The following table provides the yields per lane based on applications supported at CCR-SF by the supported Illumina chemistry and cluster densities. Actual performance parameters may vary based on sample type, sample quality, and clusters passing filter.

Platform		NextSeq 550			
Application Type	**Chemistry Version**	**Read Length**	**Total PF Reads (Million)**	**Total Yield (Gb)**	**%>=Q30 (PF)**
ChipSeq	NextSeq High Output Kit	1x75	300 - 400	20 - 35	>80%
mRNA	NextSeq High Output Kit	2x150	600 - 800	100 - 120	>75%
gDNA	NextSeq High Output Kit	2x150	600 - 800	100 - 120	>75%
PCR- product	NextSeq High Output Kit	1x75	300 - 400	20 - 30	>80%
Other	NextSeq High Output Kit	2x75	600 - 800	20 - 30	>80%
Platform		**NovaSeq 6000**			
Application Type	**Chemistry Version**	**Read Length**	**Total PF Reads (Million)**	**Total Yield (Gb)**	**%>=Q30 (PF)**
ChipSeq	NovaSeq S2	1x50	3,000 - 4,000	150 - 210	>85%
mRNA	NovaSeq SP	2x150	1,300 - 1,600	200 - 250	>75%
mRNA	NovaSeq S1	2x150	2,600 - 3,600	400 - 500	>75%
mRNA	NovaSeq S2	2x150	6,000 - 8,200	900 - 1,200	>75%
mRNA	NovaSeq S4	2x150	15,000 - 20,000	2,300 - 2,900	>75%
Exome	NovaSeq S1	2x150	2,600 - 3,200	400 - 500	>75%
Exome	NovaSeq S2	2x150	6,600 - 8,200	1,000 - 1,250	>75%
Exome	NovaSeq S4	2x150	16,000 - 20,000	2,400 - 3,000	>75%
gDNA	NovaSeq S1	2x150	2,900 - 3,200	400 - 500	>75%
gDNA	NovaSeq S2	2x150	7,400 - 8,200	1,000 - 1,250	>75%
gDNA	NovaSeq S4	2x150	18,000 - 20,000	2,400 - 3,000	>75%

Note: Statistics collected is based on NextSeq and NovaSeq Reagent chemistry and software used in Q1 of 2020 by using Illumina sample prep protocols. Library performance may be difference if use different library prep kits.

For further questions, please contact CCRSF_IFX@nih.gov.