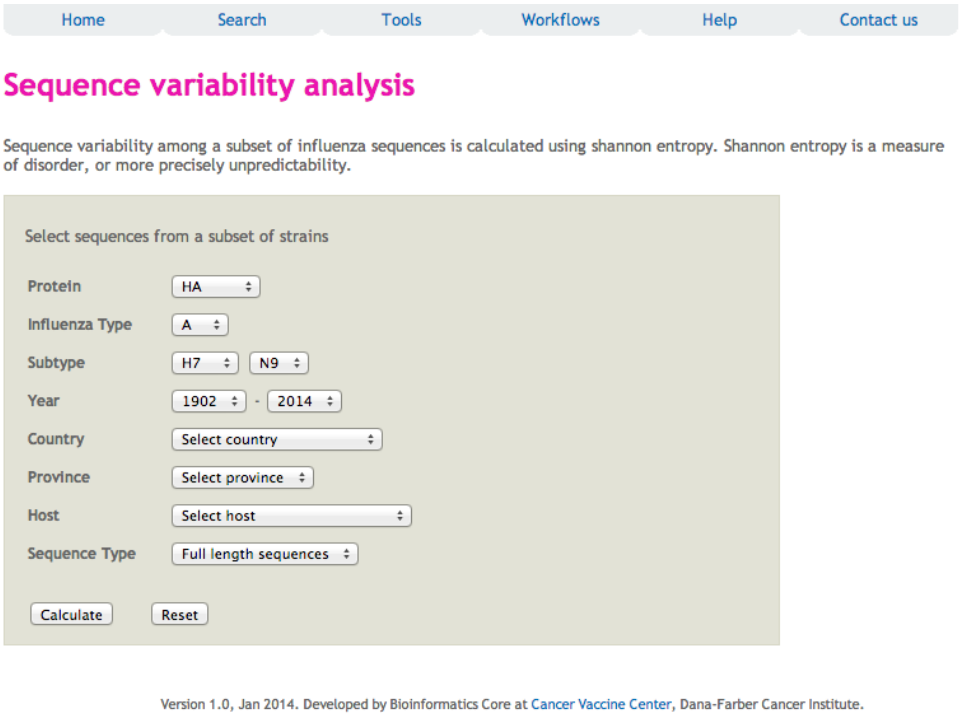
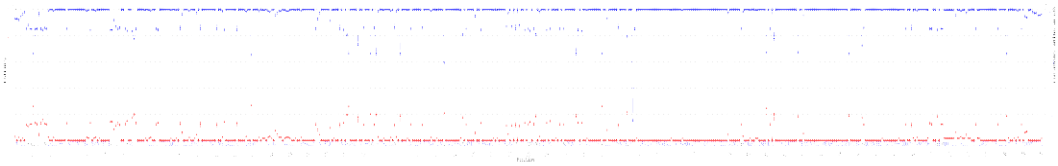
Supplemental Figures

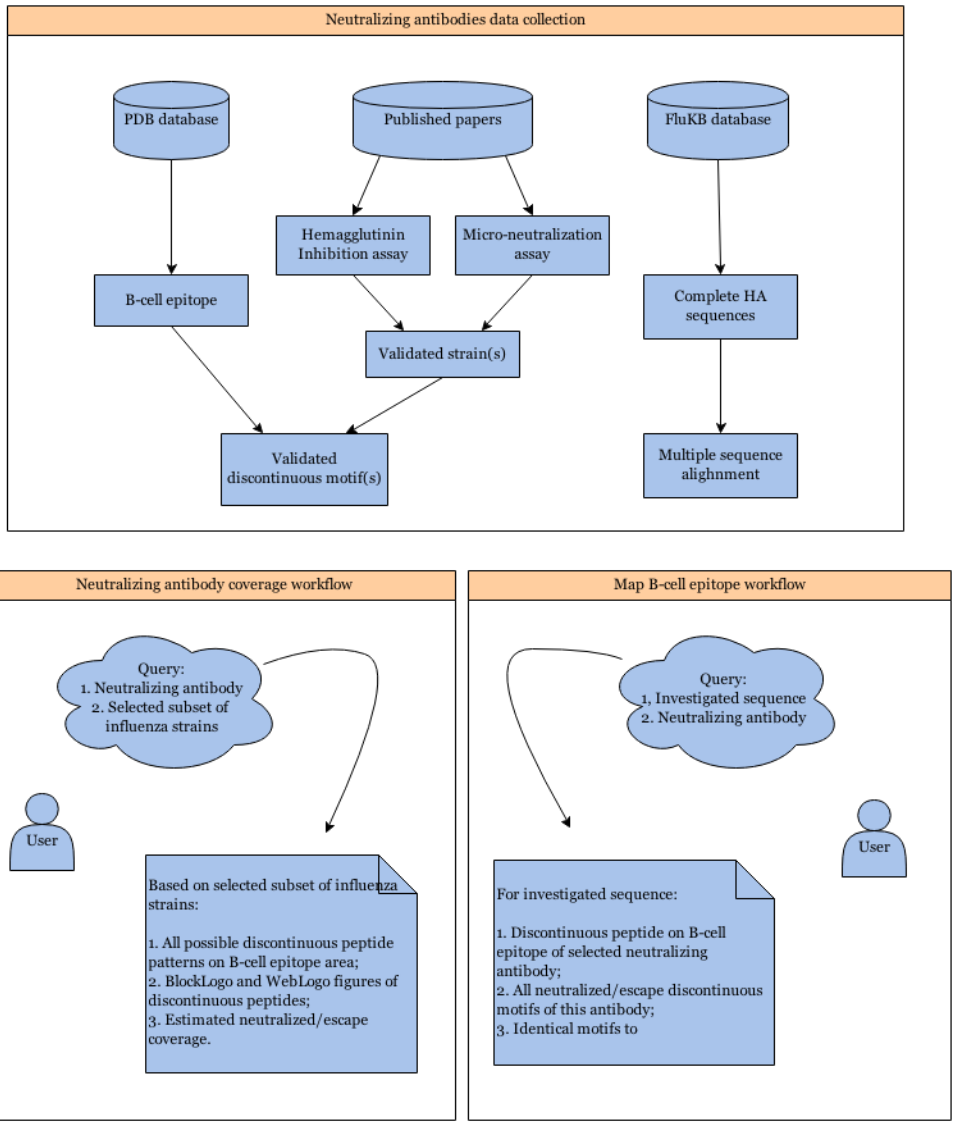


Supplemental Figure S1: The protein selection window that can be used to subset and filter the protein data in any way the user may prefer.

Supplemental Figure S2: The result of a query using the protein selection window that can be used to select a specific subset of protein data using various combinations of protein, influenza type, subtype, range of years of identification, geographic origin (country, province), host, and sequence type.



Supplemental Figure S3: An example output from the sequence variability analysis. The blue line display the percentage of sequences containing the consensus amino acids at a particular position in the alignment. The red line is the entropy of a given position in the alignment calculated by Shannon entropy. The example is a run from the setting shown in Supplemental Figure S1.



Supplemental Figure S4: Neutralizing antibodies-related data collection and two antibody analysis workflows. The upper panel shows the process of collection of neutralizing antibody-related information.

Supplemental Tables

Supplemantal Table S1: The list of GenBank accession numbers for the influenza reference sequences used in FluKB for protein annotations.

GB accession number for Influenza Virus A	
HA	M55059 AB269693 DQ508897 M25290 X05907 M16740 AF091310 AY383755 AB275283 CY015073
M1	M63530 AY210059 M63522 CY015109 AF144306 CY009205 CY034125 CY021054 CY019796 CY006708
M2	CY014695 X08093 CY020438 CY034125 M63530 M65019 M63521 CY015104 M63529 CY006836
NA	K01393 AB276110 AB124654 D00715 D00715 AF250363 M38335 CY009206 CY020463 CY019797
NP	M27298 M27520 L07352 L07351 D00050 M22573 M30748 CY009207 CY005674 CY034127
NS1	CY016240 CY026215 CY034128 M25372 M25373 AY651565 AY651568 M80973 K00578 AF348198
NS2	AB275287 AF001663 CY020297 CY034128 CY009208 CY006711 CY026295 CY002500 M25372 M25369
PA	M26078 CY014699 M26084 NC_007376 AY210006 CY005676 CY009353 CY008681 CY026216 CY034129
PA-X	P0DJW9 P0CK84 P0CK92 P0CK71 P0DJU2 P0DJW6 P0DJV5 P0DJS7 P0DJV3 P0CK87
PB1	M25929 M25930 M25931 M38376 M25935 DQ321291 AY651676 CY015113 CY015107 CY019801
PB1-F2	CY034130 CY009210 CY020443 CY014677 CY015095 CY014777 CY003742 CY007625 CY006050 CY002502
PB2	M38277 M73517 M73521 M73513 AY059525 AF348170 AY651751 CY034131 CY026218 CY009211
GB accession number for Influenza Virus B	
NS2	AB120446 AY582078 AY582083 AB120449 AF100399 AY687395 AY582075 AY582080 AY582081
BM2	M20175 M20176 AY260941 M14909 JN899476 AY581983 EU305617 JN899470 AY581975 AJ783374
HA	K00425 K00423 X17222 K00424 X53098 K02713 M58428 X00897 X13551 X13553
M1	AY260941 NC_002210 M20175 M20176 M14909 AF077348 AY581975 AY581978 AY581978 AY581980
NA	M54967 J02095 M30632 M30633 M30634 M30635 M30636 M30637 M30638 M30639
NB	J02095 M30637 M30633 M54967 M30631 M30632 M30634 M30635 M30636 M30639
NP	NC_002208 K01395 X14217 M20173 M20174 AF005739 K01139 AF100367 AB036876 AY582020
NS1	M19796 M19788 M19790 M19792 M20225 M20224 M19786 M19795 M19794 M19791
PA	NC_002206 M16711 M20171 M20172 AF005738 CY018738 CY018530 CY038292 EF626641 AY582032
PB1	M20479 NC_002204 M20169 AF005736 CY115117 CY119656 CY119560 CY119864 CY119832 CY119928
PB2	AF101982 M20163 M20168 AF005737 AY582060 AY582066 EU305612 EF626643 CY033859 CY019578