

## AlphaFold Session, 2023 SEA Faculty Meeting

Download ChimeraX: <https://www.rbvi.ucsf.edu/chimerax/download.html>

(Need version 1.5 or later for ColabFold)

Original Forum Post with additional resources: <https://seaphages.org/forums/topic/5476/>

<<Google Drive for uploading + exploring predicted sequences>>

<https://drive.google.com/drive/folders/1V6vG5pNTxiVL7UaGXd6jvtcZguvulP4E?usp=sharing>

Please add folders renamed with the gene name! [e.g., Waterfoul gp71]

### Protein Sequences:

>Xeno gp25 (RelB-like antitoxin)

MMSVLPISKAKAKLSELVRQSEDTDVVLMNHSTPAAVLISVERYEALQEELEDLRDRLSVHERSGVTVSVDKL  
MAELGISAD

>Xeno gp26 (RelE-like toxin)

MSSYRVEIETSAKQIQRLQRGEQKRVMVAITALADEPRPHGCTKLSGTTDAYRIRVGNFRVVYVIDDGLHIV  
NVTRVGHRRREVYKR

>Hammy gp32

MSGESALSTIELVGLLAGSNVLSVCGGMLAKRKDTFAVFTDAYEALAVRVTTLEQKLESVEAALGVERTQHD  
HTKHLLRVAIEHIRAVIAWGVTDRTADLPVPPASLMVQA

>Hammy gp36

MSTPTMTVRQLSEQEVAQMARGLQVTVGRRRTIPAMNVPYENMVEQIEALYGPGERAHERDAAIETAA  
LYLVEDANADTVGAAAYHEAREQWEAAMAATKAFVLLAVEDDASEAGLARGLGIDRLTVRKYRGKQDRAK

>Hammygp50

MSPAPYCLPCNAHHEGDCPPGEKLGAILGWFLLLVASVIIIGVAFAGLSVGVWSL

>Hammy gp56

MTDSKRPWWADREVVETWVEQKRFDATLAYLDGLAVAVEHRIAYGVDDSAVAAKQALDGLDALWHNDR  
LVVARMDFDPSVELLLTVGEDGVNAHLAAEPSKPEPLPFQRDDPALVMVCACTHDYPRHTAVGCMELGC  
WCNRFVRYSHDDERASNA

>Hammy gp77

MTENITRGLRLNVFRWSLGDCTNGGVSAAASHLTLVGYVKPGEKAVRDLPARSQVFPVNADAPAVVMVES  
NLRGALPHLVPLAIEYEAGKWLMSGGNHAGGDSRFGDLIASVFDGPKCVATLPVHDRIES

>Hammy90

MTDTIHAAGKLSFNFAAIRGYVTGVVYGVGDGAVEVFAMAAPVDADESAGYRMVHVRLAAKVEAGAYADR  
YEVAGWAWITRDEFDQAVGMAEIRASLGWKDAPAVAVEVEAPAPRTFPTGSAVSRALKRDAGIITTPVTRA  
GYHVRDGIKGTTPSISVSLSDLPDARSVDRDALALAEHLRERGWVVELADGSSVLYVNRIGRRAAAA

>Waterfoul gp49

MKKRIAIVAATAIGIVTLPAACSLQNQQEHTGCTVTAKDTLYSANDGNSTRTRLRVSTSCGAFDVEDSLAGGFN  
SWDLWQQLEVGKVDYDMKTGGYRIGFVSSFPPTLIEVTPRD

>Waterfoul gp52

MTEFVLAAGAAGMAGAAVALERARYWRIRYEGLRRAIDNRHPSIVGRFK

>Waterfoul gp71

MTAHTDARASAVRYFRGWLAAAVATSILGNVAHALLSDAGSPTIAAAIAFLLPLGLLGSTHG VHKLVAAAGIVG  
RAYTAALWISVATVVAAFALSFVALAELAAQWAGIPVFIAWLVVPV FIDLSITGCTVALFALSDAARADVLEAQP  
APMRVDAQLEPAAPAAVHSIAHTPVHVDAPVRVDVDDTAPQIQPGPPAARLTVADVMARTERERADAER  
VADDHLAAAERIVAAGVTRIDRGKVAQVLHEHAQNTAPSMIARKLNVGYPTVQRRIEHATVREEVNA

>Waterfoul gp86

MAKWTHEQVAHLRERHDL SVAEAEELHDPSRVTIVPDPASRSGRGIRVVGYSRSAGTVLCVLIVEHEGVMY  
GATAFPANATYRRIYQEGE

>Waterfoul gp87

MMSKQTRDDLAATIREVATDAEVYEEVMGEHVELADVKITRGGPRTRVLQVRLDEREMQFVEDAAAARGL  
PASTVAREILLSTLRRPSVDPDAKAELVGAFVRYLEGVDQKIRCDATTGPASVHETGPASMQSAG

>Waterfoul gp88

MTNWTKTEAKAADAILSDLYTAAYAAEDALKKVIDRVHRAANDKQVYYGRAPYWKMSIDEALAGA AKTAE  
GTVHYALQAAKAI AEYPAARDAAQAHAHAIRAHEEANYKGWLRFFLVQDGHHSSTYCGSLRPTTRIGWLPE  
LSGETEAEAVAAHGAMLCTRCFPSAPVEWTRGKVDPNACPGSAKAYVEGTKSDPRRRTVYGECSHCHTRQI  
VTMYGVTRKHKLPKK