ABSTRACTS OF THE 4TH MEMBRANE STRESS BIOTECHNOLOGY SYMPOSIUM

第 4 回 メンブレン・ストレスバイオテクノロジー シンポジウム　要旨集

SEPTEMBER 8, 2006

KANSAI UNIVERSITY CENTENARY HALL
YAMATE-CHO, SUITA

MSB4

Program of the 4th Membrane Stress Biotechnology Symposium

Oral Session

	Presenter	Title	Chairman
9:20	T.Tsuchido	Opening Remark	
9:30	K.Nakata	Identification of Target Sites and Acquired Resistant Mechanism of Escherichia coli Cells for Antibacterial Surfactants	Yokota
9:50	T. Sumitomo	Bacterioclastic Action of a Gemini-Quaternary Ammonium Compound	Yokota
10:10	A.Yokota	Adaptation to Bile Acid and Its Mechanism in Lactobacillus gasseri JCM1131T, a Lactic Acid Bacterium Isolated from Human Intestine	Kuboi
10:50	T.Tsuchido	A Challenge of Membrane Stress Biotechnology for Microorganism Control	Kuboi
11:20	S.Ogihara	Cellular Functions of Annexin: Expansion and Repair of the Plasma Membrane	Kuboi
12:00	**Lunch**		
13:00	K.Murofushi	Early Weaning Induces Anxiety and Precocious Myelination in Mice	Tsuchido
13:40	R. Kuboi	Approach on Alzheimer Disease Based on Membranome -Application of Membrane Stress Biotechnology-	Tsuchido

14:10	**Break**		
14:20	J. Sakamoto	Use of GFP-Based Sensor for Monitoring of Cellular and Membrane Stress in Bacteria	Umakoshi Shimanouchi Yoshimoto Morita Hayakawa Matsumura
14:40	A.Nozawa	Oxidation of Dopamine and L-DOPA by Aβ(1-42)/Cu Complex on Liposome Membrane	
15:00	T.Hayakawa	Organization of Ceramide Domains in Model Membranes	
15:20	M.Yoshimoto	Decomposition of Hydrogen Peroxide Mediated by Phospholipid Bilayer Membranes	
15:40	Y.Ohama	Liposome Membrane Can Modulate Both SOD and CAT Activities of Manganese Porphyrin Complex	
16:00	T.Shimanouchi	Detection of Surface Property of Cells / Liposomes - Analysis of Dielectrophoretic Behavior -	
16:20	R. Kuboi	Closing Remark	
16:30	**Poster Preview**		
16:40	**Poster Session**		
17:40	**Party**		
19:00			

Poster Session

	Presenter	Title
(A)	**Stress-Response of Bacterial Cells**	
1	T. Yoneda	A Role of σE Factor Involving in the Membrane Stress Response for the Stress Tolerance of Heat-Injured Escherichia coli
2	H. T. Bui	The Role of Liposome Membrane on in vitro Gene Expression System
3	K. X. Ngo	Active Roles of Liposomes and Heat Stress for Enhanced Release of Chitosanase from Streptomyces griceus
(B)	**Membrane-Based Materials**	
4	Y. Fukuta	Antitumor Activity of Novel-Lectin-Immobilized Vesicle Composed of Non-ionic Surfactant Span80 in the Mouse with Colon26 Tumor toward Human Clinical Application in Drug Delivery System
5	Y. Ohama	Liposome Membrane Can Modulate Both SOD and CAT Activities of Manganese Porphyrin Complex
6	L. Q. Tuan	LIPOzyme: Liposome-Recruited Activity of SOD at High Concentration of Hydrogen Peroxide
7	H. Umakoshi	LIPOzyme for Membrane Process Chemistry
(C)	**Bioconversion Based on Membrane**	
8	D. Ishikawa	Disaggregation of Aβ Fibril with Dopamine and Aβ/Cu Complex with Liposome
9	A. Nozawa	Oxidation of Dopamine and L-DOPA by Aβ(1-42)/Cu Complex on Liposome Membrane
(D)	**Fatty Acids-Related Response of Membrane**	
10	M. Tasaki	Effect of Heterogeneous Membrane Structure on Dopamine Oxidation Catalyzed by Aβ/Cu Complex
11	H. Uejima	Mode of Killing Action of a Nonionic Surfactant Diglycerin Monolaurate on Yeast Cells

(E) Novel Characterization Method for Membrane

12	H. Ishii	Detection of Liposome-Protein Interaction on Membrane Chip System
13	A. Hiroiwa	Novel Detection Method of Amyloid Fibril Using Foluorescence Polarization Method
14	S. Morita	Effects of Fatty Acid on Interaction between Liposome Immobilized QCM and Amyloid β-Peptide

(F) Spore Surface : Proteinous Membrane

15	S. Yamazaki	Relationship between the Surface Structure and the Resistance to Oxidizing Agents of Bacterial Spores
16	Y. Hirai	Polymerization of Amyloid β-Peptides by Tissue Transglutaminase on Liposome Membrane