

June 1 (Mon)

7:30 - 8:20

RoomB: Chiyo1

Morning Seminar 1

Chairperson : Masato Tsutsui

(Department of Pharmacology, Faculty of Medicine, University of the Ryukyus, Japan)

MS1 Orally Administered Eicosapentaenoic Acid Reduces and Stabilizes Atherosclerotic Lesions

Masataka Sata

Department of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

Sponsored by Mochida Pharmaceutical Co., Ltd.

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

8:30 - 9:45

RoomA: Fuji

Young Investigator's Award Competition

Chairpersons: Paul M. Vanhoutte

(Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China)

Hiroaki Shimokawa

(Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan)

Referees: Richard A. Cohen

(Vascular Biology Unit, Whitaker Cardiovascular Institute, Boston University School of Medicine, USA)

Kim Dora

(Department of Pharmacology, University of Oxford, UK)

Yuansheng Gao

(Department of Physiology and Pathophysiology, Peking University Health Science Center, China)

Chris Gerland

(Department of Pharmacology, University of Oxford, UK)

Ken-ichi Hirata

(Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Japan)

Hiroshi Ito

(Department of Cardiovascular Medicine, Akita University Graduate School of Medicine, Japan)

Masaaki Ito

(Department of Cardiology, Mie University Graduate School of Medicine, Japan)

Masahiko Kurabayashi

(Department of Medicine and Biological Science, Gunma University Graduate School of Medicine, Japan)

Hiroaki Shimokawa

(Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan)

Paul M. Vanhoutte

(Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China)

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

YIA-1 Endothelial Nitric Oxide Synthase Regulation in Pressure Overload-Induced Hypertrophy in Ovariectomized Rats

Md. Shenuarin Bhuiyan and Kohji Fukunaga

Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan

June 1 (Mon)

- YIA-2 Evidence for Rho-Kinase Activation in Patients with Pulmonary Arterial Hypertention**
Zhulanqigige Doe^a, Yoshihiro Fukumoto^a, Aya Takaki^a, Shunsuke Tawara^a, Junko Ohashi^a, Makoto Nakano^a, Tomohiro Tada^a, Kenya Saji^a, Kohichiro Sugimura^a, Hiroshi Fujita^a, Yasushi Hoshikawa^b, Jun Nawata^a, Takashi Kondo^b and Hiroaki Shimokawa^a
^a*Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan*
^b*Department of Thoracic Surgery, Tohoku University Graduate School of Medicine, Japan*
- YIA-3 VEGF-induced Endothelial Cell Migration is Modulated by Oxidative Modification of the Serca Cysteine-674 Reactive Thiol**
Alicia Marie Evangelista, Robert M Weisbrod, XiaoYong Tong and Richard A Cohen
Vascular Biology, Boston University, USA
- YIA-4 Hydrogen Peroxide Potentiates the EDHF Phenomenon by Promoting Endothelial Calcium Mobilization**
Yiwen Li, David H. Edwards and Tudor M. Griffith
Wales Heart Research Institute, Cardiff University, UK
- YIA-5 Absence of Lipocalin-2 Prevents Endothelium-Dependent Contractions Induced by Aging and High Fat Diet Feeding in Mice**
Jacky Tsz Chiu Liu^a, Aimin Xu^a, Ricky YK Man^a, Paul M Vanhoutte^a, Tak W Mak^b and Wang Yu^a
^a*Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China*
^b*The Campbell Family Institute for Breast Cancer Research and the Ontario Cancer Institute, University Health Network, Canada*

8:45 - 10:00

RoomB: Chiyo1

Oral 1: Pathophysiology 1

Chairpersons: John Christie McGrath

(Integrative and Systems Biology, University of Glasgow, UK)

Masataka Sata

(Department of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan)

- O1-1 Enhanced Angiotensin II Forming Activity in Mononuclear Cells by Elevated FFA: Implication in Endothelial Dysfunction as Mobile Renin-angiotensin System**
Shinichiro Ueda^a, Takanori Yasu^a and Hidenori Urata^b
^a*Department of Clinical Pharmacology & Therapeutics, University of the Ryukyus, Japan*
^b*Fukuoka University Chikushi Hospital, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

June 1 (Mon)

- O1-2 Vasculoprotective Role of Nitric Oxide Synthase System Against Vascular Lesion Formation in Mice in Vivo**
Yumi Furuno^a, Masato Tsutsui^b, Hiroaki Shimokawa^c, Tsuyoshi Morishita^a, Kiyoko Shibata^a, Yasuko Yatera^a, Yutaka Otsuji^a, Masahito Tamura^d and Nobuyuki Yanagihara^b
^aSecond Department of Internal Medicine, University of Occupational and Environmental Health, Japan
^bDepartment of Pharmacology, University of Occupational and Environmental Health, Japan
^cDepartment of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
^dKidney Center, University of Occupational and Environmental Health, Japan
- O1-3 Cyclophilin A Promotes Vascular Oxidative Stress and Accelerates Development of Angiotensin II-induced Aortic Aneurysms**
Kimio Satoh^a, Patrizia Nigro^b, Tetsuya Matoba^b, Bradford C Berk^b and Hiroaki Shimokawa^a
^aDepartment of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
^bAab Cardiovascular Institute, University of Rochester, USA
- O1-4 RAMP2 is the Key Determinant of the Vascular Functions of Adrenomedullin**
Takayuki Shindo, Takayuki Sakurai, Akiko Kamiyoshi, Yuka Shindo, Hisaka Kawate, Nobuyoshi Iinuma, Takuma Arai, Takahiro Yoshizawa, Teruhide Koyama, Natsumi Shimoyama, Ryuichi Uetake and Akihiro Yamauchi
Department of Organ Regeneration, Shinshu University Graduate School of Medicine, Japan
- O1-5 Pathophysiological Relevance of Uncoupled Endothelial Nitric Oxide Synthase in Cardiomyocyte Injury Triggered by Phenylephrine-induced Hypertrophy**
Ying-Mei Lu, Norifumi Shioda and Kohji Fukunaga
Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

10:00 - 11:45

RoomA: Fuji

Symposium 1: Endothelial Cells

Chairpersons: V. Schini-Kerth

*(Laboratory of Biophotonic and Pharmacology, University of
Strasbourg, Faculty of Pharmacy, France)*

Yukio Hirata

*(Department of Clinical and Molecular Endocrinology, Tokyo
Medical and Dental University Graduate School, Japan)*

- S1-NL** **Named Lecture 1** *6th Robert F. Furchgott Lecture on Endothelium*
Importance of the Endothelium in Coordinating Vasomotor Responses
Kim A. Dora
Department of Pharmacology, University of Oxford, UK
- S1-O1** **The AMP-activated Protein Kinase (AMPK) Exerts Anti-inflammatory Effects in the Endothelium by Activating MEF2A and Increasing KLF2 and eNOS Expression**
Ingrid Fleming^a, Beate Fisslthaler^a, Bess Elke^a and Horrevoets Anton^b
^a*Institute for Vascular Signalling, Johann Wolfgang Goethe University Frankfurt, Germany*
^b*Department of Molecular Cell Biology and Immunology, VU University Medical Center, The Netherlands*
- S1-O2** **Blood Pressure and Vascular Function in SHR after Chronic Treatment with Milk Products Containing Bioactive Peptides**
Heikki Vapaatalo^a, Pauliina I Jakala^a, Enni Pere^a, Risto Lehtinen^a, Anu Turpeinen^b and Riitta Korpela^b
^a*Institute of Biomedicine/Pharmacology, University of Helsinki, Finland*
^b*Valio Ltd., Research and Development, Finland*
- S1-O3** **WITHDRAWN**
- S1-O4** **Endothelial-specific Overexpression of Lectin-like Oxidized Low-density Lipoprotein Receptor-1 (LOX-1) Increases OxLDL Uptake and Plaque Formation and Leads to Endothelial Dysfunction**
Alexander Akhmedov^a, Izabela Rozenberg^a, Yi Shi^a, Pavani Mocharla^a, Alexander Breitenstein^a, Nicola Schaefer^a, Christine Lohmann^a, Matthias S. Stein^a, Tobias von Lukowicz^a, Jan Boren^b, Michael O. Kurrer^c, Felix C. Tanner^a, Christian M. Matter^a and Thomas F. Lüscher^a
^a*Cardiovascular Research, Department of Physiology, Zurich University, Switzerland*
^b*Sahlgrenska Center for Cardiovascular and Metabolic Research, University of Goeteborg, Sweden*
^c*Division of Pathology, University Hospital Zurich, Switzerland*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

10:45 - 12:00

RoomB: Chiyo1

Oral 2: Pathophysiology 2

Chairpersons: Yu Huang

(Department of Physiology, Chinese University of Hong Kong, Hong Kong, China)

Takayuki Shindo

(Department of Organ Regeneration, Shinshu University Graduate School of Medicine, Japan)

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

- O2-1 Different Roles of Bone Marrow-derived Progenitor Cells in the Pathogenesis of Vascular Disease**
Makoto Nakano, Yoshihiro Fukumoto, Kimio Satoh, Yoshitaka Ito, Yutaka Kagaya and Hiroaki Shimokawa
Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
- O2-2 Role of Bone Marrow Stem Cells in the Pathogenesis of Pulmonary Hypertension and Pharmacological Modulation**
Taichi Kato^a, Yoshihide Mitani^a, Yoshihiro Komada^a and Masaaki Ito^b
^a*Department of Pediatrics, Mie University Graduate School of Medicine, Japan*
^b*Department of Cardiology and Nephrology, Mie University Graduate School of Medicine, Japan*
- O2-3 Adiponectin Mediates the Beneficial Effect of PPAR γ Agonist Rosiglitazone on Endothelial Function in Type II Diabetic Mice**
Xiao Yu Tian^a, Wing Tak Wong^a, RL Hoo^b, Aimin Xu^c, Paul Vanhoutte^d and Yu Huang^a
^a*Institute of Vascular Medicine and School of Biomedical Sciences, Chinese University of Hong Kong, Hong Kong, China*
^b*Department of Medicine, University of Hong Kong, Hong Kong, China*
^c*Department of Medicine and Department of Pharmacology, University of Hong Kong, Hong Kong, China*
^d*Department of Pharmacology, University of Hong Kong, Hong Kong, China*
- O2-4 Black Tea Polyphenols Protect Endothelial Cell Function**
Yu Huang^a, WT Wong^a, FP Leung^a, XY Tian^a, CW Lau^a, ZY Chen^b, XQ Yao^a and LM Yung^a
^a*Physiology, Chinese University of Hong Kong, Hong Kong, China*
^b*Department of Biochemistry, Chinese University of Hong Kong, Hong Kong, China*
- O2-5 Induction of Cardiac Hypertrophy by Rho-associated Kinase 2 is Mediated by Downregulation of Four-and-a-half LIM-only Protein 2**
Ryuji Okamoto^a, Kensuke Noma^b, Yukio Hiroi^b, Yuxin Li^b, Ping-Yen Liu^b and James K. Liao^b
^a*Department of Cardiology, Mie University Graduate School of Medicine, Japan*
^b*Brigham and Women's Hospital, Harvard Medical School, USA*

June 1 (Mon)

12:15 - 13:15

RoomA: Fuji

Luncheon Seminar 1

Chairperson : Hiroshi Ito

(Department of Cardiovascular Medicine, Akita University Graduate School of Medicine, Japan)

LS1 Pathophysiology of Cardiovascular Disease

Richard A. Cohen

Physiology, Pharmacology and Experimental Therapeutics, Boston University School of Medicine Vascular Biology Unit, Department of Medicine, Whitaker Cardiovascular Institute, Boston University School of Medicine, U.S.A.

Sponsored by Banyu Pharmaceutical Co., Ltd.

12:15 - 13:15

RoomB: Chiyo1

Luncheon Seminar 2

Chairperson : Masaaki Ito

(Department of Cardiology, Mie University Graduate School of Medicine, Japan)

LS2 FFA and Mobile Renin-Angiotensin System in Man

Shinichiro Ueda

Department of Clinical Pharmacology & Therapeutics, University of the Ryukyus, Japan

Sponsored by Takeda Pharmaceutical Company

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 1: Natural Products

Chairpersons: Ricky Y.K. Man

(Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China)

V. Schini-Kerth

(Laboratory of Biophotonic and Pharmacology, University of Strasbourg, Faculty of Pharmacy, France)

June 1 (Mon)

P1-1 The Akt-mediated Activation of Endothelial NO Synthase by a Red Wine Extract Involves Procyanidin Dimers and Oligomers, and Conjugated Anthocyanins

Cyril Auger^a, Mehdi Chaabi^b, Jong-Hun Kim^a, Thierry Chataigneau^a, Annelise Lobstein^b and Valerie B Schini-kerth^a

^a*UMR CNRS 7213 - Laboratory of Biophotonic and Pharmacology, University of Strasbourg - Faculty of Pharmacy, France*

^b*UMR CNRS 7200, Laboratoiy of Therapeutic Innovation, University of Strasbourg, Faculty of Pharmacy, France*

P1-2 Chronic Intake of Red Wine Polyphenols by Young Rats Prevents the Development of an Endothelial Dysfunction

Stephanie Dal-Ros^a, Anne-Laure Lang^b, Joffrey Zoll^b, Nathalie Keller^a, Christian Bronner^a, Bernard Geny^b and Valerie B Schini-Kerth^a

^a*UMR CNRS 7213, Department of Biophotonic and Pharmacology, Faculte de Pharmacie, Universite de Strasbourg, France*

^b*Department of Physiology and Explorations Fonctionnelles and EA 3072, Hopitaux Universitaires of Strasbourg, France*

P1-3 Anti-atherogenic Effect of Oleonic Acid Appears Unrelated to Endothelial Release of Nitric Oxide

Ulf Simonsen^a, Nicolaj Hansson^a, Rosalia Rodriguez-Rodriguez^a, Malene R Andersen^b, Edgaras Stankevicius^a, Niels Henrik Buus^c and Yvonne Eskildsen-Helmond^a

^a*Department of Pharmacology, Aarhus University, Denmark*

^b*Department of Obstetrics and Gynecology, Aarhus University Hospital, Denmark*

^c*Department of Renal Medicine, Aarhus University Hospital, Denmark*

P1-4 Red Wine Polyphenols Improve Endothelial Dysfunction in the Mesenteric Artery of Old Rats: Role of Oxidative Stress

Stephanie Dal-Ros, Christian Bronner and Valerie B Schini-Kerth

UMR CNRS 7213, Department of Biophotonic and Pharmacology, Faculte de Pharmacie, Universite de Strasbourg, France

P1-5 Epigallocatechin Gallate Causes Endothelium Dependent Contractions in the Rat Aorta

Zhuoming Li, Marcel WL Koo, Yu Wang and Paul M Vanhoutte

Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

- P1-6 Sirtuin-1 and AMP-dependent Protein Kinase Mediate Arterial Relaxations Caused by the Polyphenol, S17834**
Robert Mark Weisbrod^a, Alex A Cordi^b, Michel Wierzbicki^b,
Serge Simone^b, Tony J Verbeuren^b and Richard A Cohen^a
^a*Vascular Biology Unit, Boston University School of Medicine, Boston, USA*
^b*Institut de Recherche Servier, France*
- P1-7 Chronic Antioxidant Catechin Preserves H₂O₂-derived eNOS Dilations and Maintains Cerebral Blood Flow in Aging Atherosclerotic Mice**
Annick Drouin^a, Priscilla Fernandes^b, Edith Hamel^b and Eric Thorin^a
^a*Montreal Heart Institute, Canada*
^b*Institut Neurologique de Montreal, Canada*

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 2: Oxidative Stress

Chairpersons: Richard A. Cohen

(Vascular Biology Unit, Whitaker Cardiovascular Institute, Boston University School of Medicine, USA)

Noriaki Kume

(Department of Cardiovascular Medicine, Kyoto University, Japan)

- P2-1 Genetic Deletion of Poly (ADP-Ribose) Polymerase Promotes Oxidative Stress Induced Endothelial Dysfunction**
Catherine Gebhard^a, Barbara E Stahli^a, Giovanni G Camici^a,
Alexander Akhmedov^a, Jonas Angstenberger^a, Christian M Matter^a,
Thomas F Lüscher^b and Felix C Tanner^a
^a*Cardiovascular Research, Physiology Institute University of Zurich, Switzerland*
^b*Cardiology, Cardiovascular Center, University Hospital Zurich, Switzerland*
- P2-2 Pharmacological Inhibition of Adipocyte-fatty Acid Binding Protein (A-FABP) Improves Endothelial Function in Male Apolipoprotein E-knockout Mice**
Mary Yuk Kwan Lee^a, Paul M Vanhoutte^a and Aimin Xu^b
^a*Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China*
^b*Department of Medicine, The University of Hong Kong, Hong Kong, China*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

June 1 (Mon)

P2-3 Effect of NADPH Oxidase Inhibitor and Superoxide Dismutase Mimetic on the Expression of Nitric Oxide Synthase in Spontaneously Hypertensive Rats

Peng Yu Cao^a, Osamu Ito^a, Qi Guo^b, Daisuke Ito^a, Yoshikazu Muroya^a, Kenta Takashima^a, Yuena Chang^a, Takefumi Mori^b, Masayuki Kanazawa^a, Sadayoshi Ito^b and Masahiro Kohzuki^a

^aDepartment of Internal Medicine and Rehabilitation Science, Tohoku University Graduate School of Medicine, Japan

^bDivision of Nephrology, Endocrinology and Vascular Medicine, Tohoku University Graduate School of Medicine, Japan

P2-4 Quinone-based System for the Controlled Induction of Oxidative Stress and Endothelial Dysfunction in Isolated Arteries

Bogdan Alexandru Stoica, Ionela Lacramioara Serban, Mihai Nechifor, Mihai M Hogas and Dragomir N Serban

Cell Physiology & Pharmacology Laboratory, Functional Sciences Department, "Grigore. T. Popa" University of Medicine and Pharmacy, Iasi, Roumania

P2-5 Toll-like Receptor 4 Increases Oxidative Stress by Inhibiting Extracellular Superoxide Dismutase in Angiotensin II-induced Hypertension

Hiroko Yoshino^a, Seiji Umemoto^b, Susumu Matsuda^a, Tadaaki Nakashima^a, Shinichi Itoh^c, Hiroki Aoki^d, Koichi Yoshimura^d, Tomoaki Murata^e, Tohru Fukai^f and Masunori Matsuzaki^a

^aDepartment of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine, Japan

^bPharmaceutical Clinical Research Center, Yamaguchi University Hospital, Japan

^cSaiseikai Shimonoseki General Hospital, Japan

^dDepartment of Molecular Cardiovascular Biology, Yamaguchi University School of Medicine, Japan

^eScience Research Center, Yamaguchi University, Japan

^fDepartments of Medicine (Section of Cardiology) and Pharmacology, Center for Cardiovascular Research, University of Illinois at Chicago, USA

P2-6 Low Luminal pH Aggravates Fatty Acid Bound Albumin Induced O₂⁻ Production in Renal Proximal Tubular Cell

Tomokazu Souma^a, Michiaki Abe^a, Yasutoshi Akiyama^a, Takafumi Toyohara^a, Hiromi O Shiwaku^a, Takehiro Suzuki^a, Masayuki Tanemoto^a, Takaaki Abe^b and Sadayoshi Ito^a

^aDivision of Nephrology, Endocrinology and Vascular Medicine, Department of Medicine, Tohoku University Graduate School of Medicine, Japan

^bDivision of Medical Science, Tohoku University Graduate School of Biomedical Engineering Sciences, Japan

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

- P2-7 Genetic Deletion of OX40 Ligand Suppresses the Development of Atherosclerosis in Apolipoprotein E-deficient Mice**
Makoto Nakano^a, Yoshihiro Fukumoto^a, Kimio Satoh^a, Yoshitaka Ito^a,
Yutaka Kagaya^a, Naoto Ishii^b, Kazuo Sugamura^b and Hiroaki Shimokawa^a
^a*Department of Cardiovascular Medicine, Tohoku University Graduate School of
Medicine, Japan*
^b*Department of Microbiology and Immunology, Tohoku University Graduate School
of Medicine, Japan*

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 3: Angiotensin II / ARB / Aldosterone ET

- Chairpersons:** Johan Van de Voorde
*(Department of Pharmacology, Vascular Research Unit, Ghent
University, Belgium)*
Koichi Node
*(Department of Cardiovascular and Renal Medicine, Saga University,
Japan)*

- P3-1 Candesartan Improves Impaired Endothelial Function in Human Coronary Artery**
Kenji Iino^a, Hiroyuki Watanabe^a, Mitsuaki Katsuta^b, Takashi Koyama^a,
Yoichiro Takahashi^a, Kiyoshi Nobori^a, Toshimitsu Kosaka^a, Gen Terui^b
and Hiroshi Ito^a
^a*Department of Internal Medicine, Division of Cardiovascular and Respiratory
medicine, Akita University School of Medicine, Japan*
^b*Department of Cardiology Akita Red Cross Hospital, Japan*
- P3-2 Angiotensin II Stimulates Endothelial Cell Migration via SIRT2-mediated Deacetylation of α -tubulin**
Aiko Hashimoto Komatsu, Tetsuaki Hirase, Machiko Asaka
and Koichi Node
*Department of Cardiovascular and Renal Medicine, Saga University Faculty of
Medicine, Japan*
- P3-3 Aldosterone Rapidly Enhances Endothelium-dependent Relaxation of Rat Small Mesenteric Arteries via Potentiation of Both the NO and EDHF Components**
Cristina Oprisa, Ionela Lacramioara Serban, Ostin Costel Mungiu,
Dumitru D Branisteanu and Dragomir N Serban
*Cell Physiology & Pharmacology Laboratory, Functional Sciences Department,
"Grigore. T. Popa" University of Medicine and Pharmacy, Roumania*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

June 1 (Mon)

P3-4 Impairment of Endothelial Function in Atherosclerotic Mice Lacking Vascular Endothelial Endothelin-1

Dyah Wulan Anggrahini^a, Noriaki Emoto^a, Kazuhiko Nakayama^a, Bambang Widyantoro^a, Kazuya Miyagawa^a, Vita Yanti Anggraeni^a, Hirowati Ali^a, Yaz Y Kisanuki^b, Masashi Yanagisawa^b and Kenichi Hirata^a

^a*Division of Cardiovascular Medicine, Kobe University Graduate School of Medicine, Japan*

^b*Howard Hughes Medical Institute, University of Texas Southwestern Medical Centre, USA*

P3-5 Angiotensin II Attenuates Vasodilatation of ANP in Human: Roles of cGMP Bioavailability and AT1 Receptor

Shinichiro Ueda and Yoko Azekoshi

Department of Clinical Pharmacology & Therapeutics, University of the Ryukyus, Japan

P3-6 High Sodium Augments Angiotensin II-induced Proliferation of Rat Vascular Smooth Muscle Cell through ERK1/2-dependent Pathway

Hirofumi Hitomi^a, Gang Liu^a, Naohisa Hosomi^b, Hideyasu Kiyomoto^b, Daisuke Nakano^a, Shoji Kimura^a, Masakazu Kohn^b and Akira Nishiyama^a

^a*Department of Pharmacology, Kagawa University, Japan*

^b*Department of Cardiorenal and Cerebrovascular Medicine, Kagawa University, Japan*

P3-7 Effects of Angiotensin II Type 2 Receptors on Calcitonin Gene-related Peptide Neurites Outgrowth in Apolipoprotein-deficient Mice

Narumi Hobar^a, Naoya Hashikawa^a, Chikao Yutani^a and Hiromu Kawasaki^b

^a*Department of Science, Okayama University of Science, Japan*

^b*Department of Clinical Pharmaceutical Science, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan*

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 4: Aging / Atherosclerosis

Chairpersons: Peter Libby

(Brigham and Women's Hospital, Cardiovascular Medicine, USA)

Yasufumi Sato

(Department of Vascular Biology, Institute of Development, Aging and Cancer, Tohoku University, Japan)

P4-1 Inhibitory Effect of Vascular Endothelium on Agonist-induced Vasoconstriction in Rat Mesenteric Resistance Arteries Disappears with Ageing

Xin Jin^a, Yukiko Satoh-Otonashi^a, Yoshito Zamami^a,
Toshihiro Koyama^a, Peng Yuan Sun^a, Narumi Hobara^b,
Yoshihisa Kitamura^c and Hiromu Kawasaki^a

^aDepartment of Clinical Pharmaceutical Science, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan

^bDepartment of Life Science, Okayama University of Science, Japan

^cDepartment of Pharmaceutical Care and Health Science, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan

P4-2 Critical Roles of V1A and V1B Vasopressin Receptors in Systemic Blood Pressure Homeostasis: Studies from Gene Knockout Mice

Taka-aki Koshimizu^a, Akito Tanoue^b, Yoshihisa Nasa^c,
Hiroyoshi Tsuchiya^a, Satoshi Takeo^d and Gozoh Tsujimoto^e

^aDepartment of Pharmacology, Division of Molecular Pharmacology, Jichi Medical University, Japan

^bDepartment of Molecular and Cellular Pharmacology, National Research Institute for Child Health and Development, Japan

^cDepartment of Clinical Pharmacy, Nihon Pharmaceutical University, Japan

^dDepartment of Molecular and Cellular Pharmacology, Tokyo University of Pharmacy and Life Science, Japan

^eDepartment of Genomic Drug Discovery Science, Graduate School of Pharmaceutical Sciences Kyoto University Faculty of Pharmaceutical Sciences, Kyoto University, Japan

P4-3 Role of Extracellular Signal-related Kinases in the Pathophysiology of Vascular Dysfunction in Aging and Hypertension

Susan WS Leung, Eva YW Ho, Godfrey SK Man, George PH Leung and
Ricky YK Man

Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

P4-4 A New View of Atherosclerosis Related Pharmacogenetics Based Gene Analysis in Japanese Elderly Women

Koichiro Ina^a, Toshio Hayashi^a, Jun Funami^a, Asako Watanabe-Ishizuka^a
and Akihisa Iguchi^b

^aDepartment of Geriatrics, Nagoya University Graduate School of Medicine, Japan

^bDepartment of Health Science, Aichi Syukutoku University, Japan

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

June 1 (Mon)

- P4-5 Progranulin in Advanced Human Atherosclerotic Plaque**
Yoji Kojima^a, Koh Ono^a, Katsumi Inoue^b, Yasushi Takagi^c,
Ken-ichiro Kikuta^c, Masaki Nishimura^c, Yoshinori Yoshida^a,
Yasuhiro Nakashima^a, Hironobu Matsumae^a, Yutaka Furukawa^d,
Nobuhiro Mikuni^c, Masakiyo Nobuyoshi^c, Takeshi Kimura^a, Toru Kita^d
and Makoto Tanaka^a
^a*Department of Cardiovascular Medicine, Kyoto University Graduate School of
Medicine, Japan*
^b*Department of Cardiology, Kurashiki Central Hospital, Japan*
^c*Department of Neurosurgery, Kyoto University Graduate School of Medicine, Japan*
^d*Department of Cardiology, Kobe City Medical Center General Hospital, Japan*
^e*Department of Cardiology, Kokura Memorial Hospital, Japan*
- P4-6 Basic and Clinical Cardiovascular Actions Induced by Ginkgo Biloba
Extract and Its Constituents in Rat Aorta**
Seiichiro Nishida and Hiroyasu Satoh
Department of Pharmacology, Nara Medical University, Japan
- P4-7 Effects of Antiviral Nucleoside Analogs on Relaxation of Rat Basilar
Arteries**
Rachel Wai Sum Li and GPH Leung
*Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong
Kong, China*

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 5: EDHF / Estrogen / Angiogenesis

- Chairpersons:** Sue Piper Duckles
*(Department of Pharmacology, School of Medicine, University of
California Irvine, USA)*
Gozoh Tsujimoto
*(Department of Genomic Drug Discovery Science, Graduate School of
Pharmaceutical Sciences Kyoto University Faculty of Pharmaceutical
Sciences, Japan)*

June 2 (Tue)

June 3 (Wed)

- P5-1 Correlation of the Patency of Myoendothelial Connections with
Endothelial Vasodilator Responses in Spontaneously Hypertensive
Rats**
John Christie McGrath, Claire Hamill, Craig J Daly and Laura Methven
Integrative and Systems Biology, University of Glasgow, UK
- P5-2 Combination Therapy with Angiotensin Receptor Blocker and
Calcium Channel Blocker Improves EDHF-mediated Responses in
Diabetic Apolipoprotein E-deficient Mice**
Maki Hosoya, Aya Takaki, Ayuko Sawada, Junko Ohashi
and Hiroaki Shimokawa
*Department of Cardiovascular Medicine, Tohoku University Graduate School of
Medicine, Japan*

June 1 (Mon)

- P5-3 Hypertension and EDHF-mediated Responses in Mesenteric Arteries of the Rats**
Billy Wing Cheung Kong, Ricky YK Man, Paul M Vanhoutte and Susan WS Leung
Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China
- P5-4 Roles of Endothelial Oxidases in Endothelium-derived Hyperpolarizing Factor Responses in Mice**
Junko Ohashi^a, Aya Takaki^a, Keiko Morikawa^b, Yoshinori Murayama^b, Hiroto Yamagishi^a, Maki Hosoya^a and Hiroaki Shimokawa^a
^a*Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan*
^b*Department of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Japan*
- P5-5 Distinctive Localization and Opposed Roles of Vasohibin-1 and Vasohibin-2 in the Regulation of Angiogenesis**
Hiroshi Kimura^a, Hiroki Miyashita^a, Yasuhiro Suzuki^a, Miho Kobayashi^a, Kazuhide Watanabe^a, Hikaru Sonoda^b, Hideki Ohta^b, Takashi Fujiwara^c, Toru Shimosegawa^d and Yasufumi Sato^a
^a*Department of Vascular Biology, Institute of Development, Aging and Cancer, Tohoku University, Japan*
^b*Discovery Research Laboratories, Shionogi & Co., Ltd., Japan*
^c*Department of Biological Resources, INCS, Ehime University, Japan*
^d*Department of Gastroenterology, Tohoku University Graduate School of Medicine, Japan*
- P5-6 Effect of Dienogest on Estrogen-induced Nitric Oxide Production in Human Umbilical Vein Endothelial Cells and Endothelium-dependent Vasodilatation in Postmenopausal Women**
Noriko Henmi, Kazuhiro Takahashi, Hizuru Yamatani, Takayuki Yoshida, Keiko Takata and Hirohisa Kurachi
Department of Obstetrics and Gynecology, Yamagata University, Japan
- P5-7 Aging and Prostacyclin Responses in Aorta and Platelets from WKY and SHR Rats**
Michel Feletou, Elodie Gomez, Cedric Schwendemann, Severine Roger, Serge Simonet, Jerome Paysant, Christine Courchay and Tony J. Verbeuren
Department of Angiology, Institut de Recherches Servier, France

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

13:15 - 14:15

Poster & Exhibition: Chiyo2

Poster 6: Vascular Tone

Chairpersons: Patrick J. Pagano

(Hemostasis and Vascular Biology Research Institute and Department of Pharmacology and Chemical Biology, University of Pittsburgh, USA)

Kimihiko Komori

(Division of Vascular Surgery, Department of Surgery, Nagoya University Graduate School of Medicine, Japan)

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

P6-1 Mechanical Stretch Augments Insulin-induced Vascular Smooth Muscle Cell Proliferation by Upregulation of Insulin-like Growth Factor 1 Receptor

Hirofumi Hitomi^a, Gang Liu^a, Naohisa Hosomi^b, Daisuke Nakano^a, Hideyasu Kiyomoto^b, Shoji Kimura^a, Masakazu Kohno^b and Akira Nishiyama^a

^a*Department of Pharmacology, Kagawa University, Japan*

^b*Department of Cardiorenal and Cerebrovascular Medicine, Kagawa University, Japan*

P6-2 Role of Rho-kinase in The Pathogenesis of Coronary Hyperconstricting Responses Induced by Paclitaxel-eluting Stent

Takashi Shiroto^a, Satoshi Yasuda^a, Ryuji Tsuburaya^a, Yoshitaka Ito^a, Jun Takahashi^a, Kenta Ito^a, Hatsue Ishibashi-Ueda^b and Hiroaki Shimokawa^a

^a*Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan*

^b*Department of Pathology, National Cardiovascular Center, Japan*

P6-3 Serum RAGE Ligands Induce Osteoblastic Differentiation of Vascular Smooth Muscle Cells Via RAGE-Notch-Msx2 Pathway

Toshihiro Suga^a, Tatsuya Iso^a, Takehisa Shimizu^a, Toru Tanaka^a, Sho-ichi Yamagishi^b, Masashi Arai^a, Tsutomu Imaizumi^b and Masahiko Kurabayashi^a

^a*Department of Cardiology, Gunma University, Japan*

^b*Kurume University, Japan*

P6-4 The Relaxing Effect of Okadaic Acid on Canine Basilar Artery Involves Phosphorylation of the Myosin Light Chain at Threonine-9

Kazuo Obara^a and Koichi Nakayama^b

^a*Department of Phramacology, University of Shizuoka, Japan*

^b*Department of Molecular and Cellular Pharmacology, Iwate Medical University, Japan*

June 1 (Mon)

- P6-5 Importance of Dual Induction Tests for Coronary Vasospasm and Ventricular Fibrillation in Patients Survived from Out-of-Hospital Cardiac Arrest**
Yusuke Takagi, Satoshi Yasuda, Jun Takahashi, Morihiko Takeda, Masaharu Nakayama, Kenta Ito, Masanori Hirose, Yuji Wakayama, Koji Fukuda and Hiroaki Shimokawa
Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
- P6-6 Rho Kinase Inhibitors Prevent Endothelium-dependent Contractions in the Rat Aorta**
Calvin KY Chan^a, Paul Vanhoutte^a, Ricky Man^a and Judith Mak^b
^a*Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China*
^b*Department of Medicine and Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China*
- P6-7 WITHDRAWN**

14:15 - 16:00

RoomB: Chiyo1

Symposium 2: Neural Control

Chairpersons: Jo G.R. De Mey

(Department of Pharmacology and Toxicology, Cardiovascular Research Institute Maastricht, Maastricht University, The Netherlands)

Yoshitaka Hirooka

(Department of Cardiovascular Medicine, Kyushu University, Japan)

- S2-NL **Named Lecture 2** 7th John T. Shepherd Lecture on Nervous Control**
The Catecholamines Strike Back: What NO Does Not Do!
Michael J. Joyner
Department of Anesthesiology Mayo Clinic College of Medicine, USA
- S2-O1 Visualisation and Subtype Identification of Endothelial Alpha 1 Adrenoceptors in the Murine Carotid Artery**
John Christie McGrath, Methven Laura, Craig J Daly and Claire Hamill
Integrative and Systems Biology, University of Glasgow, UK
- S2-O2 Angiotensin II-induced Senescence through Ras-Caspase 3 Pathway in Cardiovascular Center of Brain Increases Sympathetic Nerve Activity in Hypertensive Rat**
Takuya Kishi, Yoshitaka Hirooka and Kenji Sunagawa
Department of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Japan

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 1 (Mon)

S2-03 Sensory-motor Neurotransmitter Terminates the Long-lasting Vasoconstriction Initiated by Endothelin-1

Merlijn Johan Meens and Jo G. De Mey

Department of Pharmacology and Toxicology, Maastricht University, The Netherlands

S2-04 Segmental Dilatation of Parenchymal Arterioles of Cat Cerebral Cortex following Initial Constriction during Passage of Cortical Spreading Depression: Glial Control?

Norihiro Suzuki and Minoru Tomita

Department of Neurology, Keio University, School of Medicine, Japan

June 1 (Mon)

15:00 - 16:15

RoomA: Fuji

Afternoon Seminar 1

Chairperson : Ken-ichi Hirata

(Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Japan)

AS1-1 Possible Mechanisms of Multiple Effects of Calcium Channel Blockers on Inhibition of Vascular Injury, Metabolic Syndrome, Ischemic Brain Damage and Cognitive Decline

Masatsugu Horiuchi

Department of Molecular Cardiovascular Biology and Pharmacology, Ehime University Graduate School of Medicine, Japan

AS1-2 Vascular Protective Effects of Calcium Channel Blockers in vitro and in vivo

Thomas F. Lüscher

Department of Cardiology & Cardiovascular Center, University Hospital Zurich, Switzerland

Sponsored by Bayer Yakuhin, Ltd.

June 2 (Tue)

16:30 - 18:00

RoomA: Fuji

Special Seminar 1

Chairperson : Kimihiro Komori

(Division of Vascular Surgery, Department of Surgery, Nagoya University Graduate School of Medicine, Japan)

SS1-1 Therapeutic Strategy for Peripheral Arterial Disease: Pharmacological Therapy and Angiogenesis – Roles of Serotonin and Nitric Oxide –
Yukihito Higashi

Department of Cardiovascular Physiology and Medicine, Department of Regeneration and Medicine, Graduate School of Biomedical Sciences, Hiroshima University, Japan

June 3 (Wed)

June 1 (Mon)

SS1-2 Evidence for a Unique Role of Serotonin in the Sick Vessel Syndrome

Donald D. Heistad

Department of Internal Medicine, University of Iowa, USA

Sponsored by Mitsubishi Tanabe Pharma Corporation

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

7:30 - 8:20

RoomB: Chiyo1

Morning Seminar 2

Chairperson : Yoshitaka Hirooka

(Department of Cardiovascular Medicine, Kyushu University, Japan)

MS2 Practice of Hypertension in Near Future: Perspective of Blood Pressure and Heart Rate Monitoring

Yutaka Imai

*Department of Clinical Pharmacology and Therapeutics, Tohoku University
Graduate School of Pharmaceutical Science and Medicine, Japan*

Sponsored by Astra Zeneca K.K.

8:30 - 11:00

RoomA: Fuji

Special Symposium: Signals from Outer Space

Chairpersons: Paul M. Vanhoutte

*(Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of
Medicine, The University of Hong Kong, Hong Kong, China)*

Hiroaki Shimokawa

*(Department of Cardiovascular Medicine, Tohoku University
Graduate School of Medicine, Japan)*

SSY-1 Astrocytes: The Gatekeepers of the Brain

Jessica Andrea Filosa^a, Haruki Higashimori^b and Martin Blanco^c

^a*Physiology, Medical College of Georgia, USA*

^b*Medical College of Georgia, USA*

^c*University of Cincinnati, USA*

SSY-2 Adventitial Fibroblasts and Vascular Dysfunction

Patrick J. Pagano

*Vascular Medicine Institute, Department of Pharmacology and Chemical Biology,
University of Pittsburgh School of Medicine, USA*

SSY-3 Zona Glomerulosa Cell Regulation of Adrenal Cortical Arterial Tone

Kathryn M Gauthier^a, David X. Zhang^b, Sarah V. Christian^a,
John R. Falck^c and William B. Campbell^a

^a*Pharmacology and Toxicology, Medical College of Wisconsin, USA*

^b*Department of Medicine, Cardiovascular Research, Medical College of Wisconsin,
USA*

^c*Department of Biochemistry, University of Texas Southwestern Medical Center, USA*

SSY-4 Perivascular Fat: An Emerging Dual Modulator of Vascular Function and Its Dysfunction in Diseases

Yu-Jing Gao

Department of Anesthesia, McMaster University, Canada

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

SSY-5 Adventitia-derived Relaxing Factor

Maik Gollasch and Galyna Dubrovskaya

Nephrology/Intensive Care and Experimental and Clinical Research Center, Charite University Medicine, Germany

SSY-6 The Release of a Relaxing Factor by Retinal Tissue

Johan Van de Voorde, Christophe Delaey, Koen Boussey and Nele Maenhaut

Department of Pharmacology, Ghent University, Belgium

SSY-7 Aging Adipocytes in Vascular Dysfunction

Zhihong Yang

Department of Medicine, University of Fribourg, Switzerland

8:45 - 9:45

RoomB: Chiyo1

Oral 3: Endothelial Cells 1

Chairpersons: Ingrid Fleming

(Goethe University Frankfurt, Germany)

Ken-ichi Hirata

(Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Japan)

O3-1 The Catechin-induced Redox-sensitive Activation of Endothelial Nitric Oxide Synthase is Critically Dependent on Hydroxyl Moieties

Cyril Auger^a, Jong-Hun Kim^a, Mehdi Chaabi^b, Philippe Chabert^b, Eric Anselm^a, Xavier Lanciaux^a, Thierry Chataigneau^a, Annelise Lobstein^b and Valerie B Schini-Kerth^a

^aUMR CNRS 7213 - Laboratory of Biophotonic and Pharmacology, University of Strasbourg - Faculty of Pharmacy, France

^bUMR CNRS 7200, Laboratory of Therapeutic Innovation, University of Strasbourg, Faculty of Pharmacy, France

O3-2 Biphasic Effects of Insulin on Endothelial Senescence

Koichiro Ina^a, Toshio Hayashi^a, Hisako Matsui-Hirai^a and Akihisa Iguchi^b

^aDepartment of Geriatrics, Nagoya University Graduate School of Medicine, Japan

^bDepartment of Health Science, Aichi Syukutoku University, Japan

O3-3 Positive Feedback Mechanism of NO by Dimethylarginine Dimethylaminohydrolase-2 Expression Via Cyclic GMP Induction in Endothelial Cells

Maya Sakurada^a, Masayoshi Shichiri^a, Masatoshi Imamura^b, Hiroshi Azuma^b and Yukio Hirata^a

^aClinical and Molecular Endocrinology, Tokyo Medical and Dental University, Japan

^bTokyo Medical and Dental University, Department of Biosystem Regulation, Institute of Biomaterials and Bioengineering, Japan

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

June 1 (Mon)

03-4 Modulation of Renin-angiotensin System by Renin Inhibitor Aliskiren Improves Endothelial Function in Spontaneously Hypertensive Rats

Jack Wing Tak Wong^a, Xiao Yu Tian^a, Maik Gollasch^b, Aimin Xu^c,
Xiao Qiang Yao^a, Paul Vanhoutte^d and Yu Huang^a

^aInstitute of Vascular Medicine and School of Biomedical Sciences, Chinese University of Hong Kong, Hong Kong, China

^bMedical Clinic for Nephrology and Internal Intensive Care, Charite University Medicine Berlin, Germany

^cDepartment of Medicine and Department of Pharmacology, University of Hong Kong, Hong Kong, China

^dDepartment of Pharmacology, University of Hong Kong, Hong Kong, China

10:00 - 11:00

RoomB: Chiyo1

Oral 4: Vascular Smooth Muscle

Chairpersons: Mark T. Nelson

(Department of Pharmacology, University of Vermont, USA)

Ikuo Morita

(Department of Cellular Physiological Chemistry, Tokyo Medical and Dental University, Japan)

June 2 (Tue)

04-1 Lectin-like Oxidized LDL Receptor-1 (LOX-1) as a Novel Receptor for Remnant-like Lipoprotein Particles (RLP) in Vascular Smooth Muscle Cells

Noriaki Kume^a, Yo Aramaki^b, Hirokazu Mitsuoka^a, Eri Mukai^b,
Masako Toyohara^a, Nobuya Inagaki^b and Toru Kita^c

^aDepartment of Cardiovascular Medicine, Kyoto University, Japan

^bDepartment of Diabetes and Clinical Nutrition, Kyoto University, Japan

^cKobe City Medical Center General Hospital, Japan

04-2 Angiotensin-like 2 is a Potent Vasodilator and Hypotensive Protein in Mice

Nada Farhat^a, Nathalie Thorin-Trescases^b, Annick Drouin^c,
Bruce G. Allen^d, Aida M Mamarbachi^e, Marc-Antoine Guillis^e
and Eric Thorin^b

^aDepartment of Pharmacology, Montreal Heart Institute, Canada

^bDepartment of Pharmacology, Universite de Montreal, Canada

^cDepartment of Physiology, Universite de Montreal, Canada

^dDepartment of Biochemistry, Universite de Montreal, Canada

^eMontreal Heart Institute, Universite de Montreal, Canada

04-3 NBCn1 is the Only Na⁺, HCO₃⁻ Cotransporter in Vascular Smooth Muscle and Endothelial Cells in Situ: Importance for Vascular Tone Regulation

Christian Aalkjaer^a, Ebbe Boedtkjer^a, Jeppe Praetorius^b, Susie Mogensen^a
and Ernst-Martin Furchtbauer^c

^aInstitute of Physiology and Biophysics, Aarhus University, Denmark

^bInstitute of Anatomy, University of Aarhus, Denmark

^cInstitute of Molecular Biology, University of Aarhus, Denmark

June 3 (Wed)

June 2 (Tue)

O4-4 Role of Rho Kinase in the Inhibition of Endothelium-dependent Vasorelaxation to Isoprenaline by TP Receptor Activation

CuiQing Liu^a, FungPing Leung^b, ChiWai Lau^b, XiaoQiang Yao^b,
ZhenYu Chen^c, LiMin Lu^d, Tai Yao^d and Yu Huang^b

^a*Department of Physiology, HangZhou Normal University, China*

^b*Department of Physiology, Chinese University of Hong Kong, Hong Kong, China*

^c*Department of Biochemistry, Chinese University of Hong Kong, Hong Kong, China*

^d*Department of Physiology and Pathophysiology, Fudan University Shanghai Medical College, China*

11:15 - 12:15

RoomA: Fuji

Luncheon Seminar 3

Chairpersons: Toru Kita

(Kobe City Medical Center General Hospital, Japan)

LS3 Inflammation in Atherosclerosis from Bench to Bedside

Peter Libby

Brigham and Women's Hospital and Harvard Medical School, USA

Sponsored by SHIONOGI & CO., LTD

11:15 - 12:15

RoomB: Chiyo1

Luncheon Seminar 4

Chairpersons: Ikuo Morita

(Department of Cellular Physiological Chemistry, Tokyo Medical and Dental University, Japan)

LS4 Dysfunction of Endothelial Derived Relaxing Factors Caused by Long-term in Vivo Administration of Nitrate

Takeo Itoh

Department of Pharmacology, Graduate School of Medical Sciences, Nagoya City University, Japan

Sponsored by Eisai Co., Ltd.

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

12:15 - 14:00

RoomB: Chiyo1

Symposium 3: Vascular Smooth Muscle

Chairpersons: Richard A. Cohen

(Vascular Biology Unit, Whitaker Cardiovascular Institute, Boston University School of Medicine, USA)

Masaaki Ito

(Department of Cardiology, Mie University Graduate School of Medicine, Japan)

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

S3-NL **Named Lecture 3** *5th David F. Bohr Lecture on Vascular Smooth Muscle*

Astrocytic Endfoot Calcium and BK Channels Determine Cerebrovascular Dilation and Constriction during Neurovascular Coupling

Mark Nelson

Department of Pharmacology, University of Vermont, USA

S3-O1 **14,15-epoxyeicosa-5(Z)-enoic Acid (14,15-EE5ZE) Acts as an EET Receptor Antagonist Inhibiting 14,15-EET Receptor Binding and G-protein Activation**

William B Campbell^a, Yuenmu Chen^a, Kathryn M. Gauthier^a, Wenqi Yang^a, Cecilia J Hillard^a and John R Falck^b

^aPharmacology and Toxicology, Medical College of Wisconsin, USA

^bUniversity of Texas Southwestern Medical Center, USA

S3-O2 **Relaxation of Porcine Coronary Artery to Nitric Oxide: Direct Effect of Hydrogen Peroxide on PKG**

Yuansheng Gao, Xiaoxu Zheng, Dou Dou, Xue Qin and Huijuan Ma

Department of Physiology and Pathophysiology, Peking University Health Science Center, China

S3-O3 **Novel Mechanism of Sustained RhoA Activation in Vascular Smooth Muscle; Its Possible Role in Vasospasm**

Katsuhiro Kato^a, Kazutaka Mori^a, Mutsuki Amano^b, Mikito Takefuji^a, Toyooki Murohara^a and Kozo Kaibuchi^b

^aDepartment of Cardiology, Nagoya University, Japan

^bDepartment of Cell Pharmacology, Graduate School of Medicine, Nagoya University, Japan

S3-O4 **The Effect of the Female Hormone, 17 β -Estradiol, on Adenylyl Cyclase and Protein Kinase G in the Regulation of Vascular Function**

Ricky YK Man, Wendy Keung, Matthew LY Chan, Paul M Vanhoutte and Susan WS Leung

Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

June 2 (Tue)

13:00 - 14:15

RoomA: Fuji

Afternoon Seminar 2

Chairperson : Masahiko Kurabayashi

*(Department of Medicine and Biological Science, Gunma University
Graduate School of Medicine, Japan)*

AS2-1 Comprehensive and Collective Approaches to Find New and Effective Treatment of Circulatory Diseases from Genomic Database

Masafumi Kitakaze

Cardiovascular Division, National Cardiovascular Center, Japan

AS2-2 The Role of ADMA in Vascular Disease

John Cooke

Stanford Cardiovascular Institute, USA

Sponsored by Novartis Pharma

14:15 - 15:45

RoomA: Fuji

Special Seminar 2

Chairperson : Toyooki Murohara

(Department of Cardiology, Nagoya University, Japan)

SS2-1 Vascular Failure and Vascular Endothelial Function

Koichi Node

Cardiovascular and Renal Medicine, Saga University

SS2-2 Learning from the Largest ARB Mega-trials: Results from ONTARGET and TRANSCEND

Roland Schmieder

Department of Nephrology and Hypertention, University of Erlangen-Nuremberg, Germany

Sponsored by Nippon Boehringer Ingelheim Co., Ltd. / Astellas Pharma Inc.

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

14:15 - 15:15

Poster & Exhibition: Chiyo2

Poster 7: Adrenoceptors / Adrenergic Nerve

Chairpersons: Michael J. Joyner

(Department of Anesthesiology, Mayo Clinic, USA)

Norihiro Suzuki

(Department of Neurology, Keio University School of Medicine, Japan)

- P7-1 Endogenous Urea as a Subject and as an Object of β -adrenoceptor Control in Animal Organism**
Nikolai Dimitrov Temnyalov
Preclinical and Clinical Pharmacology, Medical University - Varna, Bulgaria
- P7-2 Pioglitazone Opposes Neurogenic Vascular Dysfunction Via Abnormal Innervation of Mesenteric Perivascular Nerves Induced by Hyperinsulinemia**
Yoshito Zamami^a, Keisuke Amitani^a, Miho Hosoda^a, Xin Jin^a,
Narumi Hobarab, Shingo Takatori^c, Yoshihisa Kitamura^d, Kenji Sasaki^e
and Hiromu Kawasaki^a
^a*Department of Pharmaceutical Sciences, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*
^b*Department of Life Science, Okayama University of Science, Japan*
^c*Nippon Shinyaku Co. Ltd, Japan*
^d*Department of Pharmaceutical Care and Health, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*
^e*Department of Molecular Design for Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*
- P7-3 Dexmedetomidine Relaxes Isolated Porcine Coronary Arteries by Activating Endothelial 2A, 2B and 2C Adrenoceptors**
Kwok Fu Jacobus Ng, Matthew L.Y. Chan, Ricky Y.K. Man
and Paul M. Vanhoutte
Pharmacology & Pharmacy, The University of Hong Kong, Hong Kong, China
- P7-4 Protons Mediate Perivascular Adrenergic Nerve-mediated Vasodilation in the Rat Mesenteric Artery**
Kazuhiro Hirai^a, Satoko Miyashita^a, Narumi Hobarab, Yoshito Zamami^a,
Yoshihisa Kitamura^c and Hiromu Kawasaki^a
^a*Department of Pharmaceutical Sciences, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*
^b*Department of Life Sciences, Okayama University of Science, Japan*
^c*Department of Pharmaceutical Care Health Sciences, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

P7-5 Local-cooling Effects on the Skin Blood Flow in Mice and Rats, The Most Major Rodents in Experimental Animals

Koichi Nakayama^a and Tomohisa Ishikawa^b

^a*Department of Molecular & Cellular Pharmacology, Iwate Medical University, Faculty of Pharmaceutical Sciences, Japan*

^b*Department of Cellular and Molecular Pharmacology, University of Shizuoka, Japan*

P7-6 Differential Effects of Alpha-adrenoceptor Agonists on Relaxation in the Mesenteric Artery and Aorta of the Rat

Emily S.W. Wong^a, Ricky Y.K. Man^a, Paul M. Vanhoutte^a and Kwok F.J. Ng^b

^a*Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China*

^b*Department of Anaesthesiology, The University of Hong Kong, Hong Kong, China*

P7-7 WITHDRAWN

14:15 - 15:15

Poster & Exhibition: Chiyo2

Poster 8: Microcirculation

Chairpersons: Richard A. Cohen

(Vascular Biology Unit, Whitaker Cardiovascular Institute, Boston University School of Medicine, USA)

Toyotaka Yada

(Department of Medical Engineering and Systems Cardiology, Kawasaki Medical School, Japan)

P8-1 Beneficial Biphasic Effects of Adenosine on Rat Afferent and Efferent Arterioles

Hiroshi Nakamoto, Yasuo Ogasawara and Fumihiko Kajiya

Department of Medical Engineering and Systems Cardiology, Kawasaki Medical School, Japan

P8-2 Role of Hydrogen Peroxide, an Endogenous EDHF during Coronary Occlusion and Injection of Erythropoietin in Canine Coronary Native Collateral Microcirculation

Toyotaka Yada^a, Hiroaki Shimokawa^b, Osamu Hiramatsu^a, Masami Goto^a, Yasuo Ogasawara^a and Fumihiko Kajiya^a

^a*Department of Medical Engineering and Systems Cardiology, Kawasaki Medical School, Japan*

^b*Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

June 1 (Mon)

- P8-3 Capillary-specific Expression of FABP4 and FABP5 (Fatty Acid Binding Proteins): A Possible Role of Fatty Acid Transport through Capillary Endothelium**
Tatsuya Iso and Masahiko Kurabayashi
Department of Medicine and Biological Science, Gunma University, Japan

- P8-4 Impaired Coronary Metabolic Dilation in Metabolic Syndrome**
Takahiko Kiyooka^a, Akira Nikaidoh^a, Michio Takikawa^a, Nami Okamoto^a, Takeaki Kasai^a, Keiko Oikawa^a and William M Chilian^b
^a*Department of Cardiology, Tokai University Hachioji Hospital, Japan*
^b*Integrative Medical Sciences, Northeastern Ohio Universities College of Medicine, USA*

- P8-5 Impact of the Presence of Metabolic Syndrome on Coronary Microvascular Response**
Hiroki Teragawa^a, Kenji Nishioka^a, Naoya Mitsuba^a, Shinsuke Mikami^a, Yuichi Fujii^a, Noritaka Fujimura^a, Takayuki Hidaka^a, Takenori Okada^a, Futoshi Tadehara^a, Yukihito Higashi^b and Yasuki Kihara^a
^a*Department of Cardiovascular Medicine, Hiroshima University Graduate School of Biomedical Sciences, Japan*
^b*Department of Cardiovascular Physiology and Medicine, Hiroshima University Graduate School of Biomedical Sciences, Japan*

- P8-6 A Hypothesis: Virchow-Robin Space as an Integrating "Cleft" of Cerebrocortical Local Arteriolar Response**
Minoru Tomita^a, Yutaka Tomita^b, Haruki Toriumi^a, Miyuki Unekawa^a, Hidenori Hattori^a and Norihiro Suzuki^a
^a*Department of Neurology, Keio University School of Medicine, Japan*
^b*Department of Neurology and Department of Preventive Medicine for Cerebrovascular Disease, School of Medicine, Keio University, Japan*

- P8-7 Glucose Metabolism and Astroglial Regulatory Mechanism of Cerebral Blood Flow**
Shinichi Takahashi, Yoshikane Izawa and Norihiro Suzuki
Department of Neurology, Keio University School of Medicine, Japan

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

14:15 - 15:15

Poster & Exhibition: Chiyo2

Poster 9: Cardiac Remodeling

Chairpersons: Jo G.R. De Mey

*(Department of Pharmacology and Toxicology, Cardiovascular
Research Institute Maastricht, Maastricht University, The Netherlands)*

Hiroshi Ito

*(Department of Cardiovascular Medicine, Akita University Graduate
School of Medicine, Japan)*

- P9-1 Synthetic Prostacycline Agonist, ONO-1301, Ameliorate Left Ventricular Dysfunction and Cardiac Fibrosis in Cardiomyopathic Hamsters**
Yoichiro Hirata^a, Hiroshi Iwata^b, Kazuto Nakamura^c, Yoshiki Sakai^d and Masataka Sata^a
^aDepartment of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan
^bDepartment of Cardiovascular Medicine, Graduate School of Medicine, University of Tokyo, Japan
^cDepartment of Internal Medicine II, Yamanashi University, Faculty of Medicine, Japan
^dOno Pharmaceutical Co. LTD. Research Headquarters, Japan
- P9-2 Extracorporeal Cardiac Shock Wave Therapy Ameliorates Left Ventricular Remodeling after Myocardial Ischemia-reperfusion Injury in Pigs in Vivo**
Yoshitaka Ito, Kenta Ito, Takashi Shiroto, Ryuji Tsuburaya, Jun Yi Gao, Yoku Kikuchi, Kentaro Aizawa, Morihiko Takeda, Satoshi Yasuda and Hiroaki Shimokawa
Department of Cardiovascular Medicine, Tohoku University, Japan
- P9-3 Exogenous Erythropoietin Protects Left Ventricle Against Pressure Overload-induced Dysfunction in Mice**
Wanting Wang^a, Yutaka Kagaya^b, Yasuhide Asami^a, Shigefumi Fukui^a, Morihiko Takeda^a and Hiroaki Shimokawa^a
^aDepartment of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
^bGraduate Medical Education Center, Tohoku University Hospital, Japan
- P9-4 Transcriptomic Analysis for Cardiac Hypertrophy**
Masaharu Nakayama, Naomi Yamaki, Morihiko Takeda, Yasuhide Asami, Tatsuya Komaru and Hiroaki Shimokawa
Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
- P9-5 Endothelin-1 Levels in Chronic Congestive Heart Failure**
Minoru Ohmae
Department of Cardiology, Kochi General Rehabilitation Hospital, Japan

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

P9-6 Urea and Manganese as Cardiovascular β -adrenoceptors Antagonists in Vivo Supporting Data in Animal Organism

Nikolai Dimitrov Temnyalov

Preclinical and Clinical Pharmacology, Medical University - Varna, Bulgaria

P9-7 Urea and Manganese as Cardiovascular β -adrenoceptors Antagonists - in Vitro Proofs in Heart and Vascular Tissues

Nikolai Dimitrov Temnyalov

Preclinical and Clinical Pharmacology, Medical University - Varna, Bulgaria

14:15 - 15:15

Poster & Exhibition: Chiyo2

Poster 10: HT/PH

Chairpersons: Heikki Vapaatalo

(Institute of Biomedicine, Pharmacology, University of Helsinki, Finland)

Masaaki Ito

(Department of Cardiology, Mie University Graduate School of Medicine, Japan)

P10-1 Polymorphisms of CYP4A11, a Producing Enzyme of 20-HETE, Are Associated with Hypertension

Ken Sugimoto^a, Hiroshi Akasaka^b, Tomohiro Katsuya^a, Osamu Yasuda^a, Tomomi Fujisawa^a, Kazuaki Shimamoto^b and Hiromi Rakugi^a

^a*Geriatric Medicine, Osaka University Graduate School of Medicine, Japan*

^b*The Second Department of Internal Medicine, Sapporo Medical University, Japan*

P10-2 Retina Derived Relaxations are Maintained in Carotid and Mesenteric Arteries of L-NAME-induced Hypertensive Rats

Fulya Gezerler^a, Selcuk Takir^a, F. Ilkay Alp^a, Bulent Ergin^b, Cihan Demirci^b, Osman Ozdemir^c and B. Sonmez Uydes-Dogan^a

^a*Department of Pharmacology, Faculty of Pharmacy, Istanbul University, Turkey*

^b*Department of Biology, Faculty of Science, Istanbul University, Turkey*

^c*Sanovel Pharmaceutical Company, Turkey*

P10-3 Mechanical Stretch Potentiates Angiotensin II-induced Proliferation in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells

Hirofumi Hitomi^a, Gang Liu^a, Naohisa Hosomi^b, Hideyasu Kiyomoto^b, Daisuke Nakano^a, Shoji Kimura^a, Masakazu Kohno^b and Akira Nishiyama^a

^a*Department of Pharmacology, Kagawa University, Japan*

^b*Department of Cardioresnal and Cerebrovascular Medicine, Kagawa University, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

- P10-4 New Additional Prognostic Factors of Pulmonary Hypertension -Lessons from Long-term Follow-up Study-**
Yutaka Miura, Yoshihiro Fukumoto, Makoto Nakano, Kimio Satoh, Kohichiro Sugimura, Minako Oikawa and Hiroaki Shimokawa
Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan
- P10-5 Role of Soluble Epoxide Hydrolase in Flow-induced Dilations of Mouse Mesenteric Arteries**
Kathryn M Gauthier^a, Yuttana Chawengsub^a, Darryl C. Zeldin^b and William B. Campbell^a
^a*Pharmacology and Toxicology, Medical College of Wisconsin, USA*
^b*National Institutes of Health, National Institute of Environmental Health Sciences, USA*
- P10-6 Endothelium-dependent Vasodilation in Aorta from Stroke-prone Spontaneously Hypertensive Rats Made Hyperglycemia with Streptozocin**
Hong Chen, Mei-Fang Zhong and Wei-Li Shen
Department of Pharmacology, Shanghai Jiao Tong University School of Medicine, China

14:15 - 15:15

Poster & Exhibition: Chiyo2

Poster 11: NOS

Chairpersons: Ralf P. Brandes

(Institute for Cardiovascular Physiology, Faculty of Medicine, Goethe-University Frankfurt, Germany)

Masato Tsutsui

(Department of Pharmacology, Faculty of Medicine, University of the Ryukyus, Japan)

- P11-1 Exogenous BH4 Improves NO Production and Controls Cytosolic Calcium Levels in Dysfunctional Aged Endothelial Cells**
Marie-Pierre Fournet-Bourguignon, Willy Gosgnach, Emilie Royere, Nicole Villeneuve and Jean-Paul Vilaine
Department of cardiology, Servier Research Institute, France
- P11-2 Prostacyclin Analogs Rapidly Induce Nitric Oxide Production through Endothelial Nitric Oxide Synthase Phosphorylation in Vascular Endothelial Cells**
Masataka Kudo^a, Akira Sugawara^b, Akiko Saito^c, Fumitoshi Satoh^a, Akira Uruno^b and Sadayoshi Ito^a
^a*Division of Nephrology, Endocrinology, and Vascular Medicine, Tohoku University Graduate School of Medicine, Japan*
^b*Department of Advanced Biological Sciences for Regeneration, Tohoku University Graduate School of Medicine, Japan*
^c*Department of Pediatrics, Tohoku University Graduate School of Medicine, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 2 (Tue)

June 1 (Mon)

- P11-3 Plasma Tetrahydrobiopterin / Dihydrobiopterin Ratio :
A Possible Marker of Endothelial Dysfunction**
Masafumi Takeda^a, Tomoya Yamashita^a, Masakazu Shinohara^a,
Kenji Nakajima^a, Naoto Sasaki^a, Ken-ichi Hirata^a
and Seinosuke Kawashima^b

^a*Department of Cardiology, Kobe University, Japan*

^b*Osaka Saiseikai Nakatsu Hospita, Japan*

- P11-4 Characterization of Vascular Function in Mice Lacking Entire Nitric
Oxide Synthase System**

Osamu Suda^a, Masato Tsutsui^b, Hiroaki Shimokawa^c, Sei Nakata^d,
Tsuyoshi Morishita^d, Ken Sabanai^b, Nobuyuki Yanagihara^b
and Yutaka Otsuji^d

^a*Health Care Center Central Japan Railway Company, Japan*

^b*Department of Pharmacology, School of Medicine, University of Occupational and
Environmental Health, Japan*

^c*Department of Cardiovascular Medicine, Tohoku University Graduate School of
Medicine, Japan*

^d*Second Department of Internal Medicine, School of Medicine, University of
Occupational and Environmental Health, Japan*

- P11-5 Blockage of NOS Exaggerates Oxygen Extraction over
Blood Flow Reduction in Human Skeletal Muscle as Measured
Directly with PET**

Ilkka Heinonen^a, Bengt Saltin^b, Jukka Kemppainen^a, Vesa Oikonen^c,
Juhani Knuuti^c, Pirjo Nuutila^d, Kari Kalliokoski^e and Ylva Hellsten^e

^a*Turku PET Centre & Clinical Physiology and Nuclear Medicine, University of
Turku, Finland*

^b*Copenhagen Muscle Research Center, University of Copenhagen, Copenhagen,
Denmark*

^c*Turku PET Centre, University of Turku, Finland*

^d*Turku PET Centre & Department of Medicine, University of Turku, Finland*

^e*Department of Exercise and Sport Sciences, Section of Human Physiology,
University of Copenhagen, Denmark*

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

7:30 - 8:20

RoomB: Chiyo1

Morning Seminar 3

Chairperson : Yasufumi Sato

(Department of Vascular Biology, Institute of Development, Aging and Cancer, Tohoku University, Japan)

MS3 Roles of Rho/Rho-kinase in Cellular Functions and Diseases

Mutsuki Amano

Department of Cell Pharmacology, Graduate School of Medicine, Nagoya University, Japan

Sponsored by ASAHI KASEI PHARMA CORPORATION

8:30 - 10:15

RoomA: Fuji

Symposium 4: Remodeling

Chairpersons: Thomas F. Lüscher

(Cardiovascular Center, University Hospital Zurich, Switzerland)

Toru Kita

(Kobe City Medical Center General Hospital, Japan)

S4-NL **Named Lecture 4 4th Björn Folkow Lecture on Growth and Remodeling**

Molecular Mechanisms of Arterial Remodeling

Peter Libby

Brigham and Women's Hospital and Harvard Medical School, USA

S4-O1 Pulmonary Pressure Reduction Attenuates Expression of Proteins Identified by Lung Proteomic Profiling in Pulmonary Hypertensive Rats

Ulf Simonsen^a, Louise Ostergaard^a, Bent Honore^b, Lise B Thorsen^a,
Jonas D Baandrup^a, Britt Elmedal^a, Henrik Vorum^b
and Michael J Mulvany^a

^a*Department of Pharmacology, Aarhus University, Denmark*

^b*Department of Biochemistry, Aarhus University, Denmark*

S4-O2 Chronic Hypoxia-induced Pulmonary Hypertension and Pulmonary Vascular Remodelling are Linked to the Downregulation of the Soluble Epoxide Hydrolase

Ingrid Fleming^a, Benjamin Keserue^a, Beate Fisslthaler^a
and Norbert Weissmann^b

^a*Institute for Vascular Signalling, Johann Wolfgang Goethe University Frankfurt, Germany*

^b*University of Giessen Lung Center, Justus-Liebig-University Giessen, Germany*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

June 1 (Mon)

- S4-03 Characterization of Vascular Metabolism in Zucker Rat**
Takeshi Adachi^a, Michiko Yamamoto^b, Kyoko Ishiwata^c, Ikeda Satsuki^d,
Yoshiaki Hirayama^d, Tomoyoshi Soga^d and Makoto Suematsu^c

^a*Internal Medicine I, Division of Cardiology National Defense Medical College, Japan*

^b*Department of Regenerative Medicine and Advanced Cardiac Therapeutics, Keio University, School of Medicine, Japan*

^c*Department of Biochemistry and Integrative Medical Biology, Keio University, School of Medicine, Japan*

^d*Institute for Advanced Bioscience, Keio University, Japan*

- S4-04 Statin Ameliorates Hypoxia-induced Pulmonary Hypertension Associated with Down-regulated Stromal Cell-derived Factor-1**

Kimio Satoh, Yoshihiro Fukumoto, Makoto Nakano, Koichiro Sugimura, Minako Oikawa, Jun Nawata, Jun Demachi and Hiroaki Shimokawa

Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan

9:15 - 10:30

RoomB: Chiyo1

Oral 5: Endothelial Cells 2

Chairpersons: Masato Tsutsui

(Department of Pharmacology, Faculty of Medicine, University of the Ryukyus, Japan)

Toyooki Murohara

(Department of Cardiology, Nagoya University, Japan)

June 2 (Tue)

- O5-1 Nitric Oxide Synthase and Soluble Guanylyl Cyclase Activation are Required for Hypoxic Endothelium-dependent Contractions of the Porcine Coronary Artery**

Calvin KY Chan^a, Paul Vanhoutte^a, Ricky YK Man^a and Judith Mak^b

^a*Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China*

^b*Department of Medicine and Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China*

- O5-2 Testosterone Activates Endothelial Nitric Oxide Synthase through Non-genomic Signaling of Androgen Receptor**

Masato Eto^a, Masahiro Akishita^a, Jing Yu^b, Tetsuro Okabe^b and Yasuyoshi Ouchi^a

^a*Department of Geriatric Medicine, University of Tokyo, Japan*

^b*Department of Integrated Traditional Medicine, University of Tokyo, Japan*

- O5-3 Angiotensin II Impairs Endothelium-dependent Vasodilatation Via Tyrosine Phosphorylation of the Endothelial NO Synthase**

Annemarieke Elisabeth Loot, Beate Fisslthaler and Ingrid Fleming

Institute for Vascular Signalling, Centre for Molecular Medicine, Goethe University, Germany

June 3 (Wed)

June 3 (Wed)

- 05-4 Aging Induces Endothelial Dysfunction while Sparing Arterial Thrombosis**
Simon F Stampfli, Giovanni G Camici, Catherine Gebhard, Erik W Holy, Izabela Rozenberg, Thomas F Lüscher and Felix C Tanner
Cardiovascular Research, Institute of Physiology, University of Zurich, Switzerland
- 05-5 Modulation of Calcium-activated K⁺ Channels by Chronic Shear Stress Alterations in the Rat Mesenteric Arterial Bed**
Rob HP Hilgers, Ger M Janssen and Jo G De Mey
Pharmacology & Toxicology, University of Maastricht, The Netherlands

10:30 - 11:45

RoomB: Chiyo1

Oral 6: Endothelial Cells 3

Chairpersons: Maik Gollasch

(Medical Clinic for Nephrology and Internal Intensive Care, Charite University Medicine Berlin, Germany)

Yukio Hirata

(Department of Clinical and Molecular Endocrinology, Tokyo Medical and Dental University Graduate School, Japan)

- 06-1 Vasohibin-1 Prevents Cellular Senescence and Maintains Vascular Endothelial Cells**
Hiroki Miyashita and Yasufumi Sato
Department of Vascular Biology, Institute of Development, Aging and Cancer, Tohoku University, Japan
- 06-2 Small G Protein RhoA and Rac Coordinately Regulate Stromal Cell Derived Factor-1 α -mediated Angiogenesis in a Nitric Oxide Dependent Fashion**
Yasuko Kureishi-Bando, Yasutsugu Morimoto, Toshimasa Shigeta, Satoshi Shintani and Toyoaki Murohara
Cardiology, Nagoya University School of Medicine, Japan
- 06-3 The Steady-state Expression Level of Connexin43 is Maintained by the PI3K/Akt Pathway**
Rajib Bhattacharjee, Makoto Kaneda, Ken-ichi Nakahama and Ikuo Morita
Department of Cellular Physiological Chemistry, Tokyo Medical and Dental University, Japan
- 06-4 Calcium-independent Phospholipase A2 is Involved in Endothelium-dependent Contractions of the Aorta of the Spontaneously Hypertensive Rats**
Sze Ka Wong, Ricky YK Man and Paul M Vanhoutte
Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

O6-5 SIRT1 Promotes Cell Proliferation and Prevents Cellular Senescence through Targeting LKB1 in Primary Cultures of Porcine Aortic Endothelial Cells

Yu Wang^a, Yi Zu^a, Ling Liu^b, Karen Lam^b, Mary Lee^a, Paul M Vanhoutte^a and Aimin Xu^a

^a*Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China*

^b*Department of Medicine, University of Hong Kong, Hong Kong, China*

12:00 - 13:00

RoomA: Fuji

Luncheon Seminar 5

Chairperson : Toyoaki Murohara

(Department of Cardiology, Nagoya University, Japan)

LS5 Multifunctionality of Sildenafil, an PDE-5 inhibitor - Pulmonary Vasodilatation and beyond -

Tsutomu Saji

Division of Pediatric Cardiology, Pulmonary Hypertension & Kawasaki Disease,

Department of Pediatrics, Toho University, Medical Center Omori Hospital, Japan

Sponsored by Pfizer Japan Inc.

12:00 - 13:00

RoomB: Chiyo1

Luncheon Seminar 6

Chairperson : Norihiro Suzuki

(Department of Neurology, Keio University School of Medicine, Japan)

LS6 CO-mediated Modulation of H₂S Generation via CBS: A Putative Tonic Mechanism for Neurovascular Units

Makoto Suematsu

Department of Biochemistry & Integrative Medical Biology School of Medicine, Keio University, Japan

Sponsored by Otsuka Pharmaceutical Co., Ltd.

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

13:00 - 14:00

Poster & Exhibition: Chiyo2

Poster 12: Statins / PPAR

Chairpersons: Ricky Y.K. Man

(Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China)

Masahiko Kurabayashi

(Department of Medicine and Biological Science, Gunma University Graduate School of Medicine, Japan)

- P12-1** **Effect of Chronic Treatment with Atorvastatin on Nitric Oxide Synthase, Rho-kinase and Akt in the Kidney of Spontaneously Hypertensive Rats**
Daisuke Ito, Osamu Ito, Naoyoshi Mori, Yoshikazu Muroya, Peng-Yu Cao, Kenta Takashima, Masayuki Kanazawa and Masahiro Kohzuki
Department of Internal Medicine and Rehabilitation Science, Tohoku University Graduate School of Medicine, Japan
- P12-2** **WITHDRAWN**
- P12-3** **Atorvastatin Reduces Sympathetic Nerve Activity through the Inhibition of Rac/NAD(P)H Oxidase and Upregulation of Mn-SOD in Brain**
Takuya Kishi, Yoshitaka Hirooka and Kenji Sunagawa
Department of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Japan
- P12-4** **Effect of PPAR Agonists on Relaxations and Contractions of the SHR Aorta**
Chen Qu, Susan W.S. Leung, Paul M. Vanhoutte and Ricky Y.K. Man
Department of Pharmacology and Pharmacy, University of Hong Kong, Hong Kong, China
- P12-5** **PPAR γ Augments Angiotensin II-induced AT₂ Receptor Mediated Relaxation in Rat Thoracic Aorta of High Fat Diet Fed Rats**
B Viswanad and P Ramarao
Department of Pharmacology & Toxicology, National Institute of Pharmaceutical Education and Research (NIPER), India

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

June 1 (Mon)

P12-6 Enhanced Macrophage Infiltration in Epicardial Adipose Tissue in Patients with Coronary Artery Disease

Yoichiro Hirata^a, Toshiyuki Niki^a, Kenya Kusunose^a, Koji Yamaguchi^a, Shusuke Yagi^a, Kunihiko Koshiba^a, Takashi Iwase^a, Hirotsugu Yamada^a, Takeshi Soeki^a, Tetsuzo Wakatsuki^a, Masashi Akaike^a, Hirotsugu Kurobe^b, Humio Chikugo^c, Takaki Hori^d, Tetsuya Kitagawa^b and Masataka Sata^a

^aDepartment of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

^bDepartment of Cardiovascular Surgery, Institute of Health Bioscience, The University of Tokushima Graduate School, Japan

^cDepartment of Cardiovascular Surgery, Tokushima Prefectural Central Hospital, Japan

^dDepartment of Cardiovascular Surgery, Ehime Prefectural Central Hospital, Japan

P12-7 Metabolic Mechanisms of Thiol-mediated Vasodilatation

Michiko Yamamoto^a, Takeshi Adachi^b, Naoko Toki^c, Ayako Momose^c, Keiichi Fukuda^a, Tomoyoshi Soga^c and Makoto Suematsu^d

^aDepartment of Regenerative Medicine and Advanced Cardiac Therapeutics, Keio University, Japan

^bDepartment of Internal Medicine I, National Defense Medical College, Japan

^cInstitute for Advanced Bioscience, Keio University, Japan

^dDepartment of Biochemistry and Integrative Medical Biology, Keio University, Japan

13:00 - 14:00

Poster & Exhibition: Chiyo2

June 2 (Tue)

Poster 13: NO / Gaseous Mediators

Chairpersons: Yuansheng Gao

(Department of Physiology and Pathophysiology, Peking University Health Science Center, China)

Donald D. Heistad

(Division of Cardiovascular Medicine, Department of Medicine, University of Iowa, USA)

June 3 (Wed)

P13-1 Endothelium-derived Nitric Oxide inhibits CNP-induced Relaxation in the Isolated Porcine Coronary Artery

Sophie Chaofan Liang^a, SWS Leung^a, KFJ Ng^a, RYK Man^a, Michel Feletou^b and Paul M Vanhoutte^a

^aDepartment of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

^bDepartment of Angiology, Institut de Recherches Servier, France

P13-2 Role of Myosin Light Chain Phosphatase in Development of Nitrate Tolerance

Yuansheng Gao, Dou Dou, Huijuan Ma and Xiaoxu Zheng

Department of Physiology and Pathophysiology, Peking University Health Science Center, China

June 3 (Wed)

P13-3 Vascular Smooth Muscle Relaxation in Soluble Guanylyl Cyclase β 1 His 105 Phe Mutant Mice

Johan Van de Voorde^a, Sofie Nimmegeers^a, Kelly Decaluwe^a,
Rob Thoonen^b and Peter Brouckaert^b

^a*Department of Pharmacology, Ghent University, Belgium*

^b*Department of Molecular Biomedical Research, Ghent University, Belgium*

P13-4 Bicarbonate-dependent Effect of Hydrogen Sulphide on Vascular Contractility in Rat Aortic Rings

Jinsong Bian and Yihong Liu

Pharmacology, National University of Singapore, Singapore

P13-5 Hydrogen Sulfide Induced Relaxation of Isolated Renal Artery of Rabbits

Yuming Wu, Jing Zhang, Sheng Jin and Shaobin Liu

Department of Physiology, Hebei Medical University, China

P13-6 Elevated cGMP Plays Important Role in Acute Vasodilatory Effect of Sildenafil

Akihiro Tsuji, Norikazu Yamada, Satoshi Ota, Ken Ishikura,
Mashio Nakamura and Masaaki Ito

Department of Cardiology, Mie University Graduate School of Medicine, Japan

P13-7 Stimulation or Activation of Soluble Guanylate Cyclase and Relaxation of Isolated Aorta from WKY Rats

Michel Feletou, Severine Roger, Caroline Ohana, Serge Simonet,
Cecile Badier-Commander, Christine Courchay and Tony Verbeuren

Department of Angiology, Institut de Recherches Servier, France

June 1 (Mon)

June 2 (Tue)

13:00 - 14:00

Poster & Exhibition: Chiyo2

Poster 14: Diabetes Mellitus

Chairpersons: Thomas F. Lüscher

(Cardiovascular Center, University Hospital Zurich, Switzerland)

Yoshihiro Fukumoto

*(Department of Cardiovascular Medicine, Tohoku University
Graduate School of Medicine, Japan)*

P14-1 Quercetin Exerts a Gender-selective Relaxant Effect on Phenylephrine Contracted Normal and Diabetic Rat Aorta

Aloysius Iguegbe Umelo^a, Achike FI Francis^b and Mustafa MR Rais^c

^a*Department of Pharmacology, University Malaya, Malaysia*

^b*International Medical University, Malaysia*

^c*Faculty of Medicine, Department of Pharmacology, University Malaya, Malaysia*

June 3 (Wed)

June 3 (Wed)

June 1 (Mon)

- P14-2 Innovative Therapies of Endothelial Dysfunction in Experimental Diabetic Rats**
Irina Camelia Chis, Doina Baltaru, Marius Ionut Ungureanu, Ramona Simedrea, Adriana Marton, Adriana Muresan, Andreea Cozma, Anca Dumitrovici, Rami Ababneh, Nicoleta Decea, Mahdi Juhar and Monica Maier

Physiology Department, "TULIU HATIEGANU" University of Medicine and Pharmacy, Roumania

- P14-3 Losartan Reverses Thiazide Diuretics-exacerbated Insulin Resistance through Modulation of Muscular Capillary Density in Fructose-Fed Rats**

Qi Guo, Takefumi Mori, Chunyan Hu, Yusuke Osaki, Yoshimi Yoneki, Takashi Nakamichi, Takuma Hosoya, Hiroshi Sato and Sadayoshi Ito

Division of Nephrology, Endocrinology and Vascular Medicine, Tohoku University Graduate School of Medicine, Japan

- P14-4 Diabetes- and Hypertension-induced Upregulation of Concentrative Nucleoside Transporter-2 in Endothelial Cells**

George PH Leung^a, Eva YW Ho^a, Rachel WS Li^a, SW Seto^b and YW Kwan^b

*^aPharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China
^bDepartment of Pharmacology, The Chinese University of Hong Kong, Hong Kong, China*

- P14-5 WITHDRAWN**

- P14-6 WITHDRAWN**

- P14-7 Metformin Improves Imbalance between Vasodilator and Vasoconstrictor Actions of Endothelium-derived Factors in Mesenteric Arteries from Type 2 Diabetic Rats**

Takayuki Matsumoto, Tsuneo Kobayashi and Katsuo Kamata
Department of Physiology and Morphology, Hoshi University, Japan

- P14-8 Blockade of the Endothelial NF- κ B Pathway Prevents Obesity- and Age-related Insulin Resistance and Prolongs Longevity**

Yutaka Hasegawa^a, Tokuo Saito^{a,b}, Takehide Ogihara^b, Toshio Fujita^c, Yoshitomo Oka^a and Hideki Katagiri^b

^aDivision of Molecular Metabolism and Diabetes, Tohoku University Graduate School of Medicine, Japan

^bDivision of Advanced Therapeutics for Metabolic Diseases, Tohoku University Graduate School of Medicine, Japan

^cDepartment of Nephrology and Endocrinology, Faculty of Medicine, University of Tokyo, Japan

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

13:00 - 14:00

Poster & Exhibition: Chiyo2

Poster 15: Vasodilators

Chairpersons: Kim Dora

(Department of Pharmacology, University of Oxford, UK)

Jun Sukegawa

*(Department of Molecular Pharmacology, Tohoku University
Graduate School of Medicine, Japan)*

- P15-1 Retroviral Gene Delivery of Receptor for Advanced Glycation End Products (RAGE) into Rat Vascular Smooth Muscle Cells**
Eri Hayakawa, Takanobu Yoshimoto, Naoko Sekizawa,
Kyoichiro Tsuchiya, Masayoshi Shichiri and Yukio Hirata
*Department of Clinical and Endocrinology, Tokyo Medical and Dental University
Graduate School, Japan*
- P15-2 Comparison of Calcium Channel Blocker and AT1 Receptor Blocker for the Protection of Endothelial Function in Diabetes**
Nobukazu Ishizaka, Kan Saito, Kyoko Furuta, Gen Matsuzaki
and Ryozo Nagai
Cardiovascular Medicine, University of Tokyo, Japan
- P15-3 Effect of Specific T-type Calcium Channel Blocker R(-) Efonidipine on the Amelioration of Renal Medullary Circulation in Rats**
Chunyan Hu^a, Takefumi Mori^b, Qi Guo^a, Ying Sun^a, Yoshimi Yoneki^a,
Yusuke Osaki^a, Takashi Nakamichi^a, Hiroshi Sato^a and Sadayoshi Ito^a
^a*Nephrology, Endocrinology and Vascular Medicine, Tohoku University, Japan*
^b*Health Administration Center, Tohoku University, Japan*
- P15-4 Natriuretic Peptides Enhance the Production of Adiponectin**
Masashi Fujita^a, Osamu Tsukamoto^a, Mahoto Kato^b, Satoru Yamazaki^b,
Yoshihiro Asano^a and Masafumi Kitakaze^b
^a*Department of Cardiovascular Medicine, Osaka Graduate School of Medicine,
Japan*
^b*National Cardiovascular Center, Japan*
- P15-5 Rapid, Non-genomic Vascular Actions of Genistein Involves a G-protein Coupled Receptor**
Amanda HY Lin, George PH Leung, Susan WS Leung
and Ricky YK Man
Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

June 1 (Mon)

P15-6 A Vasodilator, Bradykinin, Plays a Key Role in the Contrast Media Induced Nephropathy in Mice

Jun-ichi Suzuki^a, Masahito Ogawa^a and Mitsuaki Isobe^b

^a*Department of Advanced Clinical Science and Therapeutics, University of Tokyo, Japan*

^b*Tokyo Medical and Dental University, Japan*

P15-7 A Novel Mas Receptor in the Eye Tissue

Heikki Vapaatalo^a, Anu Vaajanen^a, Paivi Lakkisto^b, Ismo Virtanen^c, Esko Kankuri^a, Olli Oksala^a and Ilkka Tikkanen^d

^a*Institute of Biomedicine/Pharmacology, University of Helsinki, Finland*

^b*Department of Clinical Chemistry, Helsinki University Central Hospital, Finland*

^c*Institute of Biomedicine, Anatomy, University of Helsinki, Finland*

^d*Minerva Foundation, Institute for Medical Research, Finland*

13:00 - 14:00

Poster & Exhibition: Chiyo2

Poster 16: Ion Channels

Chairpersons: Chris Gerland

(Department of Pharmacology, University of Oxford, UK)

Teruyuki Yanagisawa

(Department of Molecular Pharmacology, Tohoku University Graduate School of Medicine, Japan)

June 2 (Tue)

P16-1 WITHDRAWN

P16-2 Involvement of TRPV4 Channel in Endothelial Dysfunction

Yoshiko Munehisa^a, Hiroyuki Watanabe^a, Kyoichi Ono^b, Takayoshi Ohba^b, Kiyoshi Nobori^a, Manabu Murakami^b and Hiroshi Ito^a

^a*Division of Cardiovascular, Department of Internal Medicine, Akita University School of Medicine, Japan*

^b*Department of Physiology, Akita University School of Medicine, Japan*

P16-3 Long-term Treatment with Eicosapentaenoic Acid Suppresses Ischemia-induced Ventricular Fibrillation in Pigs in Vivo. Possible Involvement of ATP-sensitive Potassium Channel

Ryuji Tsuburaya, Satoshi Yasuda, Yoshitaka Ito, Takashi Shiroto, Jun Yi Gao, Kenta Ito and Hiroaki Shimokawa

Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan

June 3 (Wed)

- P16-4 Adenosine Induces Vasodilatation of Small Mesenteric Artery by Inhibiting Store-operated Calcium Channels**
Sheng-Peng Wang^a, W. Gil Wier^b, Yan Zhang^c, Ming Zhao^a, Xiao-Jiang Yu^a and Wei-Jin Zang^a
^a*Department of Pharmacology, Xi'an Jiaotong University School of Medicine, China*
^b*Departments of Physiology and Medicine, University of Maryland School of Medicine, USA*
^c*Key Laboratory of Environment and Genes Related to Diseases, Ministry of Education, School of Medicine, Xi'an Jiaotong University, China*
- P16-5 Prominent Role of Large Conductance Calcium-dependent Potassium Channels in Endothelium-dependent Relaxation of Rat Small Mesenteric Arteries in Alloxanic Diabetes**
Bogdan Alexandru Stoica, Ionela-Lacramioara Serban, Dumitru D Branisteanu, Sorin Beschea-Chiriac and Dragomir N Serban
Cell Physiology & Pharmacology Laboratory, Functional Sciences Department, "Grigore T. Popa" University of Medicine and Pharmacy, Iasi, Roumania
- P16-6 Bestrophin-3-associated Calcium-activated Chloride Current is Important for Rhythmic but not Tonic Activities in Rat Mesenteric Small Arteries**
Christian Aalkjaer^a, Vladimir V. Matchkov^a, Torbjoern Broegger^a, Donna MB Boedtkjer^a and Finn S Pedersen^b
^a*Institute of Physiology and Biophysics, Aarhus University, Denmark*
^b*Department of Molecular Biology, University of Aarhus, Denmark*
- P16-7 Insulin Inhibits Na⁺/H⁺-exchange in Vascular Smooth Muscle and Endothelial Cells in Situ: Involvement of H₂O₂ and Tyrosine Phosphatase SHP-2**
Christian Aalkjaer and Ebbe Boedtkjer
Institute of Physiology and Biophysics, Aarhus University, Denmark

June 3 (Wed)

13:00 - 14:00

Poster & Exhibition: Chiyo2

Poster 17: Blood Cells / Autacoids

Chairpersons: Yu Huang

(Department of Physiology, Chinese University of Hong Kong, Hong Kong, China)

Arnold G. Herman

(University of Antwerp, Belgium)

- P17-1 Stimulation or Activation of Soluble Guanylate Cyclase and Aggregation of Washed Platelets of WKY Rat**
Michel Feletou, Severine Roger, Cecile Badier-Commander, Jerome Paysant and Tony J. Verbeuren
Department of Angiology, Institut de Recherches Servier, France
- P17-2 The AMP-activated Protein Kinase (AMPK) α 2 Subunit is Involved in Platelet Signaling, Clot Retraction and Thrombus Stability**
Ingrid Fleming, Voahanginirina Randriamboavonjy, Johann Isaak and Beate Fisslthaler
Institute for Vascular Signalling, Johann Wolfgang Goethe University Frankfurt, Germany
- P17-3 Expression of the Cytochrome P450 Epoxygenase CYP2J2 in Human Monocytic Leukocytes**
Kaeko Nakayama^a, Takeaki Nitto^b, Teruo Inoue^a and Koichi Node^a
^a*Department of Cardiovascular and Renal Medicine, Saga University Faculty of Medicine, Japan*
^b*Laboratory of Pharmacotherapy, Yokohama College of Pharmacy, Japan*
- P17-4 ADMA, an Endogenous NOS Inhibitor is Metabolized Actively in Rat Erythrocytes**
Miyuki Yokoro, Makiko Suzuki, Yoshitaka Takahashi, Hiromi Yamashita, Miki Hiemori, Hideaki Tsuji and Masumi Kimoto
Department of Nutritional Science, Okayama Prefectural University, Japan
- P17-5 Sarpogrelate Hydrochloride Modulates the Expression of 5-Hydroxytryptamine Type 2A and Type 1B Receptors in Experimental Rabbit Vein Grafts**
Akio Kodama^a, Hiroaki Tamai^b, Akihito Idetsu^b, Hirohumi Morimae^b, Akihiko Hori^b, Hiroshi Narita^b, Masayoshi Kobayashi^b, Kiyohito Yamamoto^b, Junko Kajikuri^c, Takeo Itoh^c and Kimihiro Komori^b
^a*Department of Vascular Surgery, Kokura Memorial Hospital, Japan*
^b*Division of Vascular Surgery, Department of Surgery, Nagoya University Graduate School of Medicine, Japan*
^c*Department of Pharmacology, Graduate School of Medical Sciences, Nagoya City University, Japan*

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

P17-6 Possible Role of Organic Cation Transport-3 in Serotonin Uptake in Human Brain Vascular Smooth Muscle Cells

Eva YW Ho, Rachel WS Li, Paul M Vanhoutte, Ricky YK Man, Susan WS Leung and George PH Leung

Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

P17-7 Cell Surface Expression of Histamine H3 Receptor is Regulated by Proteins Interacting with the Carboxy-terminus of the Receptor

Kazuki Kinoshita^a, Shiori Takayanagi^a, Takeya Sato^a, Kay Maeda^a, Mituya Haraguchi^b, Kazuhiko Yanai^c, Kohji Fukunaga^d, Teruyuki Yanagisawa^a and Jun Sukegawa^a

^aDepartment of Molecular Pharmacology, Tohoku University Graduate School of Medicine, Japan

^bMitsubishi Tanabe Pharma Corporation, Japan

^cDepartment of Pharmacology, Tohoku University Graduate School of Medicine, Japan

^dDepartment of Pharmacology, Graduate School of Pharmaceutical Sciences, Tohoku University, Japan

14:15 - 16:00

RoomB: Chiyo1

Symposium 5: Pathophysiology

Chairpersons: Arnold G. Herman

(University of Antwerp, Belgium)

Masunori Matsuzaki

(Department of Medicine and Clinical Science, Division of Cardiology, Yamaguchi University Graduate School of Medicine, Japan)

S5-NL **Named Lecture 5 3rd Paul M. Vanhoutte Lecture on Vascular Pathophysiology**

The Vessel on Fire: From Endothelial Dysfunction to Acute Coronary Syndrome

Thomas F. Lüscher

Cardiovascular Center, University Hospital Zurich, Switzerland

S5-O1 Critical Role of Renin-angiotensin-aldosterone Axis in the Pathogenesis of Acute Myocardial Infarction in Mice Lacking Entire Nitric Oxide Synthase System

Sei Nakata^a, Masato Tsutsui^b, Hiroaki Shimokawa^c, Kiyoko Shibata^a, Yasuko Yatera^a, Osamu Suda^a, Nobuyuki Yanagihara^b and Yutaka Otsuji^a

^aSecond Department of Internal Medicine, University of Occupational and Environmental Health, Japan

^bDepartment of Pharmacology, University of Occupational and Environmental Health, Japan

^cDepartment of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Japan

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)

June 3 (Wed)

June 1 (Mon)

S5-02 Estrogen Suppresses Mitochondrial ROS Production in the Cerebral Vasculature: Role in Protection From Ischemia

Sue P. Duckles^a, Jiabin Guo^b, John H Weiss^c and Diana N Krause^a

^a*Department of Pharmacology, School of Medicine, University of California, Irvine, USA*

^b*Department of Pharmacology, Peking University, Beijing, China*

^c*Department of Neurology, School of Medicine, University of California, Irvine, USA*

S5-03 Effect of the Small GTP-binding Proteins Rho and Rac on Progression of Chronic Renal Failure in Mice

Oliver Jung^a, Felix Jansen^b, Matthias Lohn^c, Oliver Plettenburg^c and Ralf P. Brandes^b

^a*Nephrology & Physiology, Goethe-University, Germany*

^b*Physiology, Goethe-University Frankfurt, Germany*

^c*Sanofi-Aventis Research and Development, Germany*

S5-04 Nox4 Oxidizes Serca and Induces Vascular Dysfunction in the Prediabetic Zucker Rat

Xiaoyong Tong and Richard A Cohen

Medicine, Boston University Medical Center, USA

June 2 (Tue)

15:00 - 16:15

RoomA: Fuji

Afternoon Seminar 3

Chairperson : Yukio Hirata

(Department of Clinical and Molecular Endocrinology, Tokyo Medical and Dental University Graduate School, Japan)

AS3-1 Ca_v Channels and Their Modifiers: Molecular Identification of the Binding Sites

Teruyuki Yanagisawa

Department of Molecular Pharmacology, Tohoku University Graduate School of Medicine, Japan

AS3-2 ACE-inhibitors and Endothelial Function

Paul M. Vanhoutte

Department of Pharmacology and Pharmacy, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China

Sponsored by Kyowa Hakko Kirin Co., Ltd.

June 3 (Wed)

June 3 (Wed)

16:30 - 18:00

RoomA: Fuji

Special Seminar 3

Chairperson : Masunori Matsuzaki

*(Department of Medicine and Clinical Science, Yamaguchi University
Graduate School of Medicine, Japan)*

SS3-1 New Mechanism of Coronary Endothelial Dysfunction in Humans

Amir Lerman

The Division of Cardiovascular Diseases, Mayo Clinic, USA

**SS3-2 25 Years of Endothelial Research in Humans: Where We have been
and Where We are Heading**

Peter Ganz

University of California, San Francisco, USA

Sponsored by Daiichi-Sankyo

June 1 (Mon)

June 2 (Tue)

June 3 (Wed)