

Transmission of SARS-CoV-2 in Northern Ghana; Insights from Whole Genome Sequencing

Augustina Angelina Sylverken ^{1,2,*}, Philip El-Duah ^{1,3}, Michael Owusu ^{1,4}, Julia Schneider ³, Richmond Yeboah ¹, Nana Kwame Ayisi-Boateng ⁵, Richmond Gorman ¹, Eric Adu ¹, Alexander Kwarteng ^{1,6}, Michael Frimpong ^{1,7}, Sherihane Aryeetey ¹, Jesse Addo Asamoah ¹, Yaw Ampem Amoako ⁵, John Humphrey Amuasi ^{1,8}, Jörn Beheim-Schwarzbach ³, Ellis Owusu-Dabo ⁸, Yaw Adu-Sarkodie ⁹, Kwasi Obiri-Danso ², Victor Max Corman ³, Christian Drosten ³ and Richard Phillips ^{1,5}

¹ Kumasi Centre for Collaborative Research in Tropical Medicine, PMB, UPO, Kumasi 00233, Ghana; philip.el-duah@charite.de (P.E.-D.); michaelowusu80@gmail.com (M.O.); yeboahrichmond82@yahoo.com (R.Y.); richgorman3@gmail.com (R.G.); e.edu@kccr.de (E.A.); akwarteng@knust.edu.gh (A.K.); frimpong@kccr.de (M.F.); asherihanne@gmail.com (S.A.); jesseasamoah1@gmail.com (J.A.A.); amuasi@kccr.de (J.H.A.); phillips@kccr.de (R.P.)

² Department of Theoretical and Applied Biology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; obirid@yahoo.com

³ Institute of Virology, Charite, Universitätsmedizin Berlin, Germany; julia.schneider@charite.de (J.S.); joern.beheim-schwarzbach@charite.de (J.B.-S.); victor.corman@charite.de (V.M.C.); christian.drosten@charite.de (C.D.)

⁴ Department of Medical Diagnostics, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

⁵ Department of Medicine, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; ayisi31@gmail.com (N.K.A.-B.); yamoako2002@gmail.com (Y.A.A.)

⁶ Department of Biochemistry and Biotechnology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

⁷ Department of Molecular Medicine, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

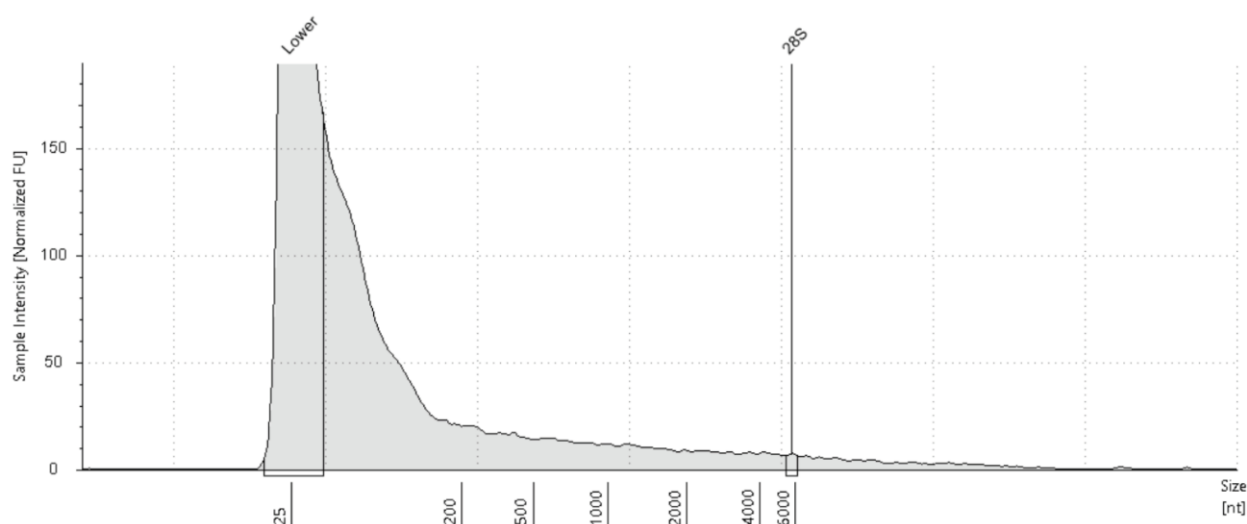
⁸ Department of Global and International Health, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; owusudabo@yahoo.com

⁹ Department of Clinical Microbiology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; yasax@hotmail.co.uk

* Correspondence: asylverken@knust.edu.gh; +233 244 214625

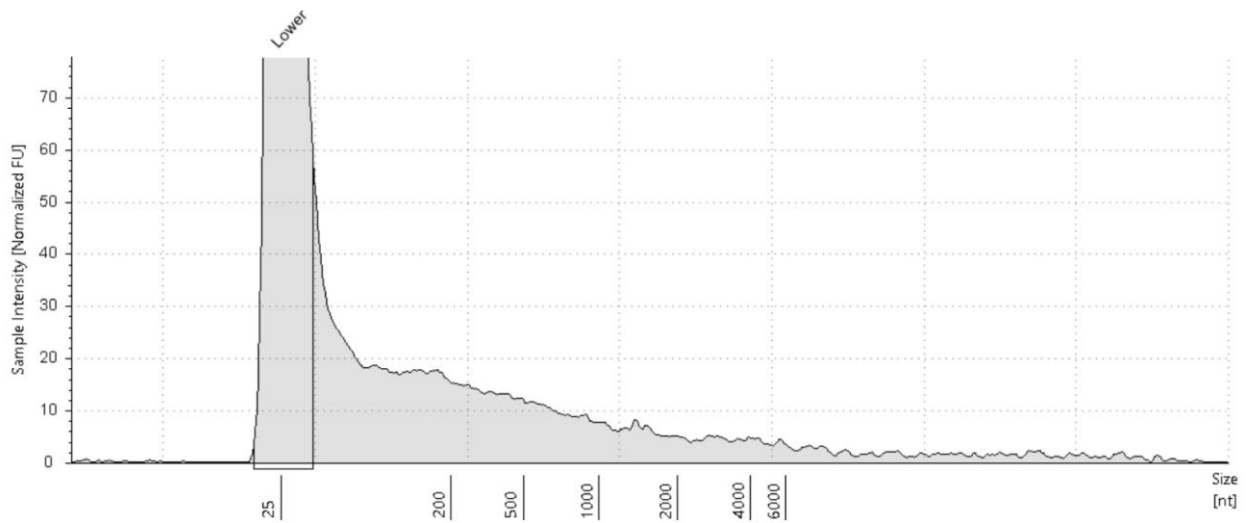
Received: date; Accepted: date; Published: date

Supplementary Materials:



S1. TapeStation analysis of sample TTH6.

The chart represents fluorescent unit (FU) measurement distribution of different fragment sizes measured in number of nucleotides (nt).



S2. TapeStation analysis of sample KATH23.

The chart represents fluorescent unit (FU) measurement distribution of different fragment sizes measured in number of nucleotides (nt).



© 2020 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).