

Sequence Analysis Workshop: A Pipeline Using Tools from the LANL Database

Time	Topic	Facilitator
9:00-9:10 AM	<ul style="list-style-type: none"> • Welcome 	Dieter Mielke
9:10-9:30 AM	<ul style="list-style-type: none"> • Part I: Preparing the Alignment 	
	<ul style="list-style-type: none"> ○ Alignment formats (brief intro) 	Elena Giorgi
	<ul style="list-style-type: none"> ○ Alignment tool: GeneCutter 	
	<ul style="list-style-type: none"> ○ Visualize and Refine: AliView 	
	<ul style="list-style-type: none"> ○ Manipulate: Align MultiTool, ConsensusMaker 	
	<ul style="list-style-type: none"> ○ Example with real world dataset 	Bhavna Hora Dieter Mielke
9:30-10:15 AM	<ul style="list-style-type: none"> • Part II: Diversity Analysis 	
	<ul style="list-style-type: none"> ○ Visualize (overall): Highlighter 	Elena Giorgi
	<ul style="list-style-type: none"> ○ Visualize (overall): Variant Visualizer 	
	<ul style="list-style-type: none"> ○ Visualize (localized): AnalyzeAlign 	
	<ul style="list-style-type: none"> ○ Env Analysis: Variable Region Characteristics 	
	<ul style="list-style-type: none"> ○ Glycan Analysis: NGlycoSite, Shield Mapping 	
	<ul style="list-style-type: none"> ○ Example with real world dataset 	Bhavna Hora Dieter Mielke
10:15-10:30 AM	BREAK	
10:30-11:15 AM	<ul style="list-style-type: none"> • Part III: Phylogenetic Analysis 	
	<ul style="list-style-type: none"> ○ Intro on Phylogenetic Trees 	Elena Giorgi
	<ul style="list-style-type: none"> ○ PhyML, IQTree, and online versions 	
	<ul style="list-style-type: none"> ○ Analyze: TreeMaker, TreeRate 	
	<ul style="list-style-type: none"> ○ Manipulate: RainbowTree 	
	<ul style="list-style-type: none"> ○ Example with real world dataset 	Bhavna Hora Dieter Mielke
11:15 AM to Noon	<ul style="list-style-type: none"> • Part IV: LANL Database 	
	<ul style="list-style-type: none"> ○ Overview of LANL Seq and Immuno Databases 	Elena Giorgi
	<ul style="list-style-type: none"> ○ Antibody search: CATNAP 	
	<ul style="list-style-type: none"> ○ Genetic Signatures: GenSig 	
	<ul style="list-style-type: none"> ○ Env/Spike feature databases 	
	<ul style="list-style-type: none"> ○ Example with real world dataset 	Bhavna Hora Dieter Mielke
Noon-1 PM	LUNCH	
1:00-4:00 PM	Hands-on Help/Q&A (open session)	Elena Giorgi, Bhavna Hora, Dieter Mielke