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Oct 19, 2021

# 🌐 (ILLUMINA MENU) Protocols for SARS-CoV-2 Library Prep with ARTIC Primers, Bioinformatic Analysis, and Database Submission V.2

Technical Outreach and Assistance for States Team<sup>1</sup>

<sup>1</sup>Centers for Disease Control and Prevention



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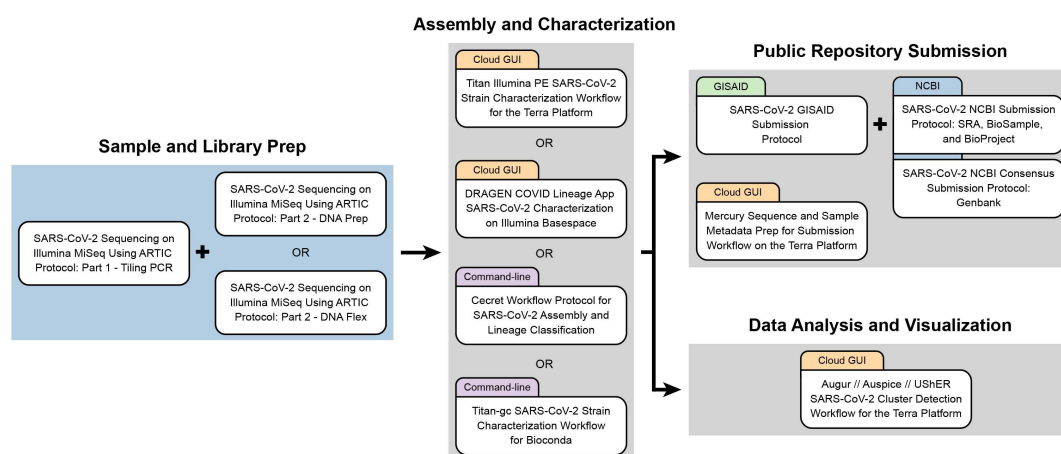
Jessica Chen

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This collection of protocols covers library preparation and sequencing on Illumina platforms as well as bioinformatic analysis and submission of SARS-CoV-2 data. These frequently used protocols have been assembled by the Technical Outreach and Assistance for States Team (TOAST) and the Office of Advanced Molecular Detection (OAMD) at the Centers for Disease Control and Prevention for use by participating State, Tribal, Local, and Territorial labs for sequencing of SARS-CoV-2. Individual protocols were developed by the protocol authors, and individual protocols should be credited accordingly.

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<https://protocols.io/view/illumina-menu-protocols-for-sars-cov-2-library-pr-by8rpzv6>  
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SARS-CoV-2, COVID-19, sequencing, bioinformatics, Illumina

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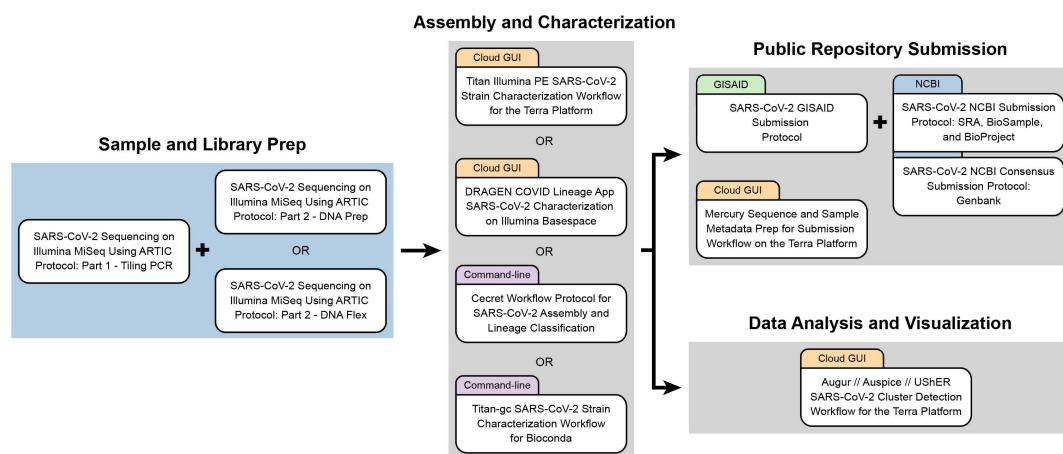
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## FILES



- SARS-CoV-2 Sequencing on Illumina MiSeq Using ARTIC Protocol: Part 1 - Tiling PCR  
**Version 1**  
by Joel Sevinsky, Theiagen Genomics
- SARS-CoV-2 Sequencing on Illumina MiSeq Using ARTIC Protocol: Part 2 - Illumina DNA Prep Protocol  
**Version 1**  
by Joseph Madden
- SARS-CoV-2 Sequencing on Illumina MiSeq Using ARTIC Protocol: Part 2 - Illumina DNA Flex Protocol  
**Version 1**  
by Joel Sevinsky, Theiagen Genomics
- Titan Illumina PE SARS-CoV-2 Strain Characterization Workflow for the Terra Platform  
**Version 2**  
by Technical Outreach and Assistance for States Team, Centers for Disease Control and Prevention



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DRAGEN COVID Lineage App SARS-CoV-2 Strain Characterization on the Illumina BaseSpace Platform  
**Version 2**  
 by ycm6
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Secret Workflow for SARS-CoV-2 Assembly and Lineage Classification  
**Version 3**  
 by ycm6
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¶ Titan-gc SARS-CoV-2 Strain Characterization Workflow for Bioconda  
**Version 3**  
 by Michael Weigand, Centers for Disease Control and Prevention
- 


Mercury Sequence and Sample Metadata Prep for Submission Workflow on the Terra Platform  
**Version 3**  
 by Technical Outreach and Assistance for States Team, Centers for Disease Control and Prevention
- 


SARS-CoV2 GISAID submission protocol  
**Version 3**  
 by Nabil-Fareed Alikhan, Quadram Institute Bioscience
- 


¶ SARS-CoV-2 NCBI submission protocol: SRA, BioSample, and BioProject  
**Version 3**  
 by Ruth Timme, US Food and Drug Administration
- 


SARS-CoV-2 NCBI consensus submission protocol: GenBank  
**Version 2**  
 by Ruth Timme, US Food and Drug Administration
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¶ Augur/Auspice/UShER SARS-CoV-2 Cluster Detection Workflow for the Terra Platform  
**Version 4**  
 by Anusha Ginni