

# Boost The Immunity

## **Professor Aung Kyaw Thu**

MBBS, MMedSC(Int Med), DrMedSc(Gen Med)

Dip.Med.Ed, DCME

MRCP(UK), FRCP(Edin), FRCP(London)

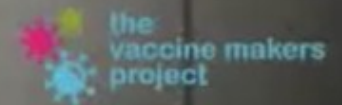


What is the fundamental role of  
the immune system?

# Invaluable Cargo

**Invaluable cargo**

**Alaska, 1925**



# Immunity

Original Meaning မူရင်း အဓိပ္ပါယ်

Latin Immunis meaning to make safe

Exemption from government taxes

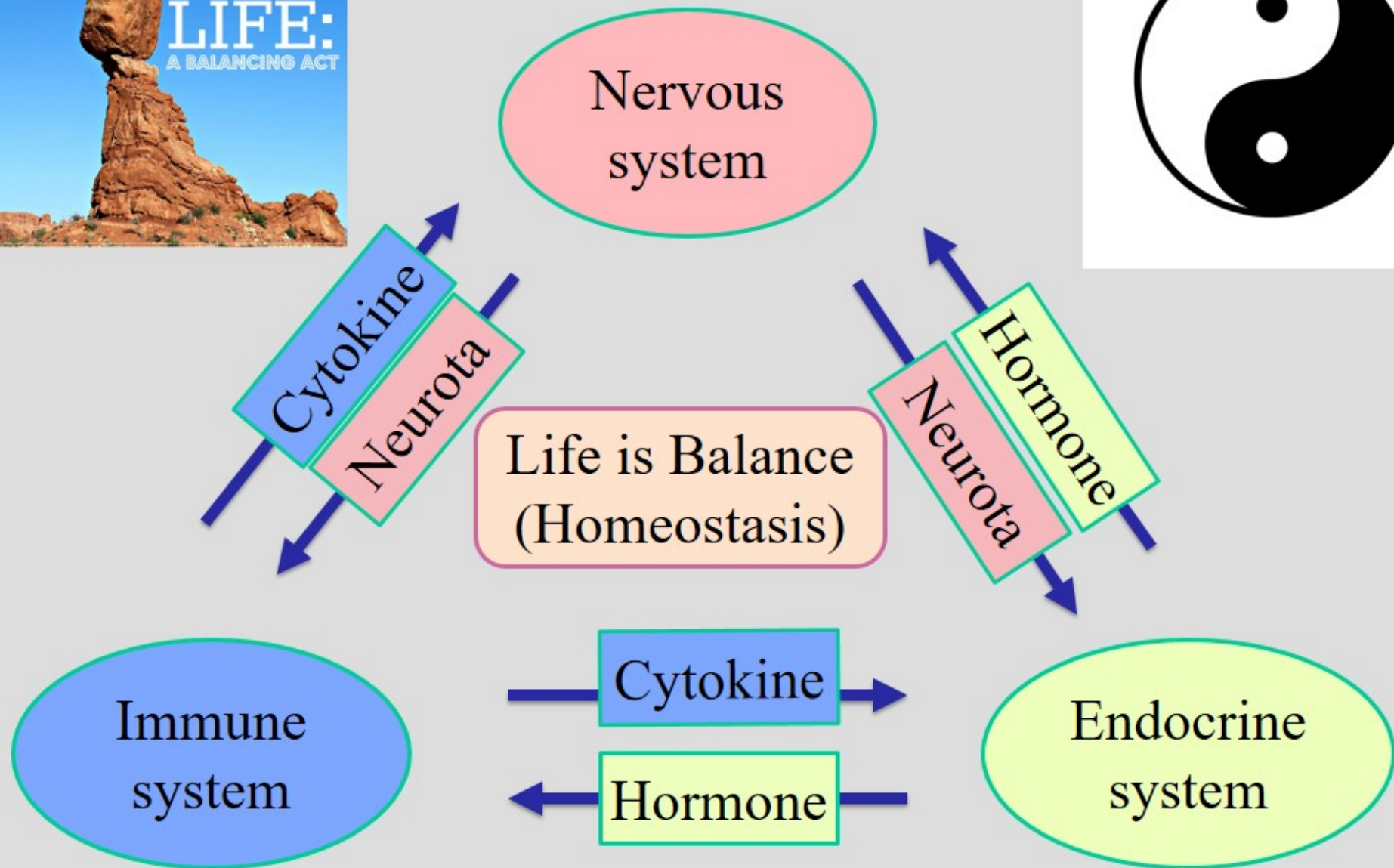
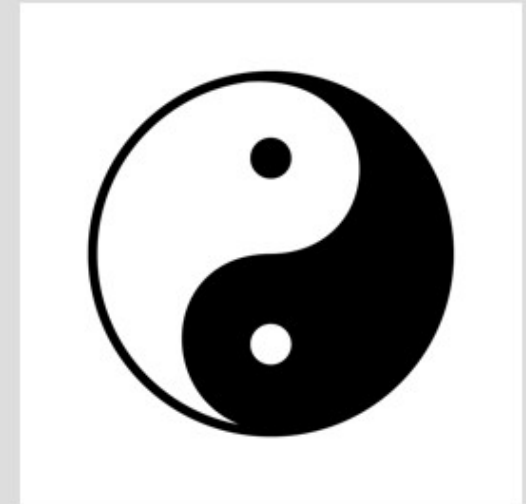
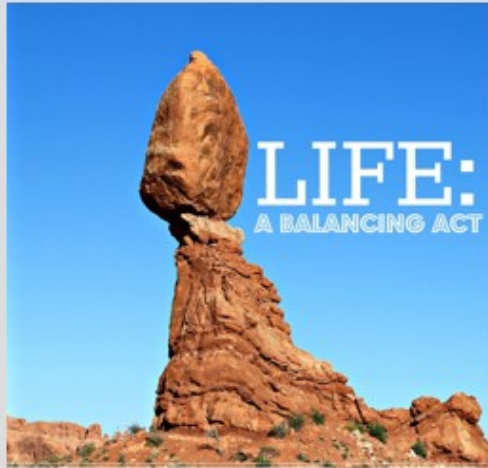
Literal Meaning ဆိုလိုရင်း အဓိပ္ပါယ်

Being able to resist a particular disease

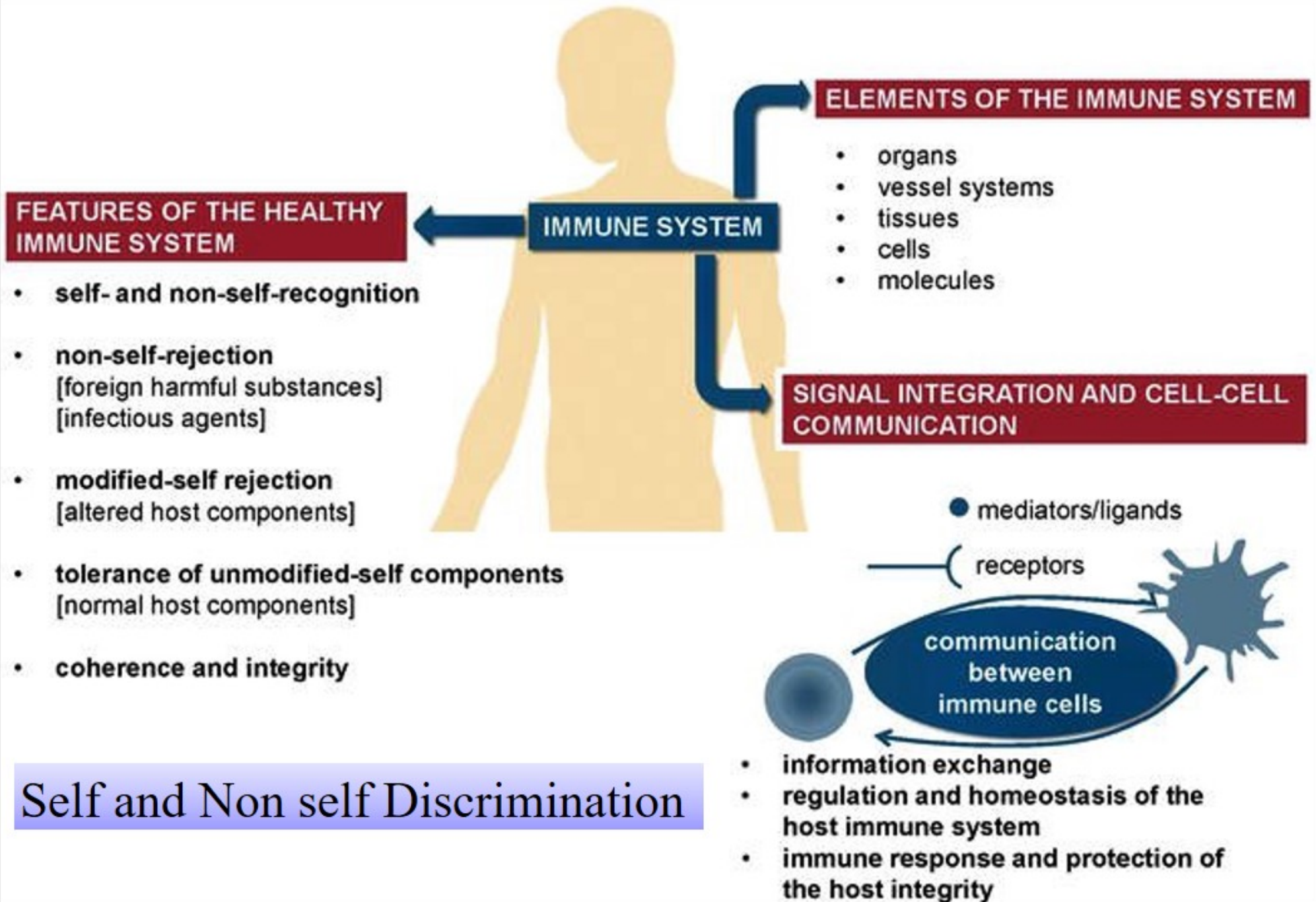
Collective defense mechanism against disease



# Immune System for Homeostasis



# Immune System For Identification



# Immune System at Start of Life



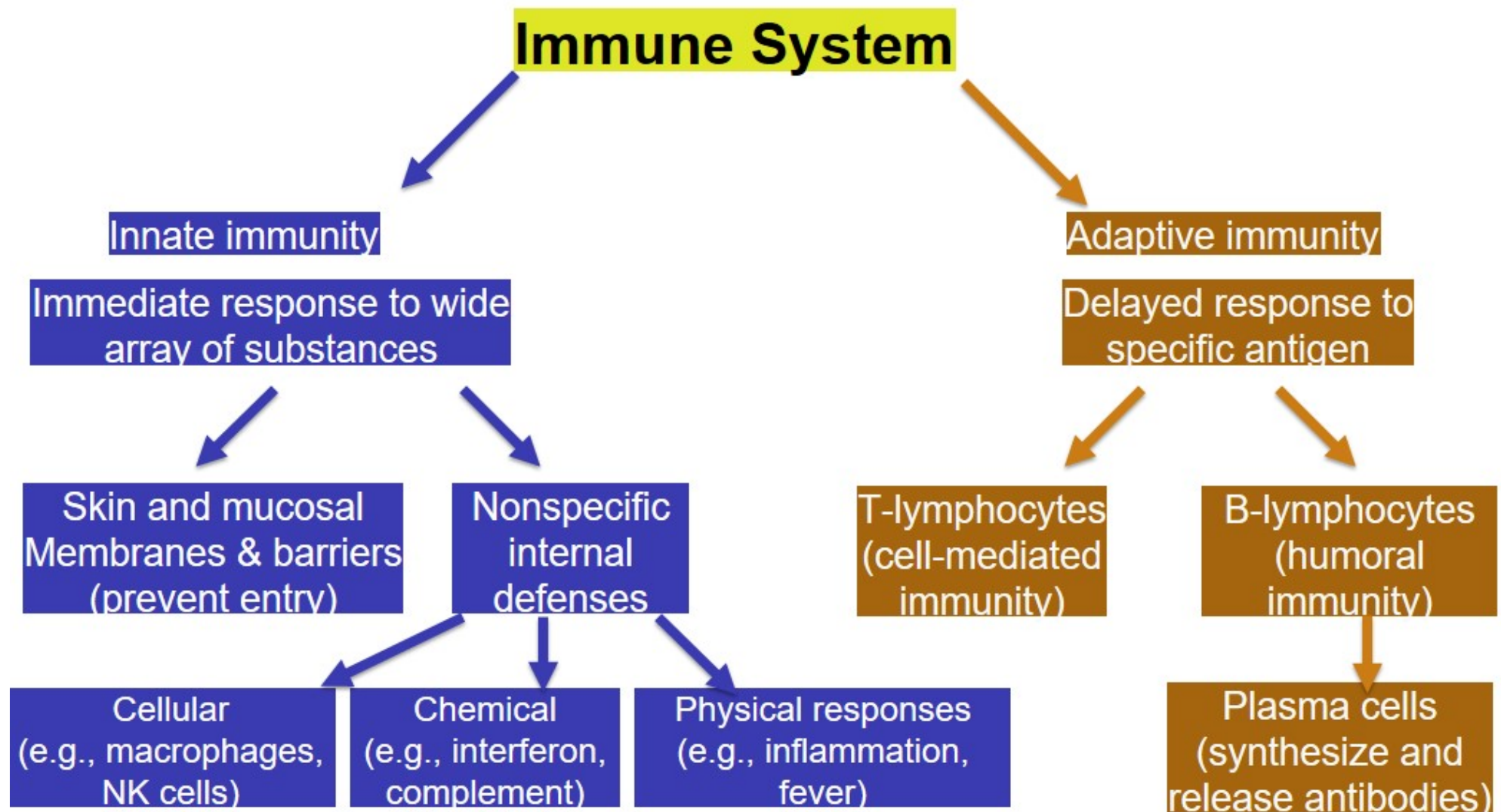


# Immune System as a Defense





# Overview of the Immune System



# Immune System in Innate Way

## Innate Immune System



Gram-negative bacteria

# Immune System in Adaptive Way

webi.edu.au

## Adaptive Immune Pathways

Volume 20

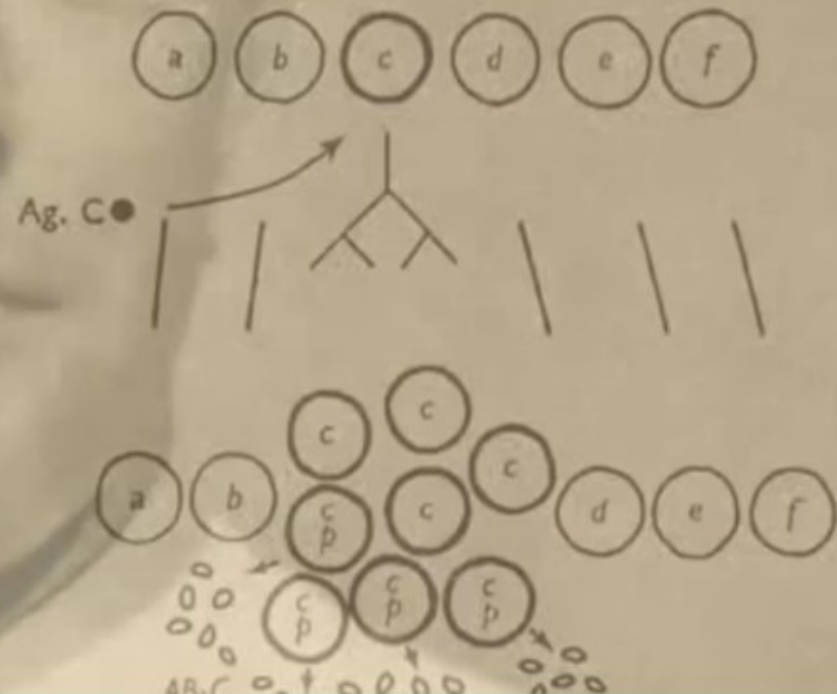
21 October 1957

Number 3

### A Modification of Jerne's Theory of Antibody Production using the Concept of Clonal Selection

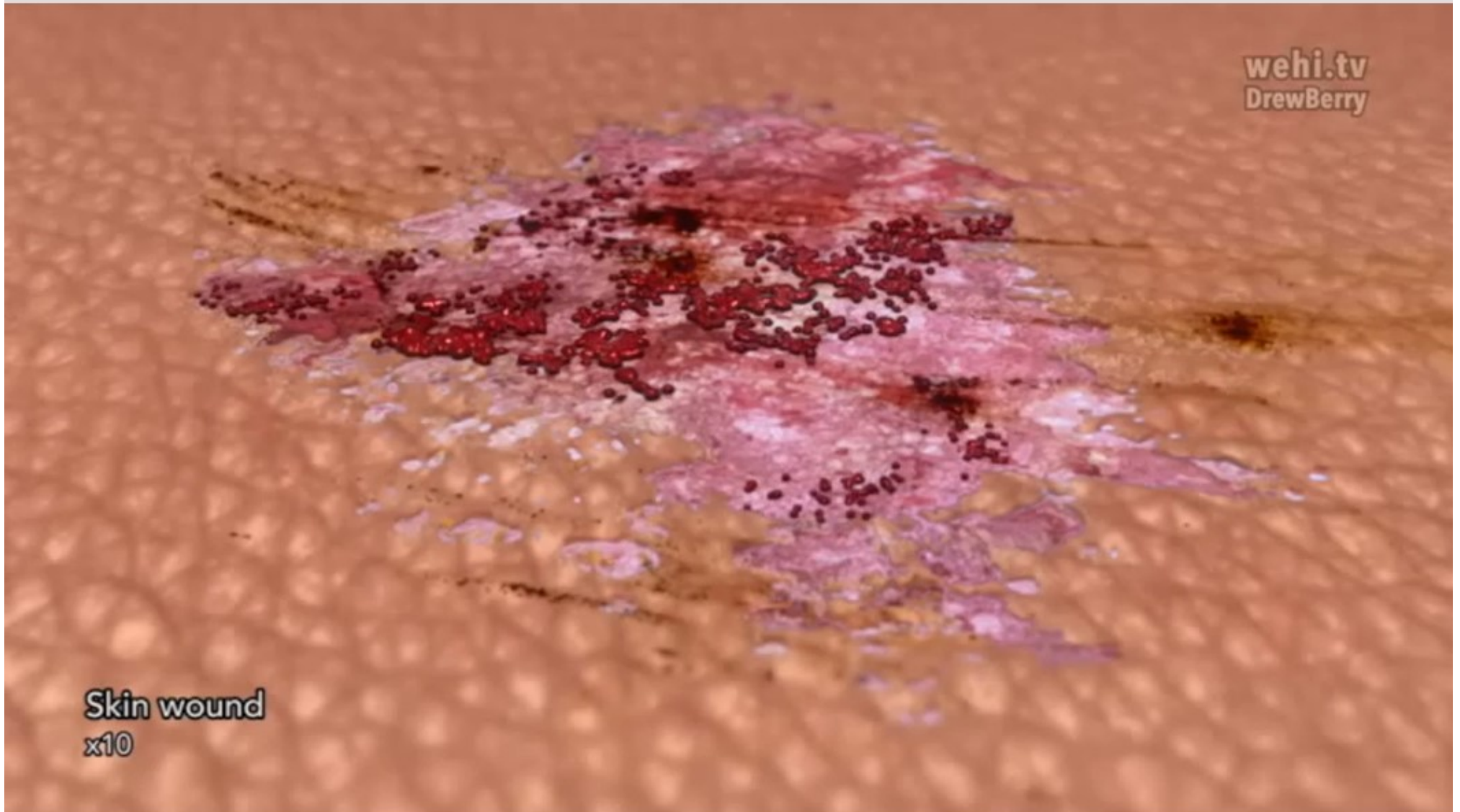
F. M. BURNET\*

There are three current theoretical interpretations of antibody production which, following Talmage (1957) may be referred to as the direct template theory in which the antigen serves as a template against which the specific pattern of the antibody is synthesized, the indirect template theory which postulates a secondary template incorporated into the genetic-synthetic processes of the antibody producing cells (Burnet, 1956), and the natural



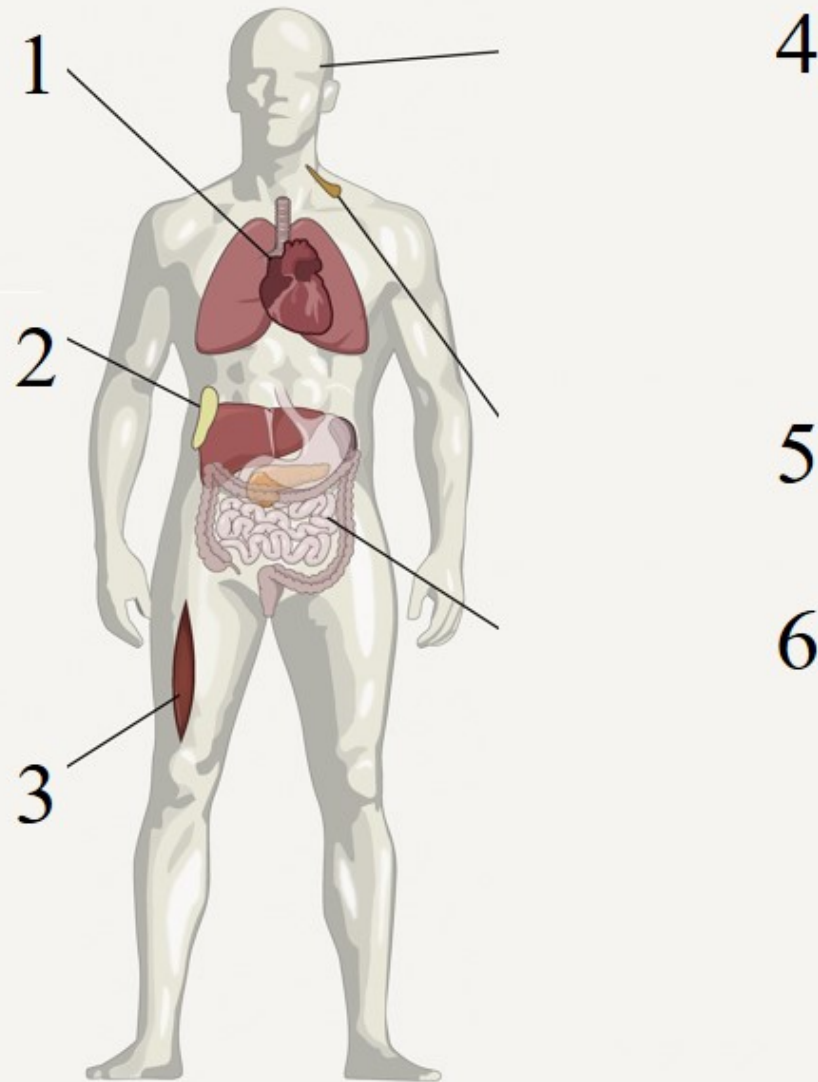


# Injury and Immune Response





# Emerging Functions of the Immune System



■ Normal physiology ■ Pathological effects

# Summary

Health

Disease

Harmonisation for Homeostasis

Clearance of death & damage cells  
Destruction of infectious  
organisms Destruction of cancer  
cells

Immunodeficiency  
Transplant rejection  
Autoimmune disease  
Hypersensitivity and allergy  
Chronic inflammation

Immune System

