano Bordalo[1]

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P1.13 69 Multilocus Sequence Analysis: a powerful tool for the classification of *Vibrio splendidus* related strains. Implementation during mussel mortality events in France.

Elise Oden[1], Suzanne Trancart[1], Clémentine Le Bas[1], Erika Burioli[1], Maryline Houssin[1*]

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P1.14 70 Phagocytosis resistance against marine grazers by the facultative intracellular pathogen *Vibrio tasmaniensis* LGP32.

Aurore Poirier[1], Cécile Roques[2], Carmen Lopez-Joven[1], Tristan Rubio[1], Jean-Christophe Auguet[2], Julie Nicod[1], Thibaud Goult[1], Jean-Luc Rolland[1], Audrey Caro[2], Dephine Destoumieux-Garzon[1], Guillaume Charriere[1]

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P1.15 71 Presence of *Vibrio* species – New insights from the UK and France using whole genome sequencing

Kayleigh Taylor[1], Rebecca Girton[4], Craig Baker-Austin[1], Emmanuelle Quenot[2], Marie Paule Caprais[2], Dominique Hervio-Heath[2], Jaime Martinez-Urtaza[4] and Alain Rincé[3]

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P1.16 72 Implications of temperature fluctuations on rapid coadaptation between *Vibrio alginolyticus* and its temperate phages

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P1.17 73 Genetic Diversity of *Vibrio parahaemolyticus* Within Individual Oysters

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P1.18 74 Antimicrobial resistance of *Vibrio cholerae* non-O1/non-O139 isolates from the aquatic environment in Haiti during the cholera epidemic (July 2012)

Sandrine Baron[1, 2, *], Emeline Larvor[1, 2], Eric Jouy[1, 2], Isabelle Kempf[1, 2], Jean Lesne, Renaud Piarroux[3], Jacques Boncy[4]

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P1.19 75 Bioaccumulation experiments of *Vibrio parahaemolyticus* and *Vibrio cholerae* nonO1 nonO139 in mussels

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P1.20 76 Vibrio cholerae shows differential behavior along a Long Term Evolution Experiment (LTEE) according to the positioning of ribosomal protein genes.

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P1.21 77 A new method for investigating in vivo gene expression by *Vibrio vulnificus* in the Eastern oyster, *Crassostrea virginica*

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P1.22 78 In situ gene expression by the human pathogen, *Vibrio vulnificus,* exhibits distinct hypoxia driven profiles

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P1.23 79 High micro-diversity of *Vibrio cholerae* in the Central European lake Neusiedler See is associated with intensive genetic recombination in the reed habitat and the long-distance transfer of strains

Alexander Kirschner[1, 2,*], Carina Pretzer[1, 3], Carmen Amaro[4], Eva Benediktsdottir[5], Ingela Hedenström[6], Dominique Hervio-Heath[7], Steliana Huhulescu[8], Franciska Schets[9], Andreas Farnleitner[2, 3] , Irina Druzhinina[3]

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P1.24 80 Characterization of *Vibrio vulnificus* isolates from German coastal waters, a comparison of North Sea and Baltic Sea isolates

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P1.25 81 Vibrio vulnificus employs different defence mechanisms against protozoan grazing

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P1.26 82 Genomic analysis of the clade *Mediterranei* based on analysis of whole genome sequences.

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P1.27 83 Phylogenetic analyses of *Vibrio cholerae* Isolated from Environmental Sources in Brazil

Nadia Catalina Alfonso Vargas[1], Flávio Augusto Cardozo[1], Welington Luiz Araujo[1], Ana Clara Guerrini Schenberg[1]

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P1.28 84 Long-term assessment of *V. vulnificus* clinical and environmental genotype distributions in environmental samples from the North Carolina coast

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SESSION 2: EPIDEMIOLOGY

P2.1 86 Estimation of the transmission parameters of the bacteria *Vibrio aestuarianus* between Pacific oysters, *Crassostrea gigas,* using experimental infection data

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P2.2 87 Epidemiological investigation of a foodborne outbreak in Spain associated with U.S. West Coast genotypes of *Vibrio parahaemolyticus*

Andy Powell[1] et al.

1 : Cefas

P2.3 88 Trh (tdh-/trh+) gene analysis of clinical, environmental and food isolates of *Vibrio parahaemolyticus*

Francesca Leoni[1], Giulia Talevi[1], Laura Masini[1], Donatella Ottaviani[1], Elena Rocchegiani[1]

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P2.4 89 Comparative genomic analysis reveals heterogeneity in VSP-II genomic island of El Tor variant *Vibrio cholerae* in Kolkata, India

Daisuke Imamura[1], Masatomo Morita[2], Tsuyoshi Sekizuka[3], Tamaki Mizuno[4], Taichiro Takemura[5], Tetsu Yamashiro[5], Asish Mukhopadhyay[6], Thandavarayan Ramamurthy[6], Shin-Ichi Miyoshi[4], Makoto Kuroda[3], Makoto Ohnishi[2], Sumio Shinoda[1]

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P2.5 90 Capacity of *Vibrio parahaemolyticus* isolated from shrimps to form biofilm and proportion of viable but non-culturable (VBNC) bacteria

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P2.6 91 Induction and resuscitation of viable but non-culturable *Vibrio parahaemolyticus* in response to various stresses in shrimp

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SESSION 3: PATHOGENESIS AND HOST INTERACTION

P3.1 93 Preliminary studies on virulence mechanisms of *Vibrio tapetis*

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P3.2 94 Health indicators of oysters *Crassostrea gigas* when exposed to a polymicrobial disease

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P3.3 95 Susceptibility of vibrios pathogenic for humans and bivalves to killing by *Mytilus galloprovincialis* haemolymph: role of D-mannose sensitive interactions.

Chiara Grande[1], Elisabetta Pezzati[1], Giovanni Tassistro[1], Teresa Balbi[1], Stefano Gualdi[1], Laura Stagnaro[1], Laura Canesi[1], Luigi Vezzulli[1], Carla Pruzzo[1]

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P3.4 96 Temperate Phages of potentially pathogenic *Vibrio* species from North Sea

Alexa Garin-Fernandez[1, *], Inga Kirstein[1], Sidika Kirmizi[1], Gunnar Gerdts[1], Antje Wichels[1]

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P3.5 97 The survival mechanisms of *Vibrio cholerae* in the presence of predatory protists, an environment conducive to human pathogenesis

Allen, C. J. [1, 2], Mann, G. [3], McDougald, D. [2, 4], Labbate, M. [1, 2]

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P3.6 98 Vibrio alginolyticus and *Vibrio splendidus*: prophage identification in the genome sequences of fish pathogens

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P3.7 99 Assessing the virulence of environmental TDH-producing *Vibrio parahaemolyticus* using different models of infection

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P3.8 100 Uncovering the disease mechanisms of TDH-positive and/or TRH-positive *Vibrio parahaemolyticus* clinical isolates

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P3.9 101 Comparative genomic analysis and virulence differences between *Vibrio tapetis* strains isolated from molluscs and fishes suffering vibriosis

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P3.10 102 Clinical *Vibrio parahaemolticus* isolates from Canada are diverse and dissimilar in profile compared to *V. parahaemolyticus* isolates indigenous to Canadian estuaries.
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P3.11 103 Molecular characterization and virulence expression in an animal model of environmental *Vibrio parahaemolyticus.*
Solen Lozach [1], David Richard [1], Natacha Keomurdjian [1], Alain Rince [2], Dominique Hervio Heath 1, *
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P3.12 104 Vibrio nigripulchritudo alters the function of hemocytes in the Pacific Blue Shrimp, *Litopenaeus stylirostris*
Viviane Boulo [1], Leila Huyghues-Despointes [1], Héléna Bouyer [1], Dominique Ansquer [1] , Karl Huet [1] , Wabete Nelly [1]
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P3.13 105 ROS-inducible DPS is critical for *Vibrio cholerae* oxidative stress resistance during infection
Hui Wang [1],Xiaoyun Xia [1] Jun Zhu [1], *

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P3.14 106 A first approach to the study of NO and virulence in *Vibrio vulnificus*
Eva Sanjuán [1, 2] , Francisco Silva-Hernández [1, 2], Carmen Amaro [1, 2]

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P3.15 107 During the initiation of symbiosis, *Vibrio fischeri* OMVs deliver LPS and PGN, triggering specific host responses.
Marie-Stéphanie Aschtgen[1*], Edward Ruby[1,2]

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P3.16 108 Evaluation of resistance to *Vibrio aestuarianus* throughout three successive challenges using selected and unselected Crassostrea gigas for their higher resistance to OsHV-1 infection
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P3.17 109 Genetic parameters for OsHV-1 and Vibrio aestuarianus resistance in Crassostrea gigas: first results using controlled challenges

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P3.18 110 First evidence for a *Vibrio* strain pathogenic to *Mytilus edulis* altering hemocyte immune capacities

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P3.19 111 Importance of quorum sensing for inducing acute hepatopancreatic necrosis disease of shrimp in *Vibrio parahaemolyticus*

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P3.20 112 Experimental Cholera - A Review

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P3.21 113 Iron and Fur in the life cycle of the zoonotic pathogen Vibrio vulnificus

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P3.22 114 Host-Vibrio vulnificus interaction: role of RTXA1 in human sepsis

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SESSION 4: MOLECULAR MECHANISMS, GENOME PLASTICITY, COOPERATION

P4.1 116 Identification of a Flp pilus involved in initial surface attachment by *Vibrio vulnificus*

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P4.2 117 Exploring *Vibrio* and *Roseobacter* dialogues: chemical diversity of molecules involved in quorum-sensing

Didier Stien, Margot Doberva, Léa Girard, Julia Baudart, Raphaël Lami[1]*

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P4.3 118 Communication abilities of *Vibrio* species in a French mediterranean lagoon: a first ecological investigation

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P4.4 119 Iron regulation of the gene cluster encoding the piscibactin-like siderophore produced by *Vibrio ordalii*

Pamela Ruiz [1], Miguel Balado [2], Alicia E Toranzo [2], Juan L Barja [2], Manuel L Lemos [2], Rubén Avendaño-Herrera [1].

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P4.5 120 Comparative cell wall analysis of the *Vibrionaceae* family

Laura Alvarez [1], Keshav Kumar [1], Ilka Abreu [2], Thomas Moritz [2], Felipe Cava [1].

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P4.6 121 Study of a *Vibrio cholerae* determinant of proper morphology

Sara B Hernandez [1], Matthew Waldor [2], Felipe Cava [1].

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[2] : Howard Hughes Medical Institute, Brigham and Women's Hospital Division of Infectious Diseases and Department of Microbiology and Immunobiology. Harvard Medical School, Boston.

P4.7 122 The two-component regulatory system RstAB regulates expression of the *Photobacterium damselae subsp. damselae* major virulence factors Dly, Phobalysin and HlyAch

Mateus Terceti [1], Amable J Rivas [1], Carlos R. Osorio [1].

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P4.8 123 The vibriophage TLC activates the Xer machinery for its integration

Caroline Midonet [1], Bhabatosh Das [2], Evelyne Paly [1], François-Xavier Barre [1]

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P4.9 124 Transcriptome-based comparative analysis of clinical and environmental strains of the opportunistic human pathogen *Vibrio vulnificus*

Tiffany C. Williams [1,2], Elliot Blackman [3], Tyler Robbins [3], James D. Oliver [1], Cynthia Gibas [3].

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[2] : Duke University Marine Laboratory, Dept of Conservation and Marine Science (DUML)

[3] : University of North Carolina at Charlotte, Dept of Bioinformatics and Genomics (UNCC)

P4.10 125 CicA and PicA bridge the flagellar, chemotactic and c-di-GMP signaling pathways in *Vibrio vulnificus*

Tianyi Chen [1], Dan Chodur, Dean Rowe-Magnus.

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P4.11 126 The Cation Shield of *V. cholerae* & Existence of Homologous Pathways in Other Vibrio species: Biochemical Description of the AlmEFG Pathway Responsible for Differences in Antimicrobial Peptide Resistance in Pandemic *V. cholerae* Biotypes & Other Vibrio sp.

Jeremy Henderson[1], M. Stephen Trent[2*]

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2: The University of Georgia, Athens

P4.12 127 c-di-GMP independent binding of BrpT to target DNA sequences in regulating extracellular polysaccharide gene expression in *Vibrio vulnificus*

Daniel Chodur[1], Dean Rowe-Magnus[1]*

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P4.13 128 Leucine-Responsive Regulatory protein regulates multiple virulence determinants in *Vibrio vulnificus*

Lien-I Hor[1], Chao-Hui Weng[1], Wei-Ting Li[1]

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P4.14 129 Next generation sequencing as alternative for Amplified fragment length polymorphism for investigation of the population structure of clinical and environmental *Vibrio cholerae* isolates

Sonja Hirk[1], Steliana Huhulescu[1], Marion Blaschitz[1], Franz Allerberger[1], Peter Hufnagl[1], Sarah Lepuschitz[1], Werner Ruppitsch[1], Anna Stöger[1], Alexander Indra[1,2]

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2: Paracelsus Medical University, Institute for Laboratory Medicine, Division for Medical Microbiology, Salzburg

P4.15 130 Characterisation of competence regulator QstR in *Vibrio cholerae*

Milena Jaskólska[1], Melanie Blokesch[1]*

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P4.16 131 Composition and Mechanism of the DNA-uptake Pilus of *Vibrio cholerae*

David Adams[1], Melanie Blokesch[1]*

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P4.17 132 Analysis of the transcription and physiological impact of the *Vibrio vulnificus* chromosomal integron

Austin Becker[1*], Dean Rowe-Magnus[1*]

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P4.18 133 Induction of SOS response by antibiotics that do not target DNA in *Vibrio cholerae*

Veronica Negro[1*], Zeynep Baharoglu[1], Didier Mazel[1]

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P4.19 134 Identification of amino acids in the *Vibrio cholerae* FlaA flagellin responsible for flagellar synthesis and motility

Li Hua Yen[1], Mike Martinez[1], Karl E. Klose[1]

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P4.20 135 Coordinated replication of the 2 chromosomes of *Vibrio cholerae*

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