🌐 BSCI:414--Lab 4 Plate Setup for COVID RT-qPCR

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Sep 25, 2020

In Development   This protocol is published without a DOI.

USG Fall 2020 BSCI:414

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ABSTRACT

The purpose of this experiment is to show where saliva samples and positive and negative controls will be placed on a 96-well plate by an OpenTrons robot.

PROTOCOL CITATION

Harley King 2020. BSCI:414--Lab 4 Plate Setup for COVID RT-qPCR. **protocols.io**
https://protocols.io/view/bsci-414-lab-4-plate-setup-for-covid-rt-qpcr-bmqyk5xw

CREATED

Sep 25, 2020

LAST MODIFIED

Sep 25, 2020

PROTOCOL INTEGER ID

42488

Discuss Sample Types

1   Review SalivaDirect for sample processing protocol: https://www.protocols.io/view/salivadirect-rna-extraction-free-sars-cov-2-diagno-bkjgkujw?step=11

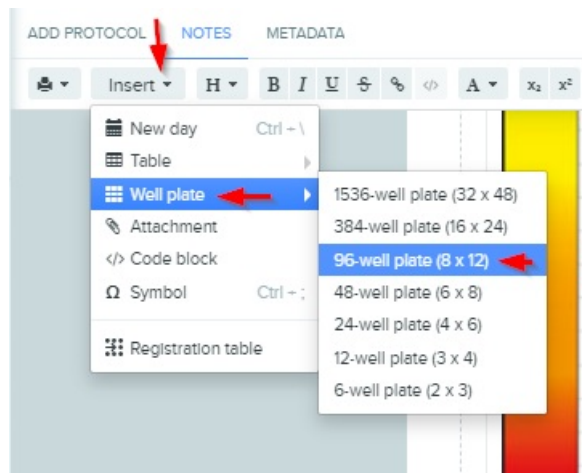## Inset Well Plate in Benchling Lab Notebook

2   Open your Benchling Lab Notebook and insert "Lab 4" with heading "H1". Add pertinent links to protocols like the SalivaDirect protocol.

3   We need to set up the format for our experiment in a 96-well plate.

Add a 96-well well plate by selecting "Insert>Well plate>96-well plate".

Add a 96-w "Well plate" in Benchling.

4   Add saliva samples 1 to 4, the no-template control and positive control using plasmid "pEX-A128-nCoV_CD". Make sure to "@-mention" the plasmid "pEX-A128-nCoV_CD" located in the BSCI:414 directory. Do not copy this to a new folder.
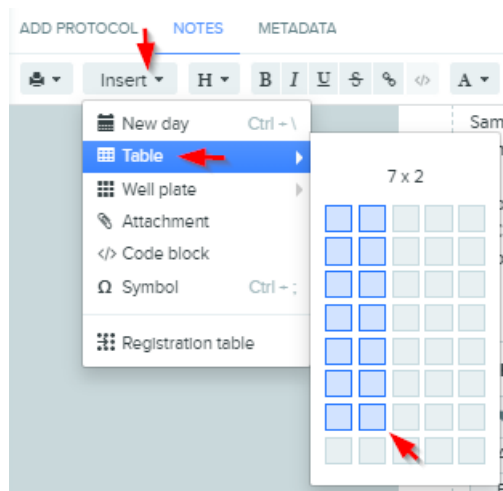

96-well plate outline in Benchling.

Add qPCR Schedule to Lab Notebook

5   Add a 2x7 table using "Insert>Table".

Copy the qPCR schedule from Step 11 in SalivaDirect into the table . Use the values from the "NEB Luna" kit.

Add a "Saliva Sample" row containing 5ul.

Add a "TOTAL" row at the bottom and ensure reagents total 20ul.

Add a 2x7 table.

qPCR Schedule for Each Sample using NEB Luna Reagents		
	A	B
1	Component	NEB Luna
2	Master mix	10 µL
3	RT	1 µL
4	Primer-probe-water mix (see above)	4 µL
5	Nuclease-free water	-
6	Saliva Sample	5 µL
7	TOTAL	20 ul

qPCR Schedule in Benchling.