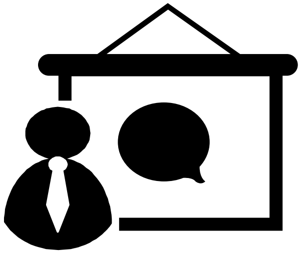
Welcome to the

2022 IEDB Virtual User Workshop – Day 3

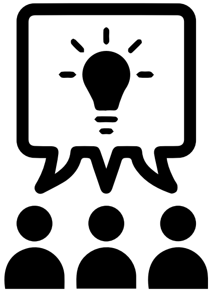
Friday, October 28, 2022

Annual IEDB User Workshop – Why?

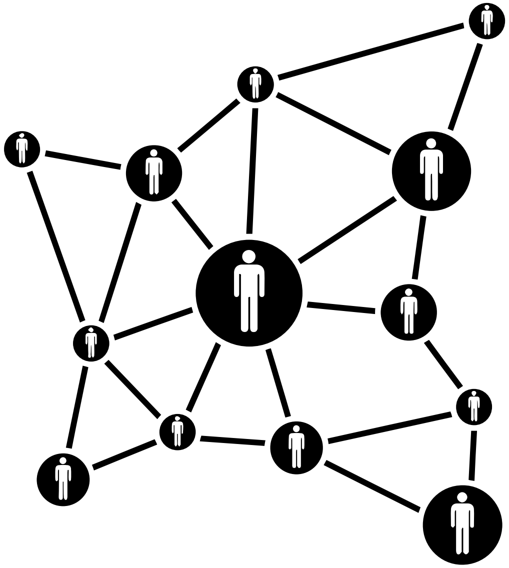
3 Day Event



IEDB and tools overview with research examples and specialized topics

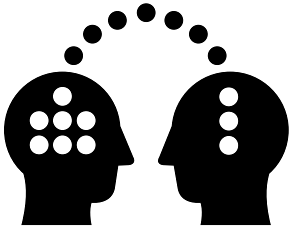


Improve our resources through user feedback



Engage with global user community

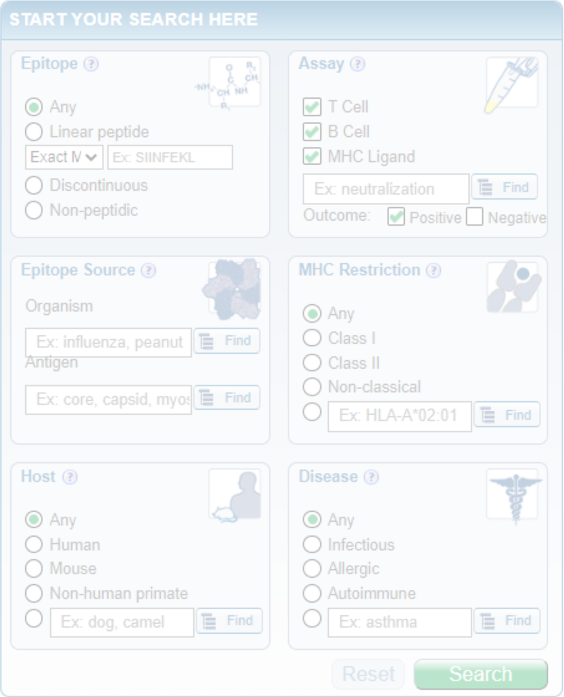
Answer user questions to facilitate learning



Share ideas to further scientific research

User Workshop Structure

Day 1



START YOUR SEARCH HERE

Epitope ?
- ● Any
- ○ Linear peptide
- Exact M ▾ Ex: SIINFEKL
- ○ Discontinuous
- ○ Non-peptidic

Assay ?
- ☑ T Cell
- ☑ B Cell
- ☑ MHC Ligand
- Ex: neutralization Find
- Outcome: ☑ Positive ☐ Negative

Epitope Source ?
- Organism
- Ex: influenza, peanut Find
- Antigen
- Ex: core, capsid, myos Find

MHC Restriction ?
- ● Any
- ○ Class I
- ○ Class II
- ○ Non-classical
- ○ Ex: HLA-A*02:01 Find

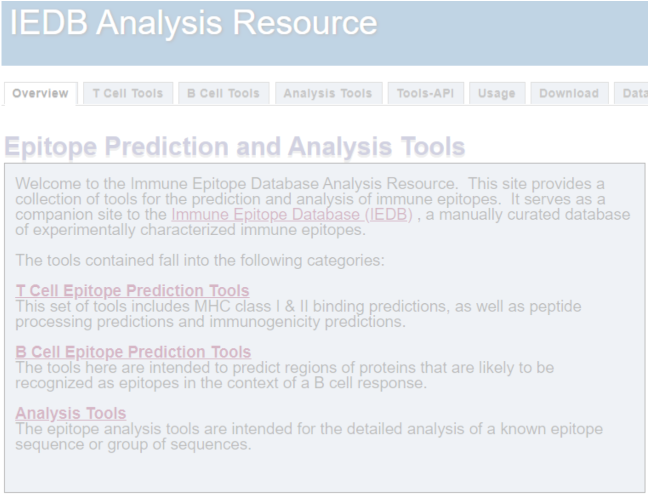
Host ?
- ● Any
- ○ Human
- ○ Mouse
- ○ Non-human primate
- ○ Ex: dog, camel Find

Disease ?
- ● Any
- ○ Infectious
- ○ Allergic
- ○ Autoimmune
- ○ Ex: asthma Find

Reset Search

Process Overview and Database

Day 2



IEDB Analysis Resource

Epitope Prediction and Analysis Tools

Welcome to the Immune Epitope Database Analysis Resource. This site provides a collection of tools for the prediction and analysis of immune epitopes. It serves as a companion site to the Immune Epitope Database (IEDB) , a manually curated database of experimentally characterized immune epitopes.

The tools contained fall into the following categories:

T Cell Epitope Prediction Tools
This set of tools includes MHC class I & II binding predictions, as well as peptide processing predictions and immunogenicity predictions.

B Cell Epitope Prediction Tools
The tools here are intended to predict regions of proteins that are likely to be recognized as epitopes in the context of a B cell response.

Analysis Tools
The epitope analysis tools are intended for the detailed analysis of a known epitope sequence or group of sequences.

Analysis Resource – Processing & Prediction Tools

Day 3

CEDAR
Cancer Epitope Database and Analysis Resource

Los Alamos
NATIONAL LABORATORY

Specialized Topics – 3D Structures, Cancer, HIV

Who You'll Hear From

IMMUNE EPITOPE DATABASE
AND ANALYSIS RESOURCE

Dr. Marcus Mendes
Bioinformatics Postdoctoral Researcher

Dr. Paolo Marcatili
DTU Associate Professor

DTU

Dr. Jason Greenbaum
Bioinformatics Core Director

Dr. Alessandro Sette
Principal Investigator

Dr. Zeynep Koşaloğlu-Yalçın
Instructor

Dr. Bjoern Peters
Co-Principal Investigator

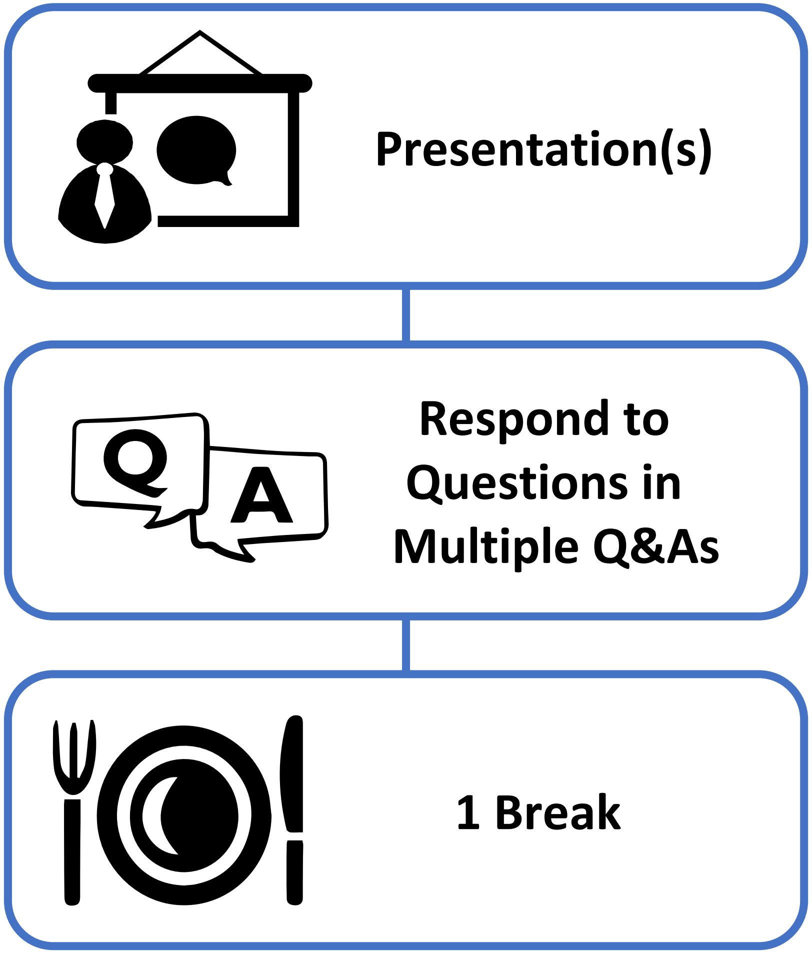
Who You'll Hear From

Los Alamos
NATIONAL LABORATORY

Dr. Elizabeth-Sharon Fung
Annotator, Editor

Jennifer Macke
Research Technologist

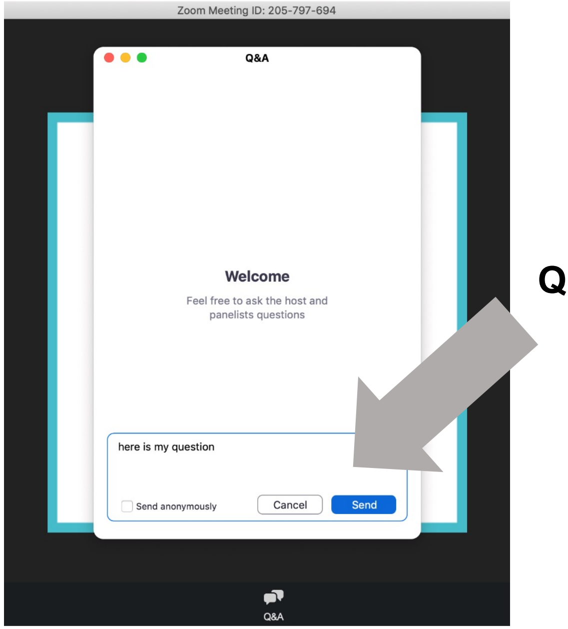
User Workshop Structure



Presentation(s)

Respond to Questions in Multiple Q&As

1 Break



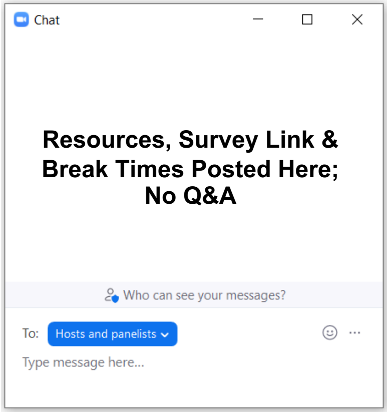
Zoom Meeting ID: 205-797-694

Welcome

Feel free to ask the host and panelists questions

here is my question

Q&A



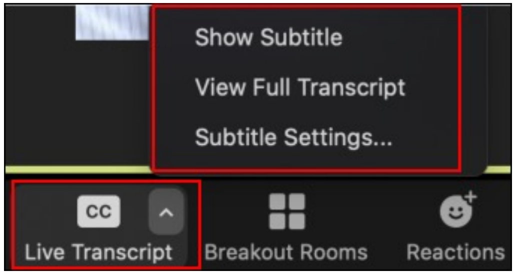
Resources, Survey Link & Break Times Posted Here; No Q&A

Who can see your messages?

To: Hosts and panelists

Type message here...

Chat



Subtitles

Agenda – Day 3

Start Time	End Time	Topic	Speaker
08:00	**08:05**	Welcome	Nina Blazeska *IEDB Project Manager*
08:05	**08:30**	IEDB-3D 2.0: Visualizing Structures in the IEDB	Marcus Mendes *Bioinformatics Postdoctoral Researcher*
08:30	**09:00**	Structure Tools: LYRA & SCEptRe	Paolo Marcatili (Recording) *DTU Associate Professor*
09:00	**09:15**	Section 1: Q&A with Drs. Mendes and Peters (in lieu of Dr. Marcatili)	
09:15	**09:35**	IEDB Query API (IQ-API)	Jason Greenbaum *Bioinformatics Core Director*
09:35	**10:05**	NIH Resources for Researchers: The LANL HIV Databases	Elizabeth-Sharon Fung *Los Alamos National Laboratory* Jennifer Macke *Los Alamos National Laboratory*
10:05	**10:20**	Section 2: Q&A with Drs. Greenbaum, Fung and Macke	
10:20	**10:45**	**Break**	

Agenda – Day 3

Start Time	End Time	Topic	Speaker
10:45	**11:15**	The Cancer Epitope Database and Analysis Resource (CEDAR)	Alessandro Sette *IEDB Principal Investigator* In the absence of Zeynep Koşaloğlu-Yalçın *Instructor Cancer Bioinformatics*
11:15	**11:35**	CEDAR Prostate Cancer Meta-analysis	Alessandro Sette *IEDB Principal Investigator*
11:35	**11:50**	Section 3: Q&A with Drs. Sette and Peters	
11:50	**12:00**	Closing Remarks & Feedback Survey	Nina Blazeska *IEDB Project Manager*
	12:00	**End of Session**	

Other Event Logistics

You will receive a post-event email next week

Workshop recording will be shared with you

All presentations will be shared with you

Participation certificates will be provided upon request

SurveyMonkey

Daily and post-event feedback survey

Be aware of IEDB slowness due to increased traffic

#iedbuw2022

Follow us @iedb_

Without further ado…

Dr. Marcus Mendes
Bioinformatics Postdoctoral
Researcher

IEDB-3D 2.0: Visualizing Structures in the IEDB