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The 20th Annual Meeting of JSIT 2013 (Japanese Society of Immunotoxicology)

September 12-13, 2013

Auditorium (Daigaku Yongou-kan), Tokai University
Yoyogi Campus

2-28-4 Tomigaya, Shibuya-ku, 151-8677 Tokyo, Japan.

Organizing Committee of the 20th Annual Meeting of
JSIT

<http://www.jsit2013.com>

Theme:

“To explore the vision of Immunotoxicology”

The subject matter of the 20th Anniversary Annual Meeting of the Society is “To explore the vision of Immunotoxicology” Although the details of the 20th Memorial Lectures as well as Symposium are being prepared now, the contents should be apposite for the 20th anniversary, including invited speakers from overseas.

In addition, educational lectures on two separate subjects are also included in the plan.

Lecture 1 will be on “Epigenetics of the function and differentiation of immune-competent cells-aspects of immunotoxicology”, while Lecture 2 will deal with “Higher-order function analysis of the system of Notch/NotchL in the development and differentiation of the immune system”.

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Deadline for abstract submissions: July 19, 2013

Program (Tentative Schedule)

■ September 12, 2013 (THU)

- The 20th Memorial Symposium
- Luncheon Seminar 1
- Award Lectures
- Educational Lecture 1
- Oral / Poster presentation
- Social gathering
Campus Cafeteria

■ September 13, 2013 (FRI)

- Educational Lecture 2
- Luncheon Seminar 2
- Oral / Poster presentation
- Workshop
- Awards Ceremony



**New with old in immunotoxicological research
---- What has been and what shall be in JSIT**

Motoyasu Ohsawa

(Hatano Research Institute, Food and Drug Safety Center,
Hadano, Japan)

Towards the 20th anniversary of The Japanese Society of Immunotoxicology (JSIT) in 2013, here is provided a historical information on founding our Society followed with some suggestions about its future challenges. Three topics are described: A brief history of 1) immunotoxicology before founding the research association in Japan and 2) foundation of the immunotoxicology research association and subsequent establishment of JSIT, and 3) some suggestions on further challenges of our Society at the 20th anniversary. After immunotoxicology emerged and developed, immunotoxicologists in Japan founded their research association in 1994, much later than in Europe and the United States. The association was aimed at sharing novel concept of the young science and promoting

research activities of them. Their collaboration contributed to making good and rapid progress in researches, and subsequently developed to establish JSIT. JSIT is a unique organization specialized for immunotoxicology that investigates interactions between xenobiotics and hosts beyond conventional concept of immunity or toxicity. It is suggested finally that for further challenges to unsolved and emerging problems in immunotoxicology, JSIT should reasonably organize projects and contribute to promoting international collaboration with own original perspectives, methods, and proposals.

Young power for immunotoxicological research

Immunotoxicology and my life

Takamasa Kido

(Department of Public Health and Environmental Medicine,
The Jikei University, School of Medicine)

During my graduate student days in the master course at Kitasato University Graduate School of Medical Sciences, I focused on the immunotoxicity of petroleum-derived cleaning solvent for dry cleaning in *in vitro* study. The use of a petroleum-derived cleaning solvent for dry cleaning, instead of tetrachloroethylene (perchloroethylene, PCE), has increased. The toxic effects of the cleaning solvent have been considered low, however, the solvent may cause dermatitis. The mRNA expressions of cytokines related to inflammation and allergy in J774.1 cells exposed to the cleaning solvent or PCE were examined. The mean mRNA expressions of TNF- α and IL-1 β in the 50 μ g/ml group were significantly higher than those in the control. For PCE, the mean expressions of IL-6 and IL-10 in the 800 μ g/ml group were significantly higher than that in the control. The productions of IL-1 β and TNF- α may be altered in human during intoxication of the cleaning solvent as well as those of IL-6 and IL-10 in human during that of PCE, and these may affect on immune cells.

I also studied immunotoxicity of fluoride, the environmental pollutant, by using the mice with renal impairment such as ICR-derived glomerulonephritis (ICGN) mice or High

IgA (HIGA) mice. It is suggested that fluoride induces immunotoxicities in the mice with renal impairment.

In addition, I participated in the study evaluating the toxicity of multi-walled carbon nanotubes (MWCNT). My role in the study was the evaluation of mRNA expressions in splenocytes after whole body inhalation of MWCNT. Relative mRNA expression of IL-1 β in macrophages from the female rats exposed to 5 mg MWCNT/m³ was significantly higher than in control rat cells. For lymphocytes, the cells from male and female rats in the MWCNT-exposed groups had significantly lower IL-2 values than control rat cells. These results suggested that the immunotoxic effects are induced by whole body inhalation of MWCNT.

I continue the study of immunotoxicology as Research assistant at Department of Public Health and Environmental Medicine, The Jikei University, School of Medicine.

Words from new councilors

Accession to the Board

Yoshihiro Takahashi

(Shin Nippon Biomedical Laboratories, Ltd.
Drug Safety Research Laboratories)

I wish to express my profound gratitude to those of my professors and seniors who recommended my appointment to the committee of the Japanese Society of Immunotoxicology.

My experience in the field of immunology began when I was researching cytokine analysis and proliferative reaction using lymphocytes in human peripheral blood and cedar pollen allergens for a Master's degree. I am currently engaged as a study director for drug safety research. I am principally responsible for studies into immunotoxicity, skin sensitization, and irritancy, and have spent several years working in areas that included efficacy and general toxicity studies. General toxicity studies cover a range that includes research into effects on antibody production and immune function. My involvement in these studies has granted me the opportunity to become acquainted with a number of society members. Ordinarily, once a project has

been completed, there is little chance of being able to associate with one's collaborators, but the opportunities for meeting and discussing our work that this society provides researchers are extremely valuable.

Among the society's meetings, that in which I was privileged to make a presentation to the "Joint Research for the Investigation of Procedures for the Evaluation of Immunotoxicity of Pharmaceuticals" workshop, which was held during the seventh annual meeting, is particularly memorable. I was involved in the compilation of chemical compounds and received assistance from my seniors that went far beyond what could be reasonably expected, and I wish to express my gratitude for their kindness.

Recently, SNBL has been conducting research into drug efficacy, and in particular, there has been an increasing demand for infection studies. Following the initiation of these we have gradually established a framework for such undertakings. I will be delighted to hear from anyone who is interested in this field and look forward to working alongside them.

Finally, I look forward to contributing to the development of the Japanese Society of Immunotoxicology, and more than ever, I look forward to your continued assistance and generous encouragement.