

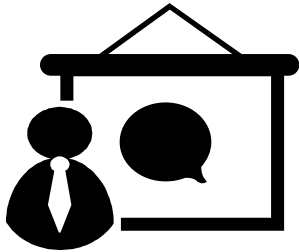
Welcome to the

**2022 IEDB Virtual User
Workshop – Day 1**

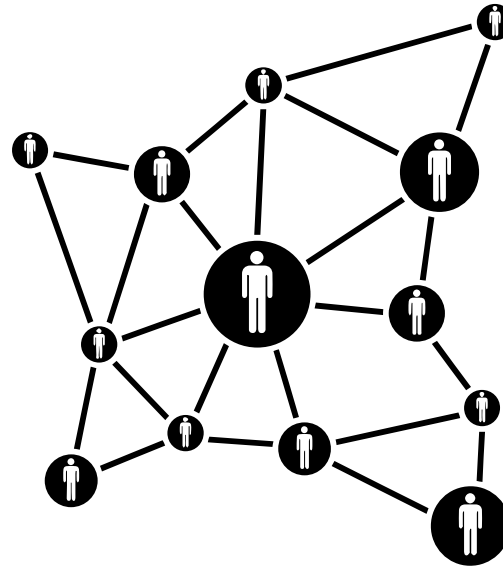
Wednesday, October 26, 2022

Annual IEDB User Workshop – Why?

3 Day Event



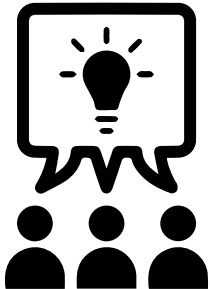
IEDB and tools overview with research examples and specialized topics



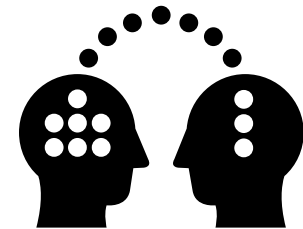
Engage with global user community



Answer user questions to facilitate learning



Improve our resources through user feedback



Share ideas to further scientific research



**We've
gone from this...**



To this...



2020



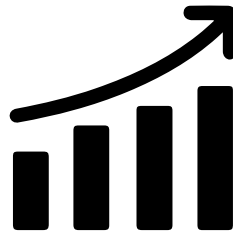
2021



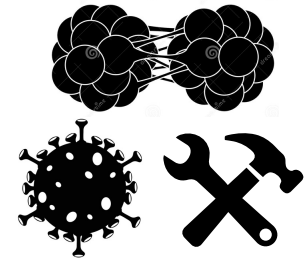
New challenges create new opportunities!



Completely virtual from the comfort of your own home



Registered and approved over 550 attendees – our largest workshop ever!



New presentation topics on novel research and new tools

ENGAGE | ENJOY | LEARN

Who You'll Hear From



Dr. Alessandro Sette
Principal Investigator



Dr. Bjoern Peters
Co-Principal Investigator



Dr. Randi Vita
*Lead Ontology & Quality
Manager*



Dr. Sidne Fitzpatrick
Scientific Curator



Kelly Wheeler
Senior Software Engineer



Dr. Alba Grifoni
LJI Research Faculty/Instructor



Dr. Zeynep Koşaloğlu-Yalçın
Instructor

Who You'll Hear From



Dr. Raphael Trevizani
*Bioinformatics Postdoctoral
Researcher*



Dr. Mahita Jarjapu
*Bioinformatics Postdoctoral
Researcher*



Dr. Marcus Mendes
*Bioinformatics Postdoctoral
Researcher*



Daniel Marrama
Bioinformatics Research Technician



Dr. Jason Greenbaum
Bioinformatics Core Director



Dr. Paolo Marcatili
DTU Associate Professor



Who You'll Hear From



Dr. Elizabeth-Sharon Fung
Annotator, Editor



Jennifer Macke
Research Technologist

User Workshop Structure

Day 1

START YOUR SEARCH HERE

Epitope ?

Any
 Linear peptide
Exact Ex: SIINFPEKLV
 Discontinuous
 Non-peptidic

Assay ?

T Cell
 B Cell
 MHC Ligand
Ex: neutralization
Outcome: Positive Negative

Epitope Source ?

Organism
Ex: influenza, peanut
Antigen
Ex: core, capsid, myosin

MHC Restriction ?

Any
 Class I
 Class II
 Non-classical
Ex: HLA-A*02:01

Host ?

Any
 Human
 Mouse
 Non-human primate
Ex: dog, camel

Disease ?

Any
 Infectious
 Allergic
 Autoimmune
Ex: asthma

Process Overview and Database

Day 2

IEDB Analysis Resource

[Overview](#) [T Cell Tools](#) [B Cell Tools](#) [Analysis Tools](#) [Tools-API](#) [Usage](#) [Download](#) [Data](#)

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.

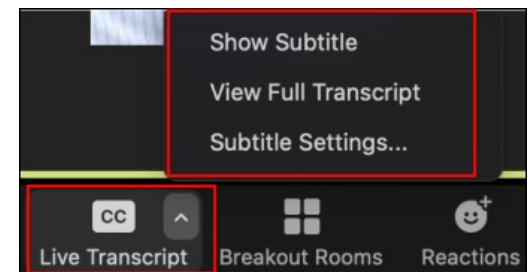
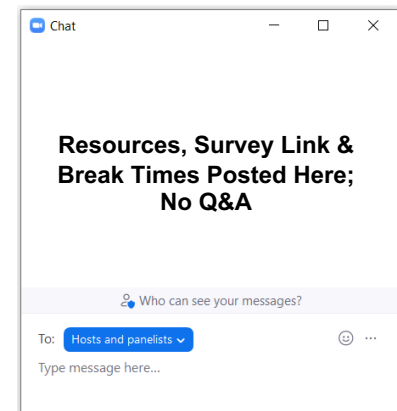
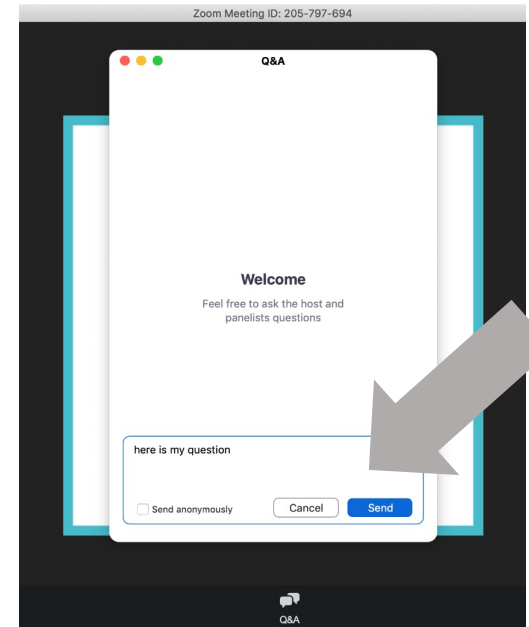
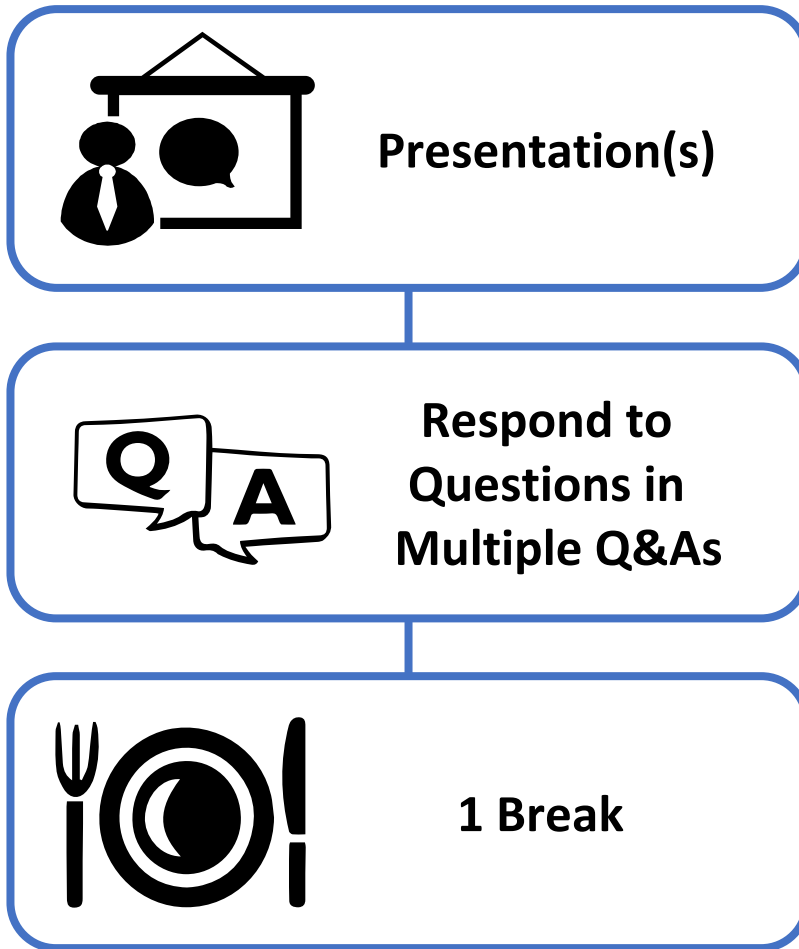
Analysis Resource – Processing & Prediction Tools

Day 3



Specialized Topics – 3D Structures, Cancer, HIV

User Workshop Structure



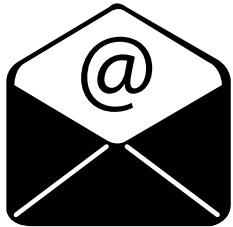
Agenda – Day 1

Start Time	End Time	Topic	Speaker
08:00	08:10	Welcome	Nina Blazeska <i>IEDB Project Manager</i>
08:10	08:40	Database Overview	Alessandro Sette <i>IEDB Principal Investigator</i>
08:40	09:00	Analysis Resource Overview	Bjoern Peters <i>IEDB Co-Principal Investigator</i>
09:00	09:15	<u>Section 1</u> : Q&A with Drs. Sette and Peters	
09:15	09:45	Accessing the Data: Query, Reporting and Examples	Randi Vita <i>Lead Ontology and Quality Manager</i> Sidne Fitzpatrick <i>Scientific Curator</i>
09:45	10:00	New Database Features - Custom Exports	Kelly Wheeler <i>Leidos Senior Software Engineer</i>
10:00	10:15	<u>Section 2</u> : Q&A with Drs. Vita, Fitzpatrick and Wheeler	

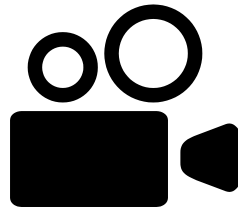
Agenda – Day 1

Start Time	End Time	Topic	Speaker
10:15	10:40	Break	
10:40	11:05	Using the IEDB in your Research: Orthopox & SARS-CoV-2 Examples	Alba Grifoni <i>LJI Research Faculty/Instructor</i>
11:05	11:35	Analysis Tools	Alessandro Sette <i>IEDB Principal Investigator</i>
11:35	11:50	<u>Section 3</u> : Q&A with Drs. Grifoni and Sette	
11:50	12:00	Closing Remarks & Feedback Survey	Nina Blazeska <i>IEDB Project Manager</i>
	12:00	End of Session	

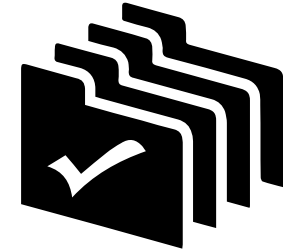
Other Event Logistics



You will receive a post-event email next week



Workshop recording will be shared with you



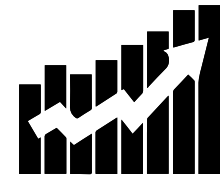
All presentations will be shared with you



Participation certificates will be provided upon request



Daily and post-event feedback survey



Be aware of IEDB slowness due to increased traffic



#iedbuw2022

Follow us @iedb_

Without further ado...



Dr. Alessandro Sette
Principal Investigator

Database Overview