



H3ABioNet

Pan African Bioinformatics Network for H3Africa

**16S rRNA Microbiome Intermediate Bioinformatics Course:
Int_BT_2019**

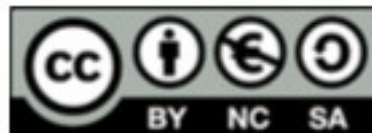
Wrap Up Session

Part 1 - Introduction



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Pan African Bioinformatics Network for H3Africa



16S rRNA Intermediate Bioinformatics Course: Int_BT
Verena Ras

It's only the Beginning...

Aims:

- Reflect on the INT_BT course
- Identify and determine how to continue utilizing the INT_BT support structures (within and across classrooms)
- Provide information regarding H3ABioNet and local bioinformatics support, as well as where to find this information.

Learning Outcomes

- reflect on the INT_BT course and provide anonymous feedback
- reflect on one's confidence to perform particular bioinformatics actions
- be able to explain what H3ABioNet is and what tools and services are available
- be able to name the H3ABioNet node ambassador for one's institution, and will know his/her role
- know the bioinformatics activities and resources available at one's local institution
- have access to a list of ways in which they can continue to utilize the INT_BT support structures after the INT_BT course.

Logistics for today's session

- follow the workshop day plan - prompts to play pre-recorded lecture videos
- Day plan available on vula
- Videos will contain instructions for each activity
- Stop the videos and complete the activity when prompted

Questions:

- Any questions? Vula forums

Next

Watch video labeled:
Part 2



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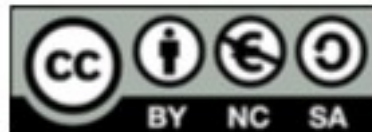
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Part 2 – The Good, the Funny, and the Frustrating



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The Good, the Funny, and the Frustrating

Activity 1 (10-15 minutes)

1. Divide into small groups of 3-4 people (at least one staff member per group, if possible)
2. Each person to describe:
 - Memory of a moment when they felt good in the INT_BT course
 - Memory of something funny that happened during the INT_BT course
 - Memory of when they felt frustrated by something in the INT_BT course and how they managed to overcome that frustration

Next

Only once you have completed
activity 1,
watch video labeled:
Part 3



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Wrap Up Session

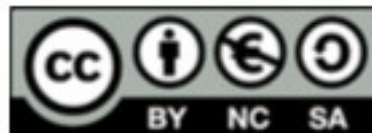
Part 3 – INT_BT

Highlights



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Introduction to Bioinformatics online course : IBT
Verena Ras

INT_BT Highlights

Activity 2 (15 minutes) -activity for the entire classroom, together

1. Move chairs into a circle
2. Select a scribe
3. Brainstorm your classroom's INT_BT highlights
4. Scribe to write down all suggestions (where everyone can see them)
5. Select top 2-4 highlights (by voting)
6. Each classroom should then post the top 2-4 on the Vula forums as a reply to their 'meet the classrooms' post. Begin the post with

“Our highlights of INT_BT this year were

1. ..., 2. ..., etc.”

Next

Only once you have completed activity 2, and have uploaded your answer to the Vula forums:

watch video labeled:

Part 4



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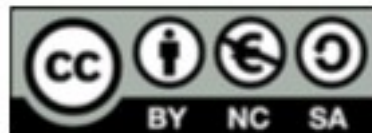
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Part 4 – Self reflection: “How confident are you?”



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'On a scale from 1 to 5...'

Activity 3 (10 minutes):

1. Navigate to INT_BT Vula site -> Feedback -> Take 2 – 'How confident are you to...'
2. Fill out the form
3. Take time to reflect on your what your answers were to these questions at the beginning of the course.

Has your confidence changed?

Next

Only once you have completed
activity 3:

watch video labeled:
Part 5



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Wrap Up Session

Part 5 – H3ABioNet overview



H3ABioNet

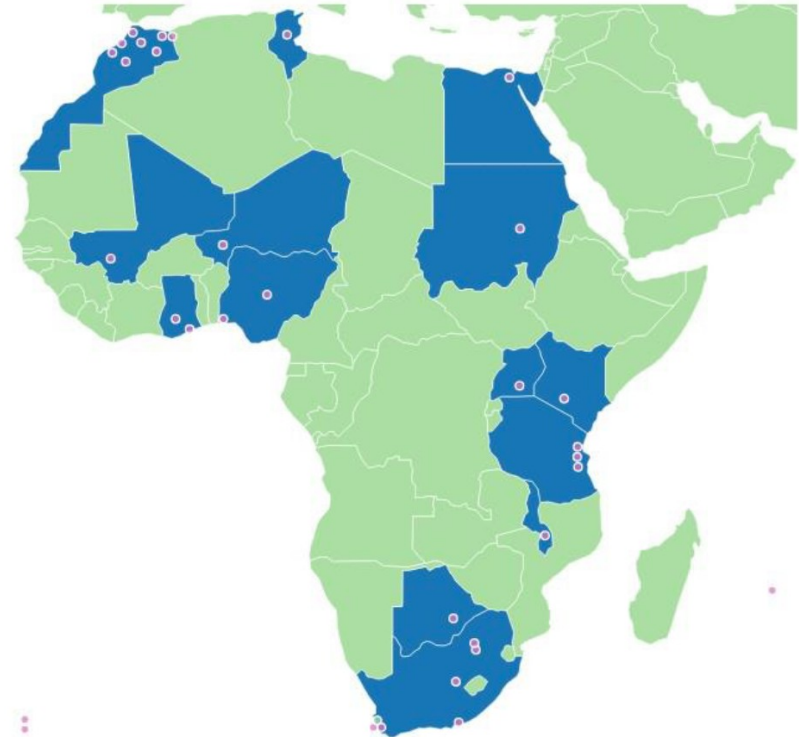
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H3ABioNet

- A sustainable African Bioinformatics Network
- Provide bioinformatics infrastructure and support for the H3Africa consortium
- Consists of nodes with different levels of bioinformatics expertise
- 28 nodes in 16 countries



What has H3ABioNet done?

- Infrastructure and capacity development
 - Servers and eBioKits
 - Connectivity between nodes, internet connectivity
 - Bioinformatics help desk
http://www.h3abionet.org/support?view=detail&_cid=-1
 - Data transfer between nodes
 - Data storage
 - Training in IT, data management
 - Tool and resource development

What has H3ABioNet done?

- Main focus areas of data analysis:
 - Targeted sequencing
 - Pathogen sequencing
 - Microbiome 16s rRNA sequencing
 - Exome sequencing
 - Whole genome sequencing
 - Genotyping arrays

Data Analysis Pipelines

- Docker containers built for main H3Africa data analysis pipelines – paper in progress
- Associated SOPs developed together with practice datasets -
<http://www.h3abionet.org/tools-and-resources/sops>

Data Analysis Pipelines

- SOPs and practice datasets available for:
 - NGS variant calling
 - Genome association studies
 - 16s rRNA diversity analysis
- Further SOPs under development
 - RNA seq
 - Variant annotation and prioritisation
- Guidelines on server setup and general system administration

H3ABioNet Helpdesk

H3ABioNet provides access to experts from a variety of [domains](#) to help answer any bioinformatics related questions and provide support to various H3Africa and non H3Africa projects that might be struggling with the analysis and planning of their experiments. The H3ABioNet helpdesk system accepts requests from the H3ABioNet web portal registered and non-registered users and can be accessed from [here](#).

H3ABioNet Helpdesk

Helpdesk

New Ticket



Contact Information

User Name: *

E-Mail: *

Department: *

Location:

Phone:

Classification

Category: Select Category

Status: Analysis - Genotyping arrays

Priority: Analysis - NGS data

Assigned To: Analysis - Other

Time Spent: Biostatistics

Data Management (storage, etc)

General Project Administration

JMS

NetCapDB

Netmap installation

Other

Software Development / Programming

Software license request

Technical / System Administration

Website / Mailing List

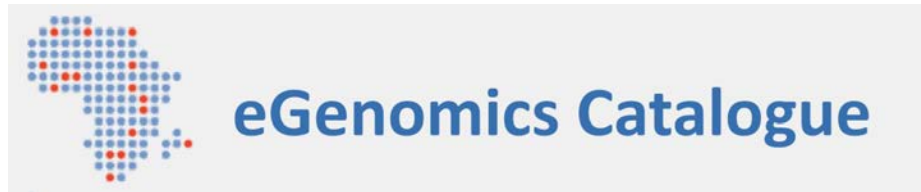
Ticket Information

Title:

Description

Training

- Hosted several workshops on a range of bioinformatics topics
- List of workshops available here:
<http://www.h3abionet.org/training-and-education/h3abionet-courses>
- In the process of updating and organising this resource
- Linking to eGenomics catalogue

 eGenomics Catalogue

Menu

- [Home](#)
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- ▶ [Add New Listing](#)
- ▶ [Recent Listing](#)
- ▶ [Recent Reviews](#)

Content

[eGenomics](#)

Most Popular

1. [Advances in Bioinformatics](#)

Category: Journals

★★★★★ 0.0

★★★★★ 3.7 (1)

2. [MetaPhlAn2](#)

Category: Software

★★★★★ 0.0

★★★★★ 0.0 (0)

3. [Open-access journal - International Scholarly Research Notices \(ISRN\) Bioinformatics](#)

Category: Journals

★★★★★ 0.0

★★★★★ 0.0 (0)

What is the eGenomics Catalogue?

The eGenomics catalogue was initiated by H3ABioNet and is maintained by volunteers from across the globe, in particular H3Africa Fellows. This catalogue maintains free online Genomics educational material and community based reviews/evaluations. The material aggregated via this web-site includes: Books; Journals, Courses, MOOCs, Opencourseware Databases. The material is categorized based on topics proposed by the H3Africa Education and Coordinated Training Working Group, in addition the EDAM ontology has been used to categorize Bioinformatics relevant courses.

SELECT A CATEGORY



Journals



Books



Lecture/Webinar



MOOC



Software



Databases

Authors:

Keywords:

[Journals](#) [Books](#) [Lecture/Webinar](#) [MOOC](#) [Software](#) [Databases](#) [Advanced Search](#) [FAQ](#) [Sign In / Up](#)

Other projects

- Design of a new African genotyping array
- Development of a participant recruitment database
- Development of an H3Africa data archive
- H3ABioNet seminar series and journal club
- Workshop proposals and internships
- <http://www.h3abionet.org/>

Acknowledgements

- H3ABioNet is funded through NIH Common Fund, NHGRI grant: U41HG006941

Next

watch video labeled:
Part 6



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Wrap Up Session

Part 6 – What’s happening at your institution?



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Bioinformatics at your Institution

- Bioinformatics expertise
- Bioinformatics Software and Computational resources
- Bioinformatics Activities
- Where to find support and further information
- What and who the Node Ambassador

Bioinformatics at your Institution

Activity 4 (30-40 mins)

Part 1:

- Staff presentation
- Meet the Node Ambassador

Part 2:

- Q&A session

Part 3:

- Summarize the main points of the presentation and add them to the Vula forums as a reply to your classrooms 'meet the classroom' post

Next

Once you have completed
activity 4:
watch video labeled:
Part 7



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Wrap Up Session

**Part 7 – Brainstorming how to stay
in touch – in Adobe**



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Discussion in Adobe

For discussion:

- What support structures exist within INT_BT classrooms?
- What support structures exist between INT_BT classrooms?
- For each support structure, how can we continue to utilize it post INT_BT?

Vula forums -> Wrap up Session

Next

Watch video labeled:
Part 8



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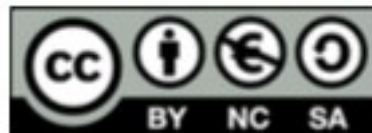
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Wrap Up Session Part 8 – Feedback



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Tell us what you thought of INT_BT

Activity

Feedback forms

- Participants and staff – tell us what you thought of INT_BT, overall

INT_BT Vula site -> Feedback -> **INT_BT course overview**

- A reminder about the informed consent form

INT_BT Vula site -> Feedback ->

INT_BT informed consent

Next

Once you have completed the
activity:

watch video labeled:

Part 9



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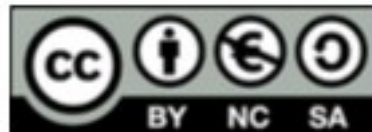
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Wrap Up Session Part 9 – Thank You!



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Thank you, All

- On behalf of the IBT core team – Shaun Aron, Verena Ras, Gerrit Botha, Suresh Maslamoney, Sumir Panji, Nicola Mulder - we thank you....
- Local staff
- Expert trainers
- consultants
- Vula and Adobe teams
- participants

See You Soon!