

PROGRAM

Wednesday, September 3, 2008

Opening Session

9:00	Opening Remarks	Yoshiki Nishizawa
9:10	Greeting	Nobuya Hashimoto
9:20	Greeting	Nancy G. Klimas
9:30	Greeting	Suzanne D. Vernon

Keynote Lectures

Chairs: Yasuyoshi Watanabe / Benjamin H. Natelson

9:40	KL-01 Immune and neuroendocrine networking, and novel approaches to biomarker discovery in CFS/ME and related illnesses Nancy G. Klimas University of Miami and the Miami Veteran Healthcare System, USA
10:10	KL-02 The epidemiology of fatigue and Chronic Fatigue Syndrome Peter D. White Barts and the London Medical School, London, UK
10:40	----- <i>Coffee Break</i> -----

Chairs: Yoshiki Nishizawa / Birgitta M. Evengård

11:00	KL-03 A genomic approach to understand the biology of fatigue and fatiguing illness to improve objective diagnosis and treatment Suzanne D. Vernon CFIDS Association of America, USA
11:30	KL-04 Fatigue science for human health Yasuyoshi Watanabe The 21st Century COE Program, "Base to Overcome Fatigue", MEXT, Molecular Imaging Research Program, RIKEN, Department of Physiology, Osaka City University Graduate School of Medicine, JST/RISTEX, Japan

12:10-13:00	Luncheon Seminar	[sanofi-aventis K.K., Astellas Pharma Inc.]
		Chair: Yoshiki Nishizawa
	Association between metabolic syndrome and insomnia Naohisa Uchimura Department of Neuropsychiatry, Kurume University School of Medicine, Fukuoka, Japan	

[Symposium 1] Chronic Fatigue Syndrome (CFS) and Related Diseases(I)

Chairs: Kenny L. De Meirleir / Hirohiko Kuratsune

- 13:10 **S1-01** Biomarkers in CFS
Birgitta M. Evengård
- 13:35 **S1-02** Chronic Fatigue Syndrome & Fibromyalgia: An exploration of differences
Benjamin H. Natelson
- 14:00 **S1-03** Dynamics of brain structure in CFS
Floris P. de Lange
- 14:25 **S1-04** Neural mechanisms underlying chronic fatigue (P-07)
Masaaki Tanaka
- 14:50 **S1-05** Ventricular CSF lactate is elevated in Chronic Fatigue Syndrome compared to generalized anxiety disorder: An *in vivo* ¹H magnetic resonance spectroscopic imaging study
Dikoma C. Shungu
- 15:15 ----- *Coffee Break* -----

Chairs: Leonard A. Jason / Kazuhiro Kondo

- 15:35 **S1-06** Scottish centre for the study of fatigue science: DNA microarray analysis of gene expression in Chronic Fatigue Syndrome
John W. Gow
- 16:00 **S1-07** Dipeptidyl peptidase IV (DDP-IV/CD26) and neuropeptide Y (NPY): Biomarkers for Chronic Fatigue Syndrome
Mary A. Fletcher
- 16:25 **S1-08** A population-based twin study of functional somatic syndromes
Kenji Kato
- 16:50 **S1-09** A new Japanese guideline for Chronic Fatigue Syndrome
Tokuzo Matsui

17:30-18:30 Poster Discussion

19:00-21:00 Buffet Dinner

Thursday, September 4, 2008

[Symposium 2] Chronic Fatigue Syndrome (CFS) and Related Diseases(II)

Chairs: Suzanne D. Vernon / Hidenori Koyama

- 8:30 **S2-01** Viral DNA in the gastric and intestinal mucosa of patients with Chronic Fatigue Syndrome
Kenny L. De Meirleir
- 8:50 **S2-02** Increased D-lactic acid intestinal bacteria in patients with Chronic Fatigue Syndrome
Kenny L. De Meirleir
- 9:10 **S2-03** Identification of novel HHV-6 latent protein associated with mood disorders and molecular
mechanism of fatigue due to overwork
Kazuhiro Kondo
- 9:35 **S2-04** Immunologic and virologic profiling of individuals with Myalgic Ecephalomyelitis/
Chronic Fatigue Syndrome (ME/CFS) reveals distinct pathogen associated signatures within a well
characterized cohort.
Judy A. Mikovits
- 10:00 **S2-05** Chronic Fatigue Syndrome and major depressive disorder
Nobuo Kiriike
- 10:25 ----- *Coffee Break* -----

[Symposium 3] Measure/Scale of Fatigue

Chairs: Nancy G. Klimas / Kazuhiro Iwai

- 10:40 **S3-01** Evaluation of fatigue by acceleration plethysmography (Part.I) (From the viewpoint of
autonomic nervous system)
Kouzi Yamaguti
- 11:00 **S3-02** The CardioPulmonary Exercise Test (CPET) for the differential diagnosis of chronic fatigue
Ruud C. Vermeulen
- 11:20 **S3-03** Heart rate variability can have an insight into working-quality of white-collar jobs
Jun-ichi Koizumi
- 11:40 **S3-04** Non-arbitrary detection of flicker fusion threshold with pupil diameter and visual evoked
magnetic field
Nobuyoshi Harada
- 12:00 **S3-05** Alternans lowers the scaling exponent of heartbeat fluctuation dynamics: A detrended
fluctuation analysis in animal models and humans for a health check up
Toru Yazawa

12:30-13:20

Luncheon Seminar

[Soiken Holdings Inc. Japan Preventive Medicine Inc.]

Chair: Yosky Kataoka

Anti-fatigue effects of imidazole dipeptides

Masaaki Tanaka

Department of Biomarker and Molecular Biophysics, Osaka City University Graduate
School of Medicine, Osaka, Japan

[Symposium 4] Mechanisms of Fatigue and Fibromyalgia

Chairs: Peter D. White / Kiyoshi Matsumura

- 13:35 **S4-01** Fatigue signalings in the brain
Yosky Kataoka
- 14:00 **S4-02** Disorders of homeostasis centers in fatigued rat
Hiroshi Kiyama
- 14:25 **S4-03** Disturbed heme metabolism in the liver of fatigue model rats and its involvement of fatigue
Kazuhiro Iwai
- 14:50 **S4-04** Brain mechanisms of immunologically induced fatigue in the rat
Toshihiko Katafuchi
- 15:15 ----- *Coffee Break* -----

Chairs: Floris P. de Lange / Hiroshi Kiyama

- 15:35 **S4-05** Sex difference in the stress response to fasting
Mika Jikumaru
- 16:00 **S4-06** Imaging of lactate utilization in the brain *in vitro* and *in vivo*
Kiyoshi Matsumura
- 16:25 **S4-07** Intermittent cold stress causes a long-term allodynia and hyperalgesia in mice, a model for
generalized chronic pain syndrome or Fibromyalgia
Hiroshi Ueda

16:50-18:00 Poster Discussion

19:00-21:30 Reception

Friday, September 5, 2008

[Symposium 5] Childhood/Adolescent Fatigue and Learning Motivation

Chairs: Katherine S. Rowe / Teruhisa Miike

- 8:30 **S5-01** Sleep problems and Chronic Fatigue Syndrome in childhood
Teruhisa Miike
- 8:55 **S5-02** Autoantibodies generating fatigue long before the onset of the diseases in children
Yasuhiko Itoh
- 9:20 **S5-03** Natural history of Chronic Fatigue Syndrome in adolescents in Australia
Katherine S. Rowe
- 9:45 **S5-04** Motivation for learning, fatigue and sleep; from the results of the cohort study
Sanae Fukuda
- 10:10 **S5-05** Neural substrates of academic achievement motivation related to neural mechanism of fatigue
Kei Mizuno
- 10:35 ----- *Coffee Break* -----

[Symposium 6] Treatment and Fatigue

Chairs: John W. Gow / Masaaki Tanaka

- 10:55 **S6-01** Relationship between fatigue and the daily diet in Japan (P-22)
Hirohiko Kuratsune
- 11:20 **S6-02** Behavioural treatments for Chronic Fatigue Syndrome
Peter D. White
- 11:45 **S6-03** Biological predictors of change following participation in non-pharmacologic interventions
Leonard A. Jason

12:10-13:10 Lunch

Chairs: John W. Gow / Masaaki Tanaka

- 13:20 **S6-04** Psychosomatic treatment and management of Chronic Fatigue Syndrome
Chiharu Kubo
- 13:45 **S6-05** Fatigue in patients with end-stage renal diseases
Hidenori Koyama
- 14:10 **S6-06** Development of anti-fatigue food: Results from human studies
Yoshitaka Kajimoto

Closing Remark

- 14:35 Hirohiko Kuratsune

Wednesday, September 3 - Friday, September 5, 2008

Poster Session

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|------|--|----------------------|
| P-01 | A two-year follow-up study of psychiatric disorders comorbid with Chronic Fatigue Syndrome (CFS) | Yasunori Matsuda |
| P-02 | Summary of patients with chronic fatigue visiting to medical experts in fatigue | Yukiko H. Kato |
| P-03 | Cognitive Behavioral Therapy (CBT) for patients with Chronic Fatigue Syndrome: Comparing CBT in group and individual therapy | Nahoko Kusaka |
| P-04 | No difference of parvovirus B19 prevalence between Chronic Fatigue Syndrome patients and healthy individuals in Japan | Yukiko H. Kato |
| P-05 | Evaluation of fatigue by acceleration plethysmography (Part.II) (From the view point of complexity system) | Kouzi Yamaguti |
| P-06 | Experimental therapeutic approach with polymyxin B column absorption to Chronic Fatigue Syndrome | Kazuki Miura |
| P-07 | Neural mechanisms underlying chronic fatigue | Masaaki Tanaka |
| P-08 | Job-related stress, job satisfaction, and working conditions among doctors in the regional core hospitals | Sayuri Kaneko |
| P-09 | Physical performance tests are useful for the evaluation of fatigue induced by physical load in healthy people | Tomohiro Sugino |
| P-10 | Therapeutic effects of thalassotherapy on fatigue in healthy young women | Kuniaki Takagi |
| P-11 | Increase in serotonin release in human brain induced by exercise: A PET study | Toshihiko Fujimoto |
| P-12 | Investigation of Okinawa-spa effect from the view point of EEG power value | Toshiharu Kurita |
| P-13 | The relationship between fatigue and visual evoked cortical magnetic response | Yoshihito Shigihara |
| P-14 | A preliminary trial of physiological fatigue evaluation using heart rate variability analysis | Seiki Tajima |
| P-15 | Salivary cortisol and self-reports of pleasure-displeasure of unmarried young people in contact with infant | Kyoko Imai-Matsumura |
| P-16 | Fatigue is associated with eating habits and intake of nutrients in general population | Hisako Fujii |
| P-17 | Infant-directed behavior and speech of university students: A basic study aiming at preventing childcare stress. | Ai Nakagawa |
| P-18 | Fatigue and metabolic syndrome among Japanese men and women | Tetsuya Ohira |

P-19	The evaluation of fatigue by using plethysmograph and self-organizing map	Tetsuya Sasabe
P-20	Effect of acupressure points stimulation on ocular fatigue causes by VDT work	FengHao XU
P-21	Which aroma is the most effective for anti-fatigue? A preliminary study	Sanae Fukuda
P-22	Relationship between fatigue and the daily diet in Japan	Hirohiko Kuratsune
P-23	Imidazole dipeptides attenuate fatigue induced by physical load in human	Sayaka Aoyagi
P-24	Examination of the high bright light therapy for the Childhood Chronic Fatigue Syndrome	Takako Jodoi
P-25	Metabolic dysfunction and circadian rhythm abnormalities in children and adolescents with sleep disturbance	Akemi Tomoda
P-26	The actigraphic evaluation of sleep-awake rhythm and daily activity level among with Child Chronic Fatigue Syndrome	Junko Kawatani
P-27	Feedback from young people with Chronic Fatigue Syndrome on the perceived usefulness of various management strategies including alternative therapies	Katherine S. Rowe
P-28	Aspects of intellectual ability in Childhood Chronic Fatigue Syndrome (CCFS)	Miyuki Takano
P-29	The association between effort-reward imbalance for learning and fatigue in school children	Sanae Fukuda
P-30	Learning motivation among early elementary school aged children - What would make them intrinsically motivated?	Rika Okamura
P-31	Psychosocial predictors of fatigue among school children in Japan: The one-year follow-up study	Emi Yamano
P-32	Children's feeling transformation and health care in summer seaside camp	Tadashi Yano
P-33	Examination of Hb/Alb as the simple screening of Sleep Apnea Syndrome (SAS) for psychiatric patients	Tatsuyo Suzuki
P-34	Moxibustion improved pain in patients with Fibromyalgia	Takeo Madarame
P-35	Activation of microglia and reduction of cerebral glucose metabolism in a mouse model of fatigue caused by sleep disturbance	Miho Shukuri
P-36	Alterations of inflammatory responses to LPS in rat fatigue model	Nobue Shishioh-Ikejima
P-37	Prolonged fatigue exhibits the opposed proliferation regulations in the anterior and intermediate pituitary cells	Tokiko Ogawa
P-38	Aged garlic extract as an anti-fatigue agent	Takeshi Nishihama
P-39	Genotype dependent antidepressant-like effect of green odor in mice	Yasuhito Nakatomi

P-40	Inflammatory cytokines expression in the brain is involved in poly I:C-induced immunological fatigue-like behavior in rats	Masanori Yamato
P-41	Mechanisms of decreased [18F] 2-fluoro-2-deoxy-D-glucose accumulation in the brain of fatigued rats	Ko-hei Akazawa
P-42	Effects of (-)-epigallocatechin gallate on an animal model of combined (physical and mental) fatigue	Yoshitake Baba
P-43	A novel method of PET imaging for neuropsychiatric disorders in mice	Hiroshi Mizuma
P-44	Non-REM sleep induction after excessive brain excitation: A possible pathway for central fatigue recovery	Yilong Cui
P-45	The role of laminin-332 and -511 in the regulation of stress-induced alopecia	Daisuke Tsuruta
P-46	Regulation of gastric emptying by reciprocal alteration between plasma catecholamine and ghrelin levels in a rat model of fatigue	Masahiro Ochi
P-47	Expression of c-Fos in the central nervous system in a rat model for immunological fatigue induced by poly I:C administration	GuangHua Jin
P-48	Changes in behavior and brain GABAergic activity by mental fatigue: PET study with macaque monkeys	Hiroataka Onoe
P-49	Decrease of hepatic delta-aminolevulinate dehydratase activity in an animal model of fatigue	Tsuyoshi Tahara
P-50	Up-regulation of aromatase in the fatigued model rats	Makoto Ozawa