

# Polytechnic School Seminars

2013-14

Scientific Sessions  
in Engineering  
and Biosciences

Lecture

## THE IMMUNE RESPONSE: CELLS AND PROTEINS

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The immune response (IR) is a network of tissues, cells and proteins dedicated to :

- recognize the non-self (infections, tumour cells , etc)
- process the information and destroy the aggressors, to keep our homeostasis

All IR cells derive from the haematopoietic precursors in the bone marrow. They receive the information through the membrane receptors and, with the activation of several intracellular pathways, give the signal to the cell nucleus in order to synthesise different proteins (antibodies, cytokines, chemokines , etc).

The IR cells are distributed in all the body tissues and circulate through the lymphatic vessels. Cytokines are the main communication signals between cells and antibodies are the neutralising agents of bacterial infections.

**UVIC**  
ESCOLA POLITÈCNICA  
SUPERIOR

**16.12.2013**

Universitat de Vic  
Aula TS116

9:30 h



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FUNDACIÓN ESPAÑOLA  
PARA LA CIENCIA  
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