WORLD IMMUNOLOGY DAY

29th of April 2022

CALL FOR ANIMATION MOVIE

IMMUNOLOGY AND VACCINES

CASH PRIZES

1st-1200 2nd-750 3rd-500

Last date of submission 27/4/22

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GUIDELINES AND OVERVIEW MENTIONED IN PAGE 3 AND 4

WORLD IMMUNOLOGY DAY

QUIZ COMPETITION

Immunology and Vaccines

on 29th of April 2022
Doors open at 2.30 pm

Venue: Council hall, Tezpur University

Free Registration
Cash prizes: 1st-1250 2nd-750 3rd-500

CALL US TO RESERVE YOUR SPOT

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Guidelines for the movie

- Please read the overview on the theme for better understanding
- Films are to be made on any aspect of the theme.
- Language used in the films should be English.
- The duration for the movie must be maximun 3.5 minutes.
- The film must be of highest quality possible.

Details of submission

- There is no entry fee for this competition.
- The film can be submitted as a shareable Google Drive link. The link can be sent to sushmitaheisnam95@gmail.com along with the filled in registration form.

Overview on vaccines

Vaccines contain weakened or inactive parts of a particular organism that can trigger an immune response but are incapable to cause the disease. Some vaccines require multiple doses. This is sometimes needed to allow production of long-lived antibodies and development of memory cells. In this way, the body is trained to fight the disease, building up memory for that pathogen so as to rapidly generate an immmune response it if exposed in future.

Immune response evoked:

An immune response begins when macrophages ingest antigens such as proteins entering the body and digest them into antigen fragments. A molecule called MHC (major histocompatibility complex) carries certain of these fragments to the surface of the cell, where they are displayed but they are still locked into the cleft of the MHC molecule. These displayed antigen fragments are recognized by T cells, which stimulate B cells to secrete antibodies to the fragments as well as prompt other immune defense.

Types of vaccines:

Inactivated vaccines

Inactivated vaccines use the killed version of the germ that causes a disease like HepatitisA.

Live-attenuated vaccines

Live vaccines use a weakened (or attenuated) form of the germ that causes a disease. Eg-Smallpox, chikenpox

Messenger RNA vaccines—also called mRNA vaccines

mRNA vaccines work by introducing a piece of mRNA that corresponds to a viral protein, usually a small piece of a protein found on the virus's outer membrane. Using this mRNA blueprint, cells produce the viral protein. As part of a normal immune response, the immune system recognizes that the protein is foreign and produces specialized proteins called antibodies. Eg-Covishield for COVID-19

Subunit, recombinant, polysaccharide, and conjugate vaccines

These vaccines use specific pieces of the germ—like its protein, sugar, or capsid. Eg-HepatitisB

Toxoid vaccines

Toxoid vaccines use a toxin made by the germ to induce immunity to the toxin that cause disease instead of the germ itself. That means the immune response is targeted to the toxin instead of the whole germ. Eg-Tetanus

Viral vector vaccines

Viral vector-based vaccines use a harmless virus to smuggle the instructions for making antigens from the disease-causing virus into cells. Eg- Ebola