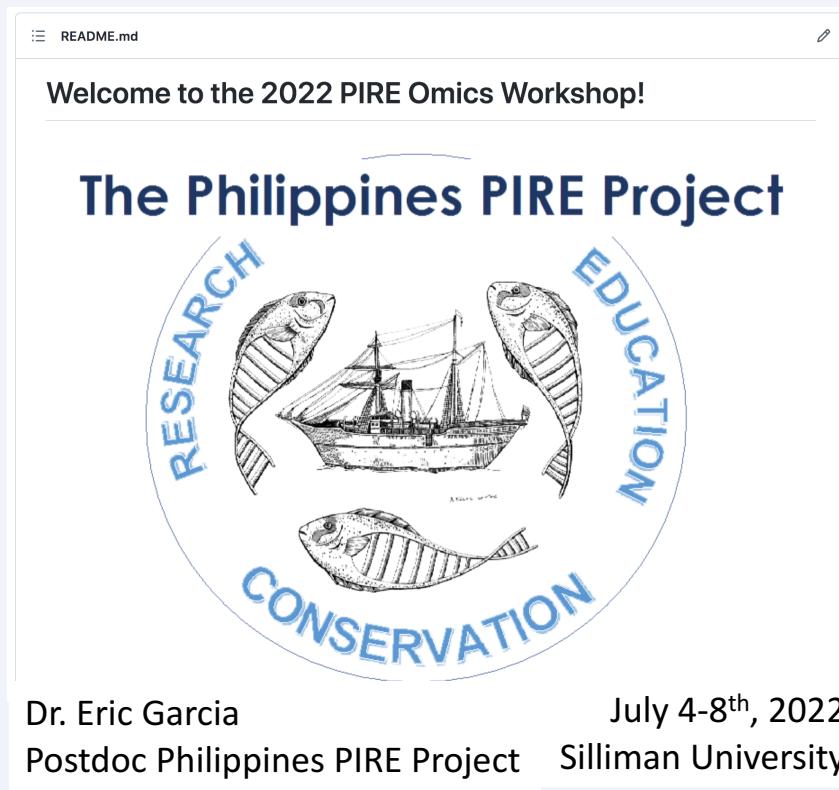


2022 Omic's Workshop

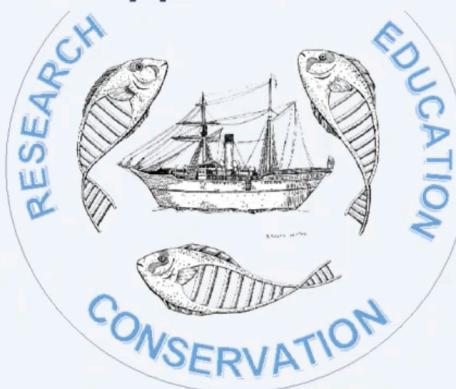
CLOSING REMARKS



Partnerships for International Research & Education: Centennial Genetic and Species Transformations in the Epicenter of Marine Biodiversity



The Philippines PIRE Project



2022 Omic's Workshop

GOALS

- ❑ To have all participants being able to process their own genomic data using the PPP Pipeline to estimate population history of species and analyze population genomic patterns across time and space
- ❑ To facilitate international collaboration

First impressions of Pipeline???

☰ README.md

SHOTGUN DATA PROCESSING & ANALYSIS

The purpose of this repo is to document the processing and analysis of [Shotgun Sequencing Libraries – SSL](#) data for probe development which then will be processed according to the [Capture Shotgun Sequencing Libraries- CSSL repo](#). Both SSL and CSSL pipelines use scripts from the [Pre-Processing PIRE Data](#) repo at the beginning of files processing.

Each species will get it's own directory within this repo. Try to avoing putting dirs inside dirs inside dirs.

The Sgr dir will serve as the example to follow in terms of both directory structure and documentation of progress in `README.md`.

If this is your first time working on wahab/turing or want to check out some tips see the [Working on ODU's HPC repo](#)

Contact Dr. Eric Garcia for questions or if you are having issues running scripts (e1garcia@odu.edu)

Use Git/GitHub to Track Progress

To process a species, begin by cloning this repo to your working dir. I recommend setting up a `shotgun_PIRE` sub-dir in your home dir if you have not done something similar already

Example: `/home/youruserID/shotgun_PIRE/`

Clone this repo

```
cd ~      # this will take you to your home dir
cd shotgun_PIRE
git clone https://github.com/philippinespire/pire_ssl_data_processing.git
```

This data will be processed and analyzed in the code. There is no guarantee that data will be accurate or useful.

2022 Omic's Workshop July 4th-8th, 2022

Silliman University - Dumaguete

SHOTGUN DATA PROCESSING & ANALYSIS

The purpose of this repository is for probe development and analysis. Both SSL and CSS processing.

Each species will get its own directory. The Sgr dir will serve as a template for the other species.

If this is your first time using R, contact Dr. Eric Garcia.

Use Git/GitHub

To process a species, clone it in your home dir if you want to contribute. Example: `/home/yourusername/shotgun_PIRE`

```
cd ~
cd shotgun_PIRE
git clone https://github.com/ericgarcia/shotgun_PIRE.git
```

The data will be processed by git. It includes ignore files. If you want to contribute, ignore this repo. For example, you need to have a file named `.gitignore` in the root directory.

Because large data files reside on the HPC. You should not upload them to GitHub. Most of these files don't ultimately need to be included in the repository.

A list of ongoing CSS projects can be found at [this link](#).

CAPTURE SHOTGUN DATA PROCESSING & ANALYSIS

The purpose of this repository is to capture shotgun data processing and analysis. For now, each species directory (all steps) & TODO list will be structured and documented in this format as close to the original as possible.

Use Git/GitHub

To process a species, clone it in your home dir if you want to contribute. Example: `/home/yourusername/shotgun_PIRE`

```
cd ~
cd shotgun_PIRE
git clone https://github.com/ericgarcia/shotgun_PIRE.git
```

The data will be processed by git. It includes ignore files. If you want to contribute, ignore this repo. For example, you need to have a file named `.gitignore` in the root directory.

Because large data files reside on the HPC. You should not upload them to GitHub. Most of these files don't ultimately need to be included in the repository.

A list of ongoing CSS projects can be found at [this link](#).

RStudio Environment

Console

```
activity_answers_part1.R workshop_examples_part2.R davis_na fastqc_tbl
```

Data

- davis: 200 obs. of 7 variables
- davis_no: 181 obs. of 7 variables
- fastqc_tbl: 95 obs. of 5 variables

Plots

ADMIXTURE plot

Plots

System Library

Name	Description	Version
abind	Combine Multidimensional Arrays	1.4-5
afex	Analysis of Factorial Experiments	1.0-1
askpass	Safe Password Entry for R, Git, and SSH	1.1
assertthat	Easy Pre and Post Assertions	0.2.1
backports	Reimplementations of Functions Introduced Since R-3.0.0	1.4.1
base	The R Base Package	4.1.2
base64enc	Tools for base64 Encoding	0.1-3
bayestestR	Understand and Describe Bayesian Models and Posterior Distributions	0.11.5
beeswarm	The Bee Swarm Plot, an Alternative to Stripchart	0.4.0
bit	Class and Methods for Fast Memory-Efficient Boolean Selections	4.0.4
bit64	A S3 Class for Vectors of 64bit Integers	4.0.5
blob	A Vector or S3 Class for Representing Vectors of Binary Data (BLOBS)	1.2.2
boot	Bootstrap Functions (Originally by Brian Ripley)	1.3-28

All resources available in README

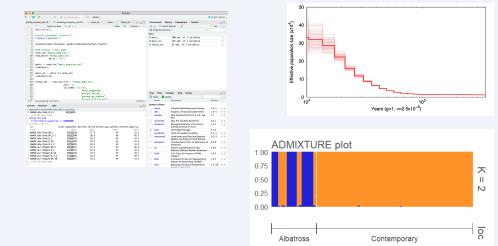
README



Lecture
videos



Exercises



Contact info

List of Instructors				
Position	Name	Institution	Contact	
Professor	Kent Carpenter	ODU	cbird@odu.edu	
Professor	Chris Bird	TAMUCC	kcarpenter@odu.edu	
Postdoc	Eric Garcia	ODU	e1garcia@odu.edu	
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REU/Post-Bac	Jordan Rodriguez	TAMUCC	jrodriguez216@islander.tamucc.edu	

pictures

2022 Omic's Workshop

GOALS



- To have all participants being able to process their own genomic data using the PPP Pipeline to estimate population history of species and analyze population genomic patterns across time and space
- To facilitate international collaboration

2022 Omic's Workshop

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- ✓ To have all participants being able to process their own genomic data using the PPP Pipeline to estimate population history of species and analyze population genomic patterns across time and space
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Shout outs!

Silliman University



Mariano & Lina Lao Hall

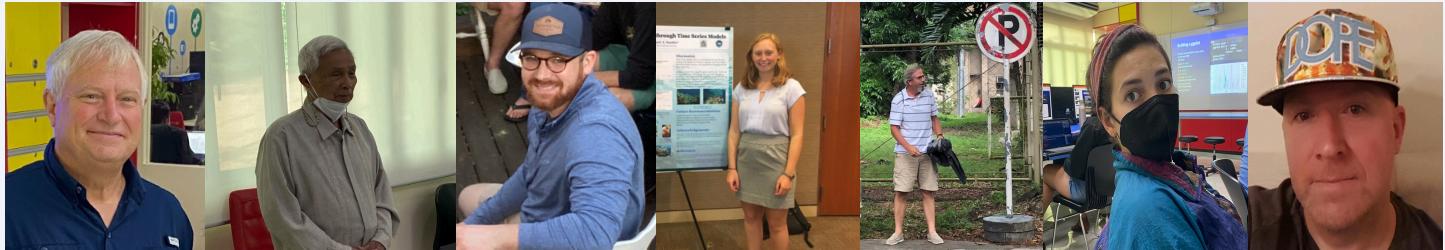
- Steve Binarao
- Gie Lopez
- Ms. Dolor

Shout outs!

Instructors

Shout outs!

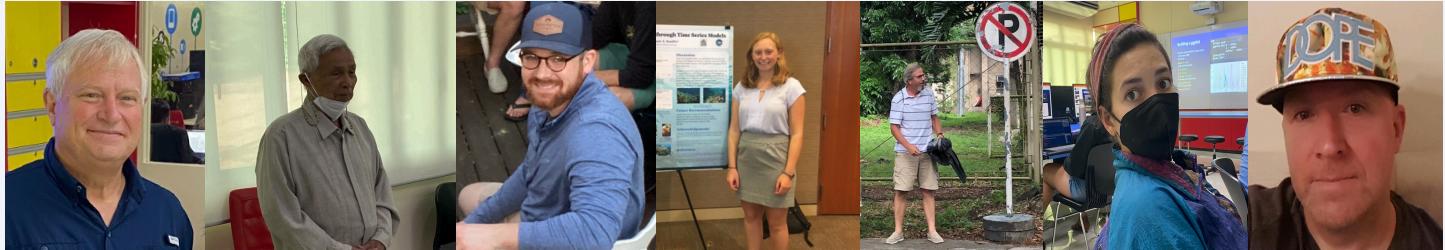
Instructors Lectures



2018-19 Omics - I. Lopez, A. Ackiss, W. Larson

Shout outs!

Instructors
Lectures



Lectures &
Exercises

Shout outs!

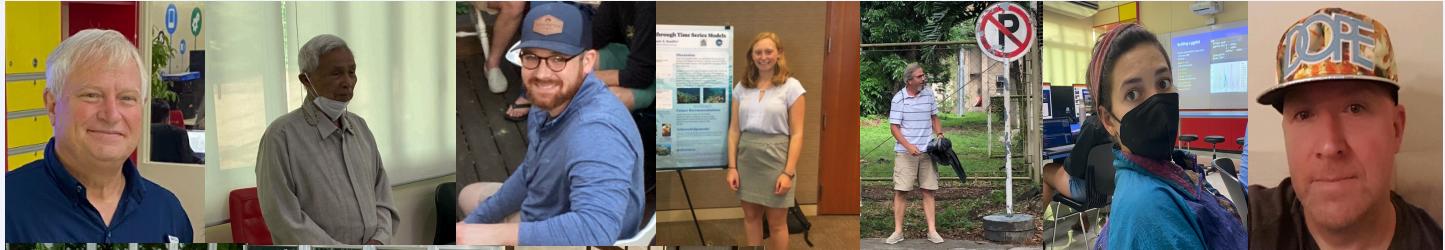
Instructors
Lectures

Lectures &
Exercises



Shout outs!

Instructors
Lectures



Lectures &
Exercises



Participants

YOU!



The Philippines PIRE Project

