

## 第 15 回 札幌国際がんシンポジウム

### テーマ

“Psycho-Neuroimmunology and Cancer”

### 日時

1995 年 7 月 5 日～8 日

### 会場

センチュリーロイヤルホテル（札幌市中央区）

### 代表世話人

仙道 富士郎（山形大学）

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## The 15th Sapporo International Cancer Symposium

### Theme:

“Psycho-Neuroimmunology and Cancer”

### Date:

July 5-8, 1995

### Venue:

Century Royal Hotel, Sapporo, Japan

### Organizers (\*Chairpaerson):

Fujiro Sendo\*

Hugo O. Besedovsky

Nakaaki Ohsawa

Atsushi Uchida

Ichiro Azuma

Ronald B. Herberman

Charles D. Spielberger

Kurt S. Zanker

## **Program**

### **Opening Remarks**

Hiroshi Kobayashi

Fujiro Sendo

### **Session 1: The Basic Concepts in Neuro-Immune-Endocrine Interactions**

Cytokines as mediators of neuro-immune-endocrine interactions

Hugo O. Besedovsky

Signal transduction through gp130 which is involved in Neuro-Immune-Endocrine Systems

Toshio Hirano

Role of vitamin C in neuro-immune interaction

Itaru Yamamoto

Mast-cell activation upon psychosocial stress and NGF release in rodents and humans

Enrico Alleva

The impact of stress on the reactivation/replication of latent Epstein-Barr virus

Ronald Glaser

Neuro-immune-endocrine interactions during neonatal development: Implications for tumor formation

Nicholas Hall

### **Session 2: Neuro-Immune-Networks in Host Tumor Relationships**

How might psychoneuroimmunology impact on tumor growth in animals and in patients with cancer?

Ronald B. Herberman

Role of neuro-immune-endocrine networks in stress, aging and cancer

Katsuiku Hirokawa

Immune-neuro-endocrine networks in host-tumor interactions

Adriana del Rey

The brain IFN- $\alpha$  suppresses NK activity via an opioid-dependent activity of hypothalamus and sympathetic activity

Tetsuro Hori

Opiates, immunity, and neoplasia

Yehuda Shavit

Pharmacological and morphological evidence for existence of brain regulatory areas and circuits in the immune response induced by immunotherapeutics

Karel Masek

Modulation of neutrophil apoptosis and functions by psychophysiological stress and dexamethasone

Tomoyuki Kato

### **Session 3: Psycho-neuroimmunology in Cancer: Clinical Aspects**

Evaluating the efficacy of psychosocial interventions for cancer outcome: Overview of conceptual and methodologic considerations

Lydia R. Temoshok

Biological significance of autologous tumor killing activity and its psychoneuro-immunological modulation in human cancer patients

Atsushi Uchida

Familial risk of breast cancer, natural killer cell activity, and psychological distress

Dana H. Bovbjerg

On the trace of psycho-neuroimmunological links in cancer patients: Results of a six years' study

Kurt S. Zanker

Neuro-immuno-endocrinological aspects of BRM and cytokine therapy in cancer patients

Nakaaki Ohsawa

Cancer patients and mental or behavioral disorders and stress –Bio-psyco-social approach for cancer–

Tomonobu Kawano

**Session 4:** General Discussion for Poster Presentation

Cytokine regulates Ca<sup>2+</sup> mobilizing receptors in culture glioma cells

Akira Kugaya

Effects of steroid hormones on the GABA- and NMDA-induced increases in intracellular Ca<sup>2+</sup> concentration in rat cortical neurons

Minoru Takebayashi

Apolipoprotein A-IV acts in the brain to regulate gut function

Toshikazu Okumura

Studies of corticosterone response of neonatal mice to allogeneic spleen cell transfer and trial of modification of neonatal tolerance induction by coadministration of corticosterone or IL-1 beta

Hiroshi Furukawa

Suppression of splenic lymphocyte activities by ventromedial hypothalamic stimulation: Role of the sympathetic nervous system

Shiki Okamoto

Acute electrical stimulation of lateral hypothalamus increases NK activity in rats

Marcus Wenner

Effect of stress on experimental B16 melanoma metastasis

Jun Kanno

Involvement of neuro–endo–immunological axis in antitumor and anticachectic effects of lentinan – contribution of cytokines and arachidonic acid metabolites to autonomous motion

Manabu Suzuki

Effects of stress on the interaction on neural, endocrine and immune systems and their modulation by biological therapy

Yuji Okubo

Decrease of cytotoxic lymphocyte counts in highly alexithymic subjects

Noriyuki Kawamura

The scientific aspect of QOL in anticancer immunotherapy

Kunitsugu Ishikawa

### **Session 5: Panel Discussion**

Basic Concepts in Neuro–immune–Endocrine Interactions

Hugo O. Besedovsky, Toshio Hirano, Itaru Yamamoto, Enrico Alleva, Ronald Glaser, Nicholas Hall (Panelists)

Neuro–Immune–Endocrine Networks in Host Tumor Relationships

Ronald B. Herberman, Katsuike Hirokawa, Adriana del Rey, Tetsuro Hori, Yehuda Shavit, Karel Masek, Tomoyuki Kato (Panelists)

Psyco-Neuroimmunology in Cancer

Lydia R. Temoshok, Atsushi Uchida, Dana H. Bovbjerg, Kurt S. Zanker, Nakaaki Ohsawa, Tomonobu Kawano (Panelists)

**Closing Remarks**

Fujiro Sendo