

Homologies Différences Between Sea Star Immune System and Human One

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On the other hand, to compare sea star immune system with human one seems like madness...And yet I dare!

The sea star belongs to Echinoderm phylum. It is situated at the high level of Invertebrates in Evolution.

Evolution makes this phylum : a « Frontier » one between Invertebrates and Vertebrates. Recently I read attentively the communication of Louis du Pasquier which has been published, In 2024, at D.C.I [1].

L du Pasquier is an honorable scientific researcher, in Comparative Immunology.

But, from my point of view, he overcomplicates things too much the aim of future Comparative Immunology.

The closer we get to the goal, the more skeptical scientific get cold feet.

My studies in a general way, concern the comparative immunology between sea star immune system and vertebrate one including sometimes, in genetics, the human model which is the « top model » when compared to all the models.

My results, over the past 60 years, lead me to put things simply, when it comes to comparative immunology and specially the rôle of sea star lymphoid organ which is called the axial organ, perhaps, the most ancestral lymphoid organ in Invertebrates [2]. Things are simple : Here is below my trilogy.

It exists immunocytes I call LYMPHOCYTES in sea star Figures 1 and 2 in the axial organ and Tiedemann's bodies (« lymphoid nodes ») [3].

It exists INNATE and ADAPTATIVE Immunity in sea star Immune system (sea star anti-HRP antibody : Figure 3) as for

Human one [4]. At last : It exists a GENOME that confirms these data [5-7].

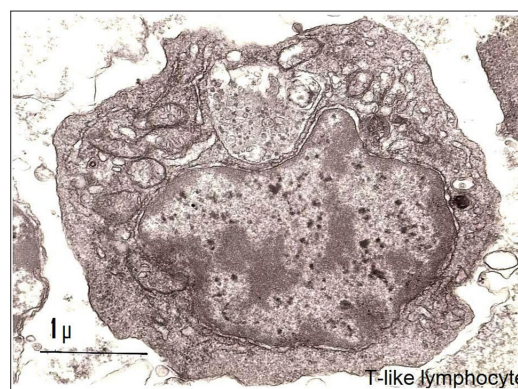


Figure 1 : Sea star Lymphocyte (T sea star lymphocyte)



Figure 2 : Sea star Lymphocyte (B sea star Lymphocyte)

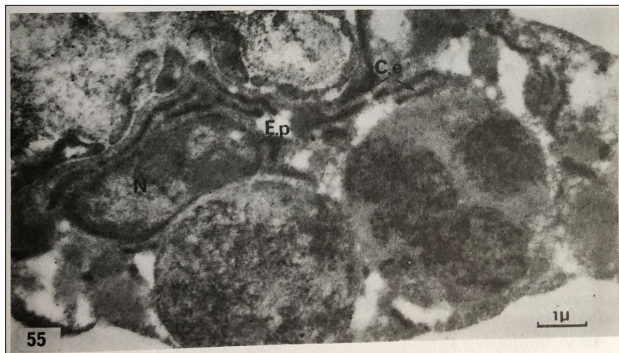


Figure 3 : Adaptative Immunity : The sea star Anti-HRP « precipitate s » antibody in black

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