# Workshop on "Next Generation Sequencing Technologies & Informatics tools for studying Marine Biodiversity & Adaptation"

1 – 3 October 2012

## Institute of Marine Biology and Genetics Hellenic Centre for Marine Research (HCMR), Crete, Greece

#### Monday 1 October 2012

Chairperson: Hooman Moghadam

9:00 -9:30	Welcome & Introduction
	Antonios Magoulas & Georgios Kotoulas, Hellenic Centre for Marine Research,
	Greece
9.30 –10.15	Next-Generation Marine Biodiversity and Adaptation - an Overview
	Karim Gharbi, "GenePool" high-throughput sequencing hub, University of
	Edinburgh, UK
10.15 -11.00	Genotyping-by-Sequencing Techniques and their Application to the Study of
	Biodiversity and Adaptation
	Karim Gharbi, "GenePool" high-throughput sequencing hub, University of
	Edinburgh, UK
11:00-11:30	Coffee break
11:30-13:00	A suite of new tools for large-scale analysis of next-generation sequencing data
	Alexis Stamatakis, Heidelberg Institute for Theoretical Studies, Germany
13:00-14:30	Lunch break
Chairperson: A	Antonios Magoulas
14.30-15.30	Computational methods for learning from (meta-)genomes
	Alice McHardy, Heinrich-Heine University, Dusseldorf, Germany
15:30-16:30	Systems Genetics: a systems biology approach to understand how genetic variation
	impacts phenotypic diversity
	Emmanouil (Manolis) Dermitzakis, School of Medicine, University of Geneva
16:30-17:00	Coffee break
17:00-18:00	Large scale approaches to genome diversity and function
	Emmanouil (Manolis) Dermitzakis, School of Medicine, University of Geneva

### Tuesday 2 October 2012

### Chairperson: Panagiotis Kasapidis

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9:00 -10:30	DNA MetaBarcoding
	Pierre Taberlet, Laboratoire d'Ecologie Alpine, CNRS, France
10:30 -11:00	Coffee break
11:00-12:30	DNA Metabarcoding: too much data for a spreadsheet
	Eric Coissac, Laboratoire d'Ecologie Alpine, CNRS, France
12:30-13:30	The Tara Oceans expedition
	Chris Bowler, Ecole Normale Supérieure, Paris
13:30-15:00	Lunch break
Chairperson: Karim Gharbi	
15:00-16:00	Examining the genetic basis of adaptive divergence in African cichlids
	Kevin Parsons, Institute of Biodiversity Animal Health and Comparative Medicine,
	University of Glasgow. UK
16:00-16:30	Coffee break
16:30-17:30	Application of next generation sequencing methodologies in economic important fish
	species
	Elena Sarropoulou, Hellenic Centre for Marine Research, Greece
17:30-18:30	Sex specific selection & convergent evolution of gene expression
	Hooman Moghadam, Hellenic Centre for Marine Research, Greece
20:00–23:00	Workshop dinner

### Wednesday 3 October 2012

### Chairperson: Georgios Kotoulas

9:00 -10:00	Genomic approaches to understanding host-virus interactions in the marine system  Declan Schroeder, Marine Biological Association, Plymuth, UK
10:00-11:00	Inferring genotype-phenotype relationships in the evolution of RNA viruses Alice McHardy, Heinrich-Heine University, Dusseldorf, Germany
11:00 -11:30	Coffee break
11:30-12:30	More genome prefixes: pan- and paleo- genomes Christos Ouzounis, Centre for Research and Technology Hellas (CERTH), Greece
12:30-13:30	Diatome Genomics Chris Bowler, Ecole Normale Supérieure, Paris
13:30-15:00	Lunch break
Chairperson: Alice McHardy	
15:00-16:00	Environmental and Evolutionary Genomics of Microbial Algae. Power and Challenges of Metagenomics  Gwenael Piganeau, Observatoire Oceanologique de Banyuls sur mer, France
16:00-17:00	Genomic Insights Into the Biology of the Smalllest photosynthetic Eukaryote,  Ostreococcus tauri  Gwenael Piganeau, Observatoire Oceanologique de Banyuls sur mer, France
17:00-17:30	Coffee break
17:30-18:30	Round Table / Conclusions