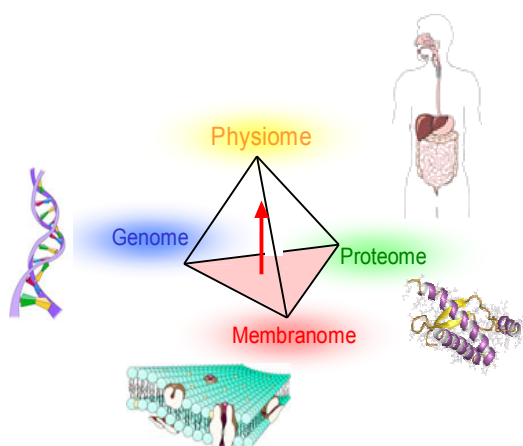


Membranomics:

Engineering Science of Biomembrane and Its Mimics
(Int'l Symp. on Membrane Stress Biotechnology) (MSB8)

Welcome to "Memranome" ! (First Circular)



The biomembrane is one of the important molecular assemblies that contribute in an essential way to the functioning of organelles and of biological cells at large. A systematic study of the "Memranome" - in addition to the genome and proteome - is expected to be achieved in the 21st century with considerable potential for biomedicine, bioengineering and biomaterials development. Intensifying studies on the various aspects of biomembranes with the help of biomembrane mimics hopefully leads (a) to a better understanding of the mechanism responsible for biomembrane-related diseases and (b) to applications in the field of biomimetic materials and bioprocesses.

"Memranome" is a term used for a newly proposed research field, where a variety of potentials of biomembranes and the strategy for possible applications of biomembranes are investigated and systematically classified. (i) **Scientific aspect**: Elucidation of a "complex biological phenomena" by linking it with different view points on the genome and the proteome. (ii) **Engineering aspect**: The most efficient strategy in biological systems shall be utilized for the design and development of biomaterials and bioprocesses, a research area called "Membrane Stress Biotechnology".

Schedule : 2010.9.22nd (Wed) Registration; Half-day Session; Welcome Dinner
2010.9.23rd (Thu) Full-day Sessions; Banquet

Venue : Gingko-Hall (Icho Kaikan), Suita Campus, Osaka University
(<http://www.office.med.osaka-u.ac.jp/icho/icho-jp.html>)

Organization: The symposium will be organized by the **Research Group of Membrane Stress Biotechnology** (Chair: R. Kuboi, Vice-Chair: T. Tsuchido, Secretariat: H. Umakoshi), the **Research Group of Engineering Science of Liposome** (Co-Chairs: R. Kuboi / P. Walde), and **Sigma Multi-disciplinary Research Laboratory** (□MRL, Grad. Sch. of Eng. Sci., Osaka Univ.) "Membranomics" (Leader: H. Umakoshi).

Session : Invited Presentation, General Presentation (Oral / Poster (Short Presentation))

Topics: Contributions of General Researchers are also welcome !! They will be allotted to suitable session by organizing committee.

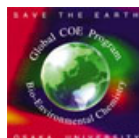
- (A) **X-omes and Memranome**
(Genome, Proteome, Lipidome, Metabolom, Membrane Proteome, Memranome, etc.)
- (B) **Membrane Stress Response Dynamics**
(Biomembrane, Biomimetic Membrane, Vecicle, Microdomain, Dynamic Analysis/Observation, etc)
- (C) **Supravesicular Chemistry**
(Membrane Fusion, DDS, Intracellular Organelles, Eukaryotic Cell, Differentiation, Membrane Chip, etc.)
- (D) **Membrane Process Chemistry**
(Process Chemistry, Industrial Seeds, □-Reactor, Device/Material, Interface, Catalysis, LIPOzyme, etc.)

Registration Fees: 5,000 yen (Academic), 10,000 yen (Industry), 1,000 yen (Student)

Deadline: 2010.8.25th (Abstract Submission) / 2010.9.8th (Registration)

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<http://www.memranome.jp> (will appear soon !!)



R.G. of Membrane Stress Biotechnology
ΣMRL "Membranomics"
R.G. on Engineering Science of Liposome
GCOE "Bio-Environment" Chemistry
MEXT/JSPS Grant in Aid