Smithsonian FIMS and Geneious LIMS Training

Session 3 - July 19, 2016

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Session 3 Outline

- Revisit generating PCR plates, primers, thermocycling protocols

- Uploading and scoring gel images

- Generating cycle sequencing plates

- Attaching raw traces to plates (including sequence naming convention)

- Downloading traces to local

http://sibarcodenetwork.readthedocs.io/en/latest/

SI Barcode Network documentation page on:

Generating PCR plates

http://sibarcodenetwork.readthedocs.io/en/latest/pcr_plates.html

Exercise 1:Creating PCR plate

Import the folder(s) of primers provided on github

Create two primers (one forward, one reverse)

Create a PCR plate (Remember: from your existing Extraction Plate)

Choose your PCR conditions

Once saved, search for your plate

Exercise 2: Uploading and Scoring gel

Find your PCR plate

Upload the gel image to your PCR plate

Assign the correct wells numbers

Automatically score the plate

Toggle display options so you can see the gel and color code the wells

SI Barcode Network documentation page on:

Generating cycle sequencing plates

http://sibarcodenetwork.readthedocs.io/en/latest/cyclesequencing_plates.html

Includes information on attaching raw traces to the cycle sequencing plate

Exercise 3: Generate cycle sequencing plates

Find your PCR plate

Generate both a forward and reverse cycle sequencing plate

SI Barcode Network documentation page on:

Downloading traces from LIMS http://sibarcodenetwork.readthedocs.io/en/latest/downloading_traces.html

Exercise 4: Attaching and downloading traces

1. Find your cycle sequencing plates

2. Attach the raw traces to the relevant cycle sequencing plates

3. Once complete, check that traces have attached correctly to each plate

4. Download the traces from both the forward and the reverse cycle sequencing plates to a folder on your local