

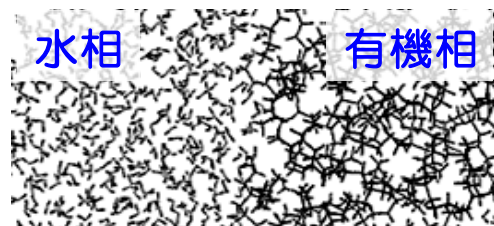
**NEXT** Symposium

***“Membranome”***  
***for***  
***“Bio-Inspired  
Chemical Engineering”***

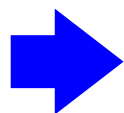
***(Membranome2 / MSB9 / ESL8)***

# “Membranome” for “Bio-Inspired Chemical Engineering”

## Chemical Process



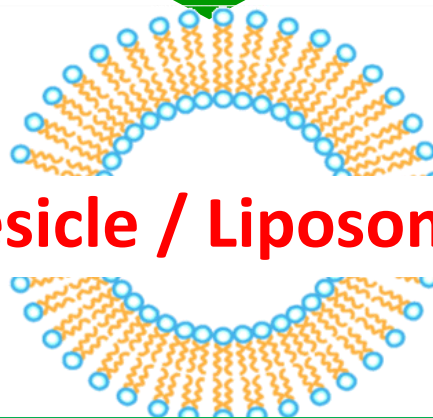
「Interface」  
(Multi-Phase System)



Bio-  
Inspired

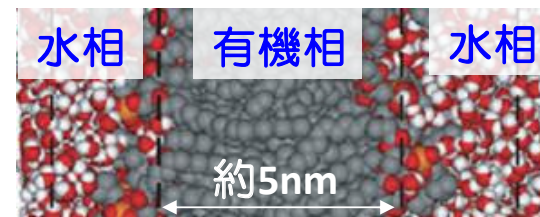
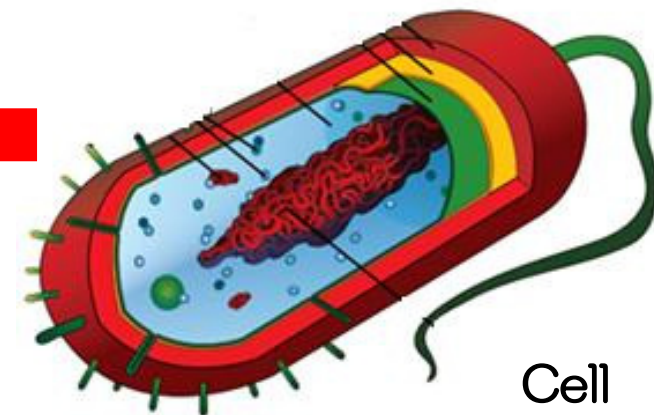


Vesicle / Liposome



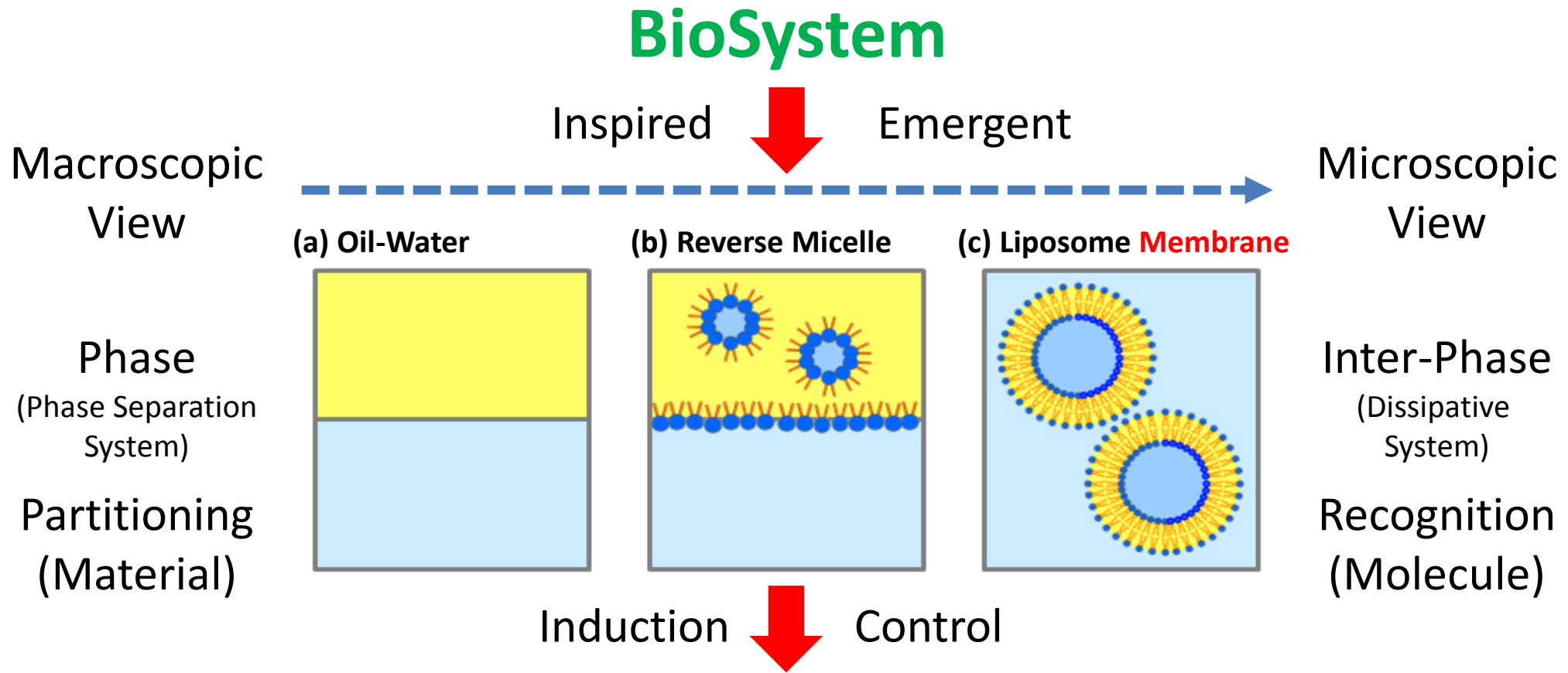
Membranome  
~ Role as a  
“Platform”

## Micro Bioprocess



「Membrane」  
(Self-Organizing System)

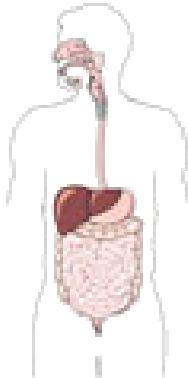
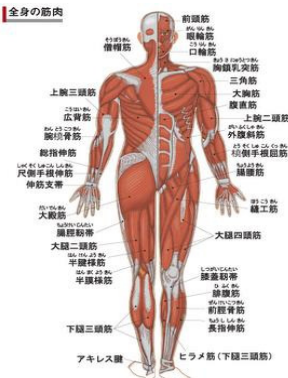
# “*Membranome*” for “*Bio-Inspired Chemical Engineering*”



## Bio-Inspired Chemical Engineering

Creation of Structure and Function  
on Membrane (as a “Platform”)

# Genome, Proteome, & Membranome ?



**Water**  
66 %

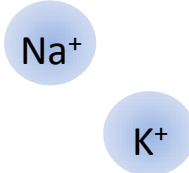
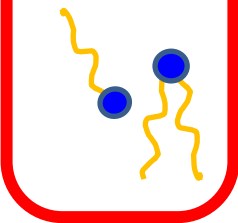
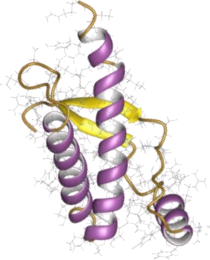
**Protein**  
16 %

**Lipid**  
13 %

**Hydrocarbon**  
0.4 %

**Ions**  
4.4 %

**Nucleic Acid**  
trace

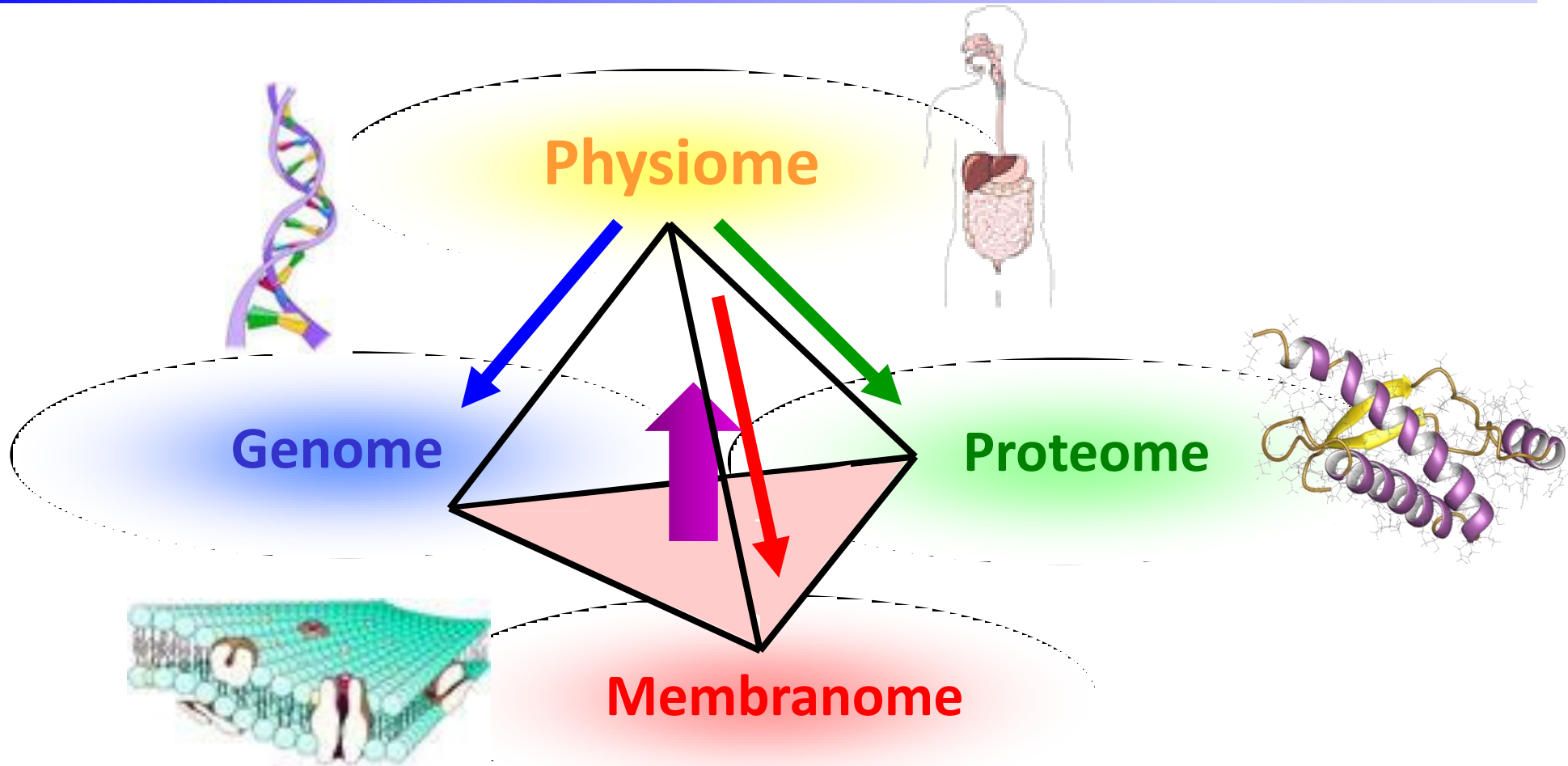


**Proteome**

**?**

**Genome**

# Genome, Proteome, & Membranome ?



<http://www.membranome.jp>

<http://www.membranome.jp/BFMD/>

*Membrane*, **33(6)**, 300-306 (2008)