



# Vivaldi Project

## Data management plan

***Microbiome (bivalve)***

***Key words: Crassostrea gigas gigas, DNA, Bacterial diversity, vibriome***

## DATA MANAGEMENT PLAN

*Template sheet for each dataset*

<b>Partner name</b>	MI
<b>Data category</b>	Microbiome (bivalve)
<b>Concerned WP</b>	WP1 WP4 Choisissez un élément.
<b>Name of the VIVALDI referent(s)</b>	Microbiome: Alberto Pallavicini
<b>Reference of the dataset</b> <i>Please refer to the DMP table to find the appropriate reference.</i> <i>Ex: Genome-Patho/SubTaskN°/Pathogen/PartnerN°</i>	Microbiome-bivalve/SubTaskN°1.2.1/Oyster/PartnerN°8-11-13
	Microbiota and Pathobiota (vibriome) NGS analysis
<b>Description of the data</b>	16SrDNA sequence (Microbiota) and phylogenetic and virulence markers sequences ( <i>Pathobiota-Vibriome</i> )
<b>Type</b>	Sequences
<b>Period and frequency of data collection</b>	Samples has been collected the 5th July 2016 (20% mortalities), 3 <sup>rd</sup> October 2016 (end of mortalities), 10 <sup>th</sup> January 2017 (control)
<b>Geographical site of data collection (if applicable)</b>	Samples were collected in Dungarvan Bay.
<b>Description of the material from which the dataset is generated</b> <i>Information will be obtained from individuals, which can come from natural/hatchery population and/or from family produced in hatchery. Animals can be infected (naturally or experimentally). DNA</i>	Bacterial diversity and/or vibriome information will be obtained from the analysis of DNA extracted from <i>C gigas</i> collected in selected aquaculture sites and periods Contrasted (eg healthy and diseased) bivalve samples ( <i>Crassostrea gigas</i> ) were collected in different seasons before, during and after the occurrence of abnormal mortality episodes in Dungarvan Bay, Ireland. DNA from single animals was extracted from whole homogenate of the bivalve tissues using commercial kit with a protocol agreed by VIVALDI partner Samples were preliminary screened for the presence of Ostreid herpesvirus 1 (OshV-1) and <i>Vibrio aestuarianus</i> by real-Time PCR based methods (Webb et al, 2007; IFREMER, 2013)



<p><i>extraction can be done from the whole animal, tissue.</i></p>	
<p><b>Protocols</b> <i>Example: 16S ribosomal RNA gene sequencing by NGS</i> <b>Please refer to the DMP table* for more examples</b></p>	<p><i>16S ribosomal RNA (V4 region) gene sequencing by NGS (Microbiota)</i> <i>Target Enrichment next generation sequencing protocol for the analysis of the Bivalve Pathobiota (TEBP protocol) (Pathobiota-Vibriome)</i></p>
<p><b>Nature of the collected/generated data</b> <i>Example: Raw dataset in .blc/.fastqc/.fasta formats for genomic information, and processed data set will be .vcf/.bed formats.</i> <b>Please refer to the DMP table* for more examples</b></p>	<p><i>Raw dataset in .fastqc format</i></p>
<p><b>Coverage (if applicable)</b> <i>Example: random genomic regions covered at 50 X</i> <b>Please refer to the DMP table* for more examples</b></p>	<p><i>N/A</i></p>
<p><b>What are the prerequisites allowing to use the data as such?</b> <i>Example: Any person able to use .fastqc file and .fasta file</i> <b>Please refer to the DMP table* for more examples</b></p>	<p><i>Any person able to use .fastqc file</i></p>
<p><b>Sharing of main data</b></p>	<p>Saved and shared after publication</p>
	<p><i>Please specify</i></p>
<p><b>Archiving and preservation</b> <i>Example: data will be stored on a hard drive</i></p>	<p><i>Hard drive and cloud service. We maintain at least 2 copies of the files in different locations (Trieste and Genova).</i></p>

<p>+ online back up and then will be released on public database (Sinoe, Dryad) after publication.  <b>Please refer to the DMP table* for more examples</b></p>																																																																	
<p><b>List, description and storage of associated data (metadata)</b>  <i>Examples:          environmental data,          mortality monitoring,          genotyping...</i></p>	<p>Samples provided by MI,          DNA extracted and amplicons libraries produced by UNIGE          DNA sequencing performed by UNITS</p> <table border="1" data-bbox="501 667 1596 882"> <thead> <tr> <th>Date</th> <th>Code</th> <th>C. gigas (age)</th> <th>Mortality (%)</th> <th>OshV-1 (PCR results)</th> <th>V. aestuarianus (PCR results)</th> <th>Microbiome analysis (analysed samples)</th> <th>Vibriome analysis (analysed samples)</th> </tr> </thead> <tbody> <tr> <td colspan="8"><b>Dungarvan Bay (Ireland)</b></td> </tr> <tr> <td>05_07_2016</td> <td>MI-2016-001 (Adult)</td> <td>adult</td> <td>20%</td> <td>0+/30</td> <td>2+/30</td> <td></td> <td></td> </tr> <tr> <td>05_07_2016</td> <td>MI-2016-001 (Spat)</td> <td>spat</td> <td>70-100%</td> <td>25+/30</td> <td>3+/30</td> <td>5 OshV infect-5 controls</td> <td>1 OshV infected-1 control</td> </tr> <tr> <td>03_10_2016</td> <td>MI-2016-002 (Adult)</td> <td>adult</td> <td>end of mortality</td> <td>0+/30</td> <td>11+/30</td> <td>5 Va infect-5 controls</td> <td></td> </tr> <tr> <td>03_10_2016</td> <td>MI-2016-002 (Spat)</td> <td>spat</td> <td>end of mortality</td> <td>12+/30</td> <td>1+/30</td> <td>5 OshV infect-5 controls</td> <td></td> </tr> <tr> <td>10_01_2017</td> <td>MI-2017-001 (Adult)</td> <td>adult</td> <td>no mortality</td> <td>0+/30</td> <td>0+/30</td> <td>5 controls</td> <td></td> </tr> <tr> <td>10_01_2017</td> <td>MI-2017-001 (Spat)</td> <td>spat</td> <td>no mortality</td> <td>0+/30</td> <td>0+/30</td> <td>5 controls</td> <td></td> </tr> </tbody> </table>	Date	Code	C. gigas (age)	Mortality (%)	OshV-1 (PCR results)	V. aestuarianus (PCR results)	Microbiome analysis (analysed samples)	Vibriome analysis (analysed samples)	<b>Dungarvan Bay (Ireland)</b>								05_07_2016	MI-2016-001 (Adult)	adult	20%	0+/30	2+/30			05_07_2016	MI-2016-001 (Spat)	spat	70-100%	25+/30	3+/30	5 OshV infect-5 controls	1 OshV infected-1 control	03_10_2016	MI-2016-002 (Adult)	adult	end of mortality	0+/30	11+/30	5 Va infect-5 controls		03_10_2016	MI-2016-002 (Spat)	spat	end of mortality	12+/30	1+/30	5 OshV infect-5 controls		10_01_2017	MI-2017-001 (Adult)	adult	no mortality	0+/30	0+/30	5 controls		10_01_2017	MI-2017-001 (Spat)	spat	no mortality	0+/30	0+/30	5 controls	
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\*To access the [DMP table](#), please login on the VIVALDI online platform

Once completed, this sheet has to:

1. Be sent to the referent(s) identified above for a final check
2. Be uploaded on the [VIVALDI online platform](#)

