

August 20, Sat

10:00-10:05 **Opening address**

Dr. Masamitsu Ichihashi, President of Japanese Society for Photo-Aging Research

10:05-11:05 **Educational Lecture**

Sponsored by
ICHIMARU PHARCOS Co., Ltd.

Chairperson: Masamitsu Ichihashi

EL-1 Elastic fibre remodelling in intrinsically and extrinsically aged skin
Michael J. Sherratt (Molecular Biochemistry, the University of Manchester)

EL-2 Molecular mechanism of elastic fiber assembly
Tomoyuki Nakamura (Department of Pharmacology, Kansai Medical University)

11:10-13:05 **Symposium I 【Pathological mechanisms of wrinkle and sagging】**

Chairpersons: Jin Ho Chung
Fukumi Furukawa

SY I-1 Activation of Peroxisome Proliferator-Activated Receptor alpha (PPAR α) improves aged and UV-irradiated skin by catalase induction
Jin Ho Chung
(Department of Dermatology, Seoul National University College of Medicine, Seoul, Republic of Korea)

SY I-2 Role of Nephrilysin in Ultraviolet-Induced Wrinkle Formation -Epithelia-Mesenchymal Paracrine Interaction during UVB-induced Up-regulation of Nephrilysin
Genji Imokawa (Chubu University, Research Institute for Biological Functions)

SY I-3 Imaging Anatomic Analysis for the Superficial Musuculoaponeurotic System (SMAS)
Itsuko Okuda¹⁾, Keiichi Akita²⁾
1) Department of Diagnostic Radiology, International University of Health and Welfare (IUHW), Mita Hospital
2) Department of Clinical Anatomy, Tokyo Medical and Dental University (TMDU)

SY I-4 Our latest findings on the mechanisms that underlie facial sagging
Tomonobu Ezure (Shiseido Co., LTD. Global innovation center)

13:15-14:15 **Luncheon Seminar I**

Sponsored by ROSETTE Co.,Ltd.

Chairperson: Osamu Ishikawa

LS I-1 Skin barrier dysfunction in various skin diseases
Makoto Sugaya
(Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, Japan)

LS I-2 The effect of topical use of natural ceramide cream rich in galactosylceramide on skin barrier function: the enhanced synthesis of ceramide in the stratum corneum
Tami Igarashi (Research and Development Department, Rosette Co.,Ltd., Tokyo, Japan)

14:25-16:55 **Symposium II**

【Photo-induced pigmented disorders:

Pathological mechanisms and their treatment and prevention】

Chairpersons: Kyoung Chan Park
Yoko Funasaka
Chikako Nishigori

SY II-1 α -Melanocyte Stimulating Hormone and Endothelin-1 Modulate the DNA Damage Response of Melanocytes to UV Exposure
Zalfa Abdel-Malek (University of Cincinnati College of Medicine)

SY II-2 Regenerative trial to prevent and recover from senile pigmentation
Kyoung Chan Park (Seoul National University Bundang Hospital, Department of Dermatology)

SY II-3 Chemiexcitation of Melanin Induced by UV Exposure
Kazumasa Wakamatsu
(Department of Chemistry, Fujita Health University School of Health Sciences)

SY II-4 How Chinese herbs to prevent and rejuvenate photo-aged skin
Leihong Flora XIANG, Chunyun HUANG, Li CHEN, Ye LIU
(Huashan Hospital, Shanghai Medical College, Fudan University, Shanghai, China)

SY II-5 Acquired photo-aggravated facial pigmentary disorders:
Pathological mechanisms and their treatment and prevention in Asian skin
Goh Chee Leok (National Skin Centre, Singapore)

17:00-18:00 **Oral session I**

Chairpersons: Yorihiro Yamamoto
Hidekazu Yamada

O I-1 Influence of carbonylated proteins on skin cells and its blocking agents
Yumiko Yamawaki, Kousei Nishikawa, Yusuke Hasegawa, Taeko Mizutani,
Yuri Okano, Hitoshi Masaki
Tokyo University of Technology Graduate School, Bionics program

O I-2 Pyridoxine prevents the accumulation of carbonylated proteins induced by oxidative stress
Taeko Mizutani¹, Yumiko Yamawaki¹, Mina Shimura², Shin Uemori²,
Satoru Yoshimura², Atsushi Sawamura², Yuri Okano¹, Hitoshi Masaki¹
1) School of Bioscience and Biotechnology, Tokyo University of Technology
2) Development Medicine & Regulatory Affairs Div. SSP CO., LTD.

O I-3 Availability and Safety of Fullerene for Skin Photoaging
Hisae Aoshima, Masayuki Ito
Vitamin C60 BioResearch Corporation

O I-4 The accumulation of carbonylated proteins causes darkness around skin pores
Akane Sasaki¹, Naomi Ogawa², Hiroshi Suzuki², Taeko Mizutani¹, Yuri Okano¹,
Kayoko Matsunaga³, Hirotaka Akita⁴, Hitoshi Masaki¹
1) Tokyo University of Technology Graduate School, Bionics program
2) Integral Corporation
3) Department of Integrative Medical Science for Allergic Disease,
Fujita Health University School of Medicine
4) Department of Dermatology, Fujita Health University Banbuntane Hotokukai Hospital

- O I-5 An alternative test to estimate the potentials for phototoxic and photoallergic reactions

Yuhma Yoshida¹⁾, Atsushi Oda²⁾, Tatsuya Honda¹⁾, Yuri Okano²⁾, Hitoshi Masaki²⁾

1) DRC CO, LTD.

2) Tokyo University of Technology, School of Bioscience and Biotechnology

18:10-19:20 **Sponsored Seminar I**

【Epigenetic changes, ROS and AhR relevant to photo-aging】

Sponsored by

P&G Innovation Godo Kaisya

Chairpersons: Cheng-Che E. Lan

Yorihiro Yamamoto

- SS I-1 Effects and interactions of solar radiation and environmental heat on the skin:
Implications on photoaging and photocarcinogenesis

Cheng-Che E. Lan

(Department of Dermatology, Kaohsiung Medical University)

- SS I-2 Skin dryness initiated by ROS accelerates photoaged skin

Hitoshi Masaki (Tokyo University of Technology)

- SS I-3 HDAC6 inhibition prevents FICZ-induced AHR activation in normal human keratinocytes; treatment possibility of skin damage associated with photo-aging

Gaku Tsuji^{1),2)}, Akiko Hachiya²⁾, Masaki Takemura²⁾, Takeshi Nakahara³⁾,
Hiroshi Uchi²⁾, Masutaka Furue^{1),2)}

1) Research and Clinical Center for Yusho and Dioxin, Kyushu University

2) Department of Dermatology, Kyushu University

3) Division of Skin Surface Sensing, Kyushu University

19:30-20:50 **Welcome dinner**

August 21, Sun

9:00-11:30 Symposium III

Chairpersons: Leihong Flora Xiang
Hiroyuki Ohjimi
Akira Hachiya

- SY III-1** Visible Lights in Regenerative Medicine: a translational Research in the skin
Hsin-Su Yu (National Health Research Institutes)
- SY III-2** Covalent modification of proteins by lipid peroxidation-derived volatile aldehydes
Koji Uchida (Nagoya University)
- SY III-3** Microfocused Ultrasound in the Management of Photoaging
Boon Kee GOH (Skin Physicians Private Limited)
- SY III-4** Latent TGF- β binding protein 4 plays an important role in elastogenesis
Kyoko Takagi¹⁾, Tomoyuki Nakamura²⁾
1) Rohto Pharmaceutical Company, Limited
2) Department of Pharmacology, Kansai Medical University
- SY III-5** Prevention of ultraviolet B radiation-induced epidermal damage, wrinkle formation and hyperpigmentation by expression of HSP70
Tohru Mizushima (LTT Bio-Pharma Co., Ltd.)
- SY III-6** Anti-aging effects of nanocapsule α -lipoic acid for skin
Yoshiki Kubota¹⁾, Teruaki Nagasawa¹⁾, Yoko Yamaguchi^{1),2)}
1) NANOEGG Research Laboratories, Inc., Division of research and development for medical
2) Institute of Medical Science St. Marianna University
- SY III-7** Why do the cheeks sag?
Yukio Shirakabe (Sapho-Clinic)
- SY III-8** Prevention and treatments of facial sagging by using various energy based devices
Nariaki Miyata (Miyata Plastic Surgery & Skin Clinic)

11:40-12:40 Special Lecture

Chairperson: Akimichi Morita

- SL** (Photo)aging of skin: New insights into underlying mechanisms
Jean Krutmann
(IUF - Leibniz-Research Institute for Environmental Medicine at the Heinrich-Heine-University Düsseldorf)

12:50-13:50 Luncheon Seminar II

Sponsored by
Japan Bio Products Co.,Ltd.

Chairperson: Masamitsu Ichihashi

- LS II** JBP485 decreases the amount of keratinocyte-secreted inflammatory cytokines and increases collagen synthesis by fibroblasts
Sawako Hibino
(Saisei Mirai medical corporation, R Science Clinic HIRO-O,
Department of Clinical Gene Therapy, Graduate School of Medicine, Osaka University)

14:00-15:15 **Sponsored Seminar II**

【Sunscreens at present and in the future】

Sponsored by Meiji Co. Ltd.

Chairpersons: Akira Kawada
Shinichi Moriwaki

SS II-1 Photoprotection by prevention of the UV-induced energy crisis

Gary Halliday

(Discipline of Dermatology, Bosch Institute, Royal Prince Alfred Hospital,
the University of Sydney, Australia)

SS II-2 Potential of natural UV absorbing compound, Shinorine, as a novel anti-photoaging agent

Shogo Yamamoto¹⁾, Yosuke Matsumoto²⁾, Jun Matsumoto¹⁾, Masahiro Sota¹⁾,
Hitoshi Masaki³⁾, Xiaoli Liu¹⁾

1) NAGASE & Co., LTD. NAGASE R&D CENTER

2) HAYASHIBARA CO., LTD. R&D Center

3) School of Bioscience and Biotechnology, Tokyo University of Technology

SS II-3 The beneficial role of functional foods in ultraviolet-induced skin damage

Masashi Morifuji (Meiji Co. Ltd., Food Science Research Lab.)

15:20-16:35 **Oral session II**

Chairpersons: Hitoshi Masaki
Takahito Nishikata

○ II-1 Efficiency of singlet oxygen production from oxidized platinum nanoparticle and hydrogen peroxide

Yorihiro Yamamoto, Sachiko Aoki, Satsuki Motomiya, Yuske Karato

School of Bioscience and Biotechnology, Tokyo University of Technology

○ II-2 A New finding of the sensitive skin development -the contribution of oxidative stress-

Yushi Katsuyama¹⁾, Tatsuya Tsuboi¹⁾, Sayaka Nakamura¹⁾, Norihisa Taira¹⁾,
Masato Yoshioka¹⁾, Hitoshi Masaki²⁾

1) SEIWA KASEI CO., LTD.

2) School of Bioscience and Biotechnology, Tokyo University of Technology

○ II-3 Gp91phox-derived Reactive Oxygen Species/Urocortin 2/Corticotropin- releasing Hormone Receptor Type 2 Play an Important Role in Long-term Ultraviolet A Eye Irradiation-induced Photoaging

Keiichi Hiramoto, Yurika Yamate

Department of Pharmaceutical Science, Suzuka University of Medical Science

○ II-4 Morphological change of skin fibroblasts induced by UV Irradiation is involved in photoaging

HiroYuki Yamaba, Mayumi Kunita, Tsutomu Sakaida, Hiroshi Tanaka,

Youichi Yashiro, Satoru Nakata

Research Laboratories, Nippon Menard Cosmetic Co., Ltd.

○ II-5 Quantification of the engulfment activity in human dermal fibroblast and the analysis on the impact of UVA irradiation

Takahito Nishikata^{1),2)}, Haruka Kohda²⁾, Mika Fukuda¹⁾, Yuma Arata¹⁾,
Hideya Ando³⁾, Masamitsu Ichihashi⁴⁾

1) Frontiers of Innovative Research in Science and Technology (FIRST), Konan University

2) Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST),
Konan University

3) Department of Applied Chemistry and Biotechnology, Faculty of Engineering, Okayama
University of Science

4) SAISEI MIRAI Clinic Kobe

○ II-6 Effects of *Petroselinum crispum* on collagen synthesis in dermal fibroblasts through exerting on adipocytes

Ai Nishizawa^{1,2}, Yoshihide Kimura¹, Hitoshi Masaki²

1) Research & Development, IVY COSMETICS CO., LTD

2) Advanced Cosmetics Course, School of Bioscience and Biotechnology, Tokyo University of Technology

16:40-17:55 **Oral session III**

Chairpersons: Hideya Ando
Yoko Funasaka

○ III-1 Xeroderma pigmentosum as the model of photoaging -
The present features of XP in Japan

Eiji Nakano¹, Ryusuke Ono¹, Fumio Kanda², Seiji Takeuchi¹,
Shinichi Moriwaki³, Chikako Nishigori¹

1) Department of Dermatology, Graduate school of Medicine, Kobe University

2) Division of Neurology, Graduate school of Medicine, Kobe University

3) Department of Dermatology, Osaka Medical College

○ III-2 A new anti-photoaging strategy based on DNA polymerase activity

Sawako Ikeoka, Tatsuo Nakahara

MARUZEN PHARMACEUTICALS CO., LTD.

○ III-3 A 3-year clinical study on sunscreen use in the Japanese elderly

Makoto Mizuno^{1, 2}, Kayo Kunimoto², Mikiko Seigan², Takashi Teramura¹,
Eiji Naru¹, Fukumi Furukawa², Yuki Yamamoto^{2, 3}

1) Fundamental Research Laboratories, KOSÉ Corporation

2) Department of Dermatology, Wakayama Medical University

3) Department of Cosmetic Dermatology and Photomedicine, Wakayama Medical University

○ III-4 Ethnic Variations in the Expression of an Essential Factor for Photo-protection

Daiki Murase¹, Akira Hachiya¹, Rachel Fullenkamp², Anita Stepp²,
Shigeru Moriwaki¹, Tadashi Hase¹, Yoshinori Takema³, Prashiela Manga⁴

1) Biological Science Laboratories, Kao Corporation

2) Biological Science Americas Laboratory, Kao USA Inc.

3) Research and Development Global, Kao Corporation

4) The Ronald O. Perelman Department of Dermatology, New York University School of Medicine

○ III-5 Facial site distribution of cutaneous malignant tumor in Japanese

Hiroshi Kato, Takao Oda, Shoichi Watanabe, Akimichi Morita

Department of Geriatric and Environmental Dermatology

Nagoya City University Graduate School of Medical Sciences

○ III-6 Effect of infrared A on photoaging

Yoko Funasaka, Shizuka Okazaki, Hidehisa Saeki

Department of Dermatology, Nippon Medical School

17:55-18:00 **Closing Remarks**