

Number, Supporting societies	Symposium Titles Presentation titles		Chairpersons/Speakers	COUNTRY
<b>Commission I Locomotion</b>				
<b>WD-I-1</b>  <i>Society of muscle physiology</i>	<b>Muscle excitation-contraction coupling and its disorders (Ebashi &amp; Natori Memorial Symposium)</b>			
	<b>Part 1</b>	Chairperson 1	Masato Konishi	Japan
		Chairperson 2	Stephen M. Baylor	USA
	Historical overview of studies on excitation-contraction coupling	1	Makoto Endo	Japan
	RYANODINE RECEPTOR ISOFORMS IN EXCITATION-CONTRACTION COUPLING IN SKELETAL	2	Takashi Murayama	Japan
	CARDIOPROTECTION BY MG53 MEDIATED MEMBRANE REPAIR	3	Heping Cheng	China
	Ryanodine receptor-related proteins	4	Do Han Kim	Korea
	MEASUREMENT AND SIMULATION OF LOCAL AND GLOBAL MYOPLASMIC CALCIUM SIGNALS DURING EC COUPLING IN FROG AND MOUSE INTACT SKELETAL MUSCLE FIBERS	5	Stephen M Baylor	USA
	<b>Part 2</b>	Chairperson 1	Shin'ichi Ishiwata	Japan
		Chairperson 2	David G. Allen	Australia
	Ca-INDUCED STRUCTURAL CHANGES OF REGULATORY PROTEINS IN SKELETAL MUSCLES	1	Naoto Yagi	Japan
	MOLECULAR MECHANISM OF MUSCLE CONTRACTION: FOCUSING ON THE DYNAMIC PROPERTIES REVEALED AT INTERMEDIATE ACTIVATION LEVELS	2	Shin'ichi Ishiwata	Japan
	High resolution structure and basic properties of F-actin	3	Yuichiro Maeda	Japan
	Role of excitation-contraction coupling in muscle fatigue	4	David Grant Allen	Australia
	DISEASES RELATED TO CALCIUM RELEASE CHANNELS	5	Robert Thomas Dirksen	USA
<b>WD-I-2</b>  <i>The Japanese Society of Physical Fitness and Sports Medicine , The Journal of Physiology</i>	<b>Physiological regulation linked with physical activity and health (The Journal of Physiology Symposium)</b>			
	<b>Part 1</b>	Chairperson 1	Hiroshi Nose	Japan
		Chairperson 2	Michael Joyner	USA
	PHYSIOLOGICAL DYS-REGULATION WITH INACTIVITY IN SYSTEMS DESIGNED TO MOVE	1	Frank W Booth	USA
	The role of myokines in muscle-fat cross-talk	2	Bente Klarlund Pedersen	Denmark
	Exercise and Muscle Blood Flow	3	Michael J Joyner	USA
	<b>Part 2</b>	Chairperson 1	Hiroshi Nose	Japan
		Chairperson 2	Michael Joyner	USA
	EXERCISE TRAINING AND CARDIOVASCULAR DISEASES	1	Douglas R Seals	USA
	Physiological effect of traditional culture-based elderly exercise program, Woori-Chum Chejo.	2	Sang Chul Park	Korea
	THE EFFECTS OF PHYSICAL ACTIVITY AND MUSCLE STRENGTH ON AGING AND AGE-RELATED DISEASES: FROM THE NILS-LSA-	3	Fujiko Ando	Japan
	BEYOND EPIDEMIOLOGY: FIELD STUDIES AND THE PHYSIOLOGICAL LABORATORY AS THE WHOLE	4	Hiroshi Nose	Japan
	GENETIC BASIS OF INTER-INDIVIDUAL VARIANCE IN THE EFFECTS OF EXERCISE ON PREVENTION OF LIFESTYLE-RELATED DISEASES	5	Masayuki Mori	Japan

Number, Supporting societies	Symposium Titles Presentation titles		Chairpersons/Speakers	COUNTRY	
<b>Commission II Circulation &amp; Respiration</b>					
<b>WD-II-3</b>  <i>The Japanese Society of Electrocardiology , Japan Society for Adaption Medicine</i>	<b>Arrhythmias and muscle contraction (Irisawa Memorial Symposium)</b>				
	<b>Part 1: Functional imaging and genomics of arrhythmias</b>		Chairperson 1	Yoram Rudy	USA
	Dynamics of Spiral Wave Reentry		Chairperson 2	Minoru Horie	Japan
	IN SITU CALCIUM IMAGING OF ARRHYTHMOGENIC SUBSTRATES IN THE HEART		1	Haruo Honjo	Japan
	GENETIC BACKGORUND OF CARDIAC ARRHYTHMIAS		2	Tetsuro Takamatsu	Japan
	Mechanism of Brugada Syndrome		3	Arthur Wilde	Netherlands
	Recent advances in physiology and pharmacology of K <sup>+</sup> channels		4	Wataru Shimizu	Japan
	<b>Part 2: Muscle contraction and cardiac remodeling</b>		5	Jacques Barhanin	France
	FUNCTIONAL CONSEQUENCES OF HYPERTROPHIC CARDIOMYOPATHY MUTATIONS IN cMyBP-C		Chairperson 1	David Eisner	UK
	Multi-scale approach for the understanding of cardiac function		Chairperson 2	Seiryu Sugiura	Japan
	Ca <sup>2+</sup> channels and cardiac functions		1	Richard L Moss	USA
	HOW DO CATECHOLAMINES PRODUCE ARRHYTHMOGENIC CALCIUM RELEASE?		2	Seiryu Sugiura	Japan
	ROLE OF SUBCELLULAR REMODELING IN THE PATHOGENESIS OF CARDIAC DYSFUNCTION IN HEART FAILURE		3	Masaki Kameyama	Japan
	Rennin-angiotensin system plays an important role in the pathogenesis of DCM in mouse		4	David Eisner	UK
	comment on the symposium		5	Naranjan S. Dhalla	Canada
			6	Kenichi Hongo	Japan
			7	Takeda Atsushi	Japan
<b>WD-II-4</b>  <i>Society of muscle physiology, International Academy of Cardiovascular Science (IACS), IACS Japan section</i>	<b>Physiology and pathophysiology of cardiac excitation and contractility (Goto Memorial Symposium)</b>				
	<b>Part 1</b>		Chairperson 1	Mark B. Cannell	New Zealand
	PROF. MASAYOSHI GOTO, A DISTINGUISHED CARDIAC PHYSIOLOGIST		Chairperson 2	Satoshi Kurihara	Japan
	Cardiac L-type Ca channel as the Oxygen Sensor of the heart		1	Tsuguhisa Ehara	Japan
	MOLECULAR REGULATION AND MANIPULATION OF CARDIAC CAV1.2 CHANNELS		2	Martin Morad	USA
	Cardiac Na/Ca Exchange: A Tale of Two Sites		3	Henry M Colecraft	USA
	EXCITATION-CONTRACTION COUPLING		4	Kenneth Philipson	USA
	Changes in EC coupling in human heart failure		5	Donald M. Bers	USA
	<b>Part 2</b>		6	Mark B Cannell	New Zealand
	Nonlinear properties of cardiac sarcomeres: novel insights into the physiology of the heart		Chairperson 1	R. John Solaro	USA
	SIGNALING IN SARCOMERES AND CARDIAC ARRYTHMIAS		Chairperson 2	Norio Fukuda	Japan
	Knock-in mouse model of dilated cardiomyopathy caused by troponin mutation		1	Norio Fukuda	Japan
	Pathophysiology of cardiac muscles		2	R. John Solaro	USA
	ONTOGENETIC ASPECTS OF CARDIAC SENSITIVITY TO ISCHEMIA; PROTECTIVE MECHANISMS IN THE IMMATURE HEART		3	Sachio Morimoto	Japan
			4	Issei Komuro	Japan
		5	Bohuslav Ostadal	Czech Republic	

Number, Supporting societies	Symposium Titles Presentation titles		Chairpersons/Speakers	COUNTRY
<b>WD-II-5</b>  <i>Japanese Society for Micorcirculation, Japanese Society of Lymphology, Global COE Program "Human Metabolomic Systems Biology" Keio University</i>	<b>Microvascular systems and metabolism</b>			
	<b>Part 1: Novel regulatory mechanisms for microvascular function</b>	Chairperson 1	Makoto Suematsu	Japan
		Chairperson 2	Joji Ando	Japan
	Renal medullary vasa recta blood flow regulation by H2O2 and NO	1	Allen W. Cowley, Jr.	USA
	Perivascular nitric oxide gradients normalize tumor vasculature	2	Dai Fukumura	USA
	Shear Stress Mechanotransduction via Endothelial ATP Receptors and its Physiological Role in the Vascular System	3	Joji Ando	Japan
	CO-mediated modulation of H2S generation via CBS: A putative tonic mechanism for neurovascular units	4	Makoto Suematsu	Japan
	IT IS A SMELLY EDRF: HYDROGEN SULFIDE IN CIRCULATION	5	Rui WANG	Canada
	<b>Part 2: Lymphangiogenesis and lymphatic metastasis of carcinoma cells</b>	Chairperson 1	Toshio Ohhashi	Japan
		Chairperson 2	Geert Schmid-Schonbein	USA
	ROLES OF TRANSCRIPTIONAL NETWORKS IN LYMPHATIC DEVELOPMENT	1	Tetsuro Watabe	Japan
	ATP develops suitable environment for metastasis of carcinoma cells in sentinel lymph node.	2	Yoshiko Kawai	Japan
	Individualized management for GI cancer based on lymphatic mapping	3	Yuko Kitagawa	Japan
	Lymphatics Require Two Valve Systems: The Primary Valves in Initial Lymphatics and Failure in Secondary Lymphedema	4	Geert W. Schmid-Schonbein	USA
	Transport of lymph: mechanisms and potential for correction	5	Anatoliy A. Gashev	USA
<b>Commission III Endocrine, Reproduction &amp; Development</b>				
<b>WD-III-6</b>  <i>Physiological Society of Japan</i>	<b>Systems biology of hypothalamic gonadotropin releasing hormone (GnRH) neurons</b>			
	<b>Part 1</b>	Chairperson 1	Yasuo Sakuma	Japan
		Chairperson 2	Quentin Pittman	Canada
	GnRH NEURON MIGRATION: A LONG AND DANGEROUS ROAD?	1	Stuart Tobet	USA
	BIOLOGY OF GNRH NEURON DEVELOPMENT IN THE LIVING ZEBRAFISH EMBRYO	2	Nancy Lynne Wayne	USA
	ELECTROPHYSIOLOGICAL, ANATOMICAL, AND MOLECULAR CHARACTERIZATION OF GNRH NEURONS IN DWARF GOURAMI AND GFP TRANSGENIC MEDAKA	3	Yoshitaka Oka	Japan
	SLOW AFTERHYPERPOLARIZATION CURRENTS IN RAT GONADOTROPIN-RELEASING HORMONE	4	Masakatsu Kato	Japan
	Expression of ion channels in GnRH neurons and their role in burst firing	5	Oline K Ronnekleiv	USA
	DIFFERENTIAL REGULATION OF GNRH NEURONS BY ACUTELY APPLIED ESTRADIOL (E): DEPENDENCE ON DOSE AND ESTROGEN RECEPTOR SUBTYPE	6	Sue Moenter	USA
	KISSPEPTIN SIGNALING IN GnRH NEURONS	7	CHUNGUANG ZHANG	USA
	DENDRITIC PROCESSING OF EXCITATORY SYNAPTIC INPUT IN HYPOTHALAMIC GONADOTROPIN RELEASING HORMONE (GnRH) NEURONS.	8	Kelly J Suter	USA
	<b>Part 2</b>	Chairperson 1	Yasuo Sakuma	Japan
		Chairperson 2	Martin J. Kelly	USA
	Prepubertal development of estrogen-kisspeptin-GnRH neuron positive feedback mechanism	1	Allan Herbison	New Zealand
	Kisspeptin and the Onset of Puberty in the Rhesus Monkey	2	Tony Plant	USA
	Central metastin/kisspeptin in the regulation of luteinizing hormone secretion	3	Hiroko Tsukamura	Japan
	Kiss1 and Reproduction: Focus on its Role in the Metabolic Regulation of Fertility	4	Manuel Tena-Sempere	Spain
Ligand-induced-selective-signalling (LiSS) at the Gonadotropin-Releasing-Hormone (GnRH) receptor	5	Robert Peter Millar	UK	
KISSPEPTIN-GNRH: KEY REGULATORS OF REPRODUCTION IN TELEOST	6	Ishwar Parhar	Malaysia	
DIFFERENT BEHAVIORAL ROLES FOR GNRH I AND II	7	Emilie F. Rissman	USA	

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<b>Commission IV</b>	<b>Neurobiology</b>				
<b>WD-IV-7</b>	<b>Processing and integration of sensory information</b>				
<i>Physiological Society of Japan</i>	<b>Part 1: Synapse</b>		Chairperson 1	Sumiko Mochida	Japan
			Chairperson 2	Laurence Trussell	USA
	MOLECULAR PHYSIOLOGY OF THE HAIR CELL RIBBON SYNAPSE		1	Tobias Moser	Germany
	PRESYNAPTIC MOLECULAR REGULATION FOR TRNSMITTER RELEASE		2	Sumiko Mochida	Japan
	GLYCINERGIC SYNAPTIC TRANSMISSION: CONTROL OF TIME COURSE AND IMPACT ON SYNAPTIC PLASTICITY		3	Laurence Trussell	USA
	<b>Part 2: Hearing</b>		Chairperson 1	Harunori Ohmori	Japan
			Chairperson 2	Catherine Carr	USA
	SOUND INTENSITY DEPENDENT COMPENSATION FOR THE SMALL ITD CUE IN THE CHICKEN		1	Harunori Ohmori	Japan
	BEHAVIORAL AND PHYSIOLOGICAL STUDIES OF SOUND LOCALIZATION IN THE CAT		2	Tom Chi Tien Yin	USA
	HIERARCHICAL PROCESSING OF INTERAURAL TIME DIFFERENCES IN THE HUMAN BRAIN		3	David McAlpine	UK
	<b>Part 3: Vision</b>		Chairperson 1	Makoto Kaneda	Japan
			Chairperson 2	Masao Tachibana	Japan
	"Riding the retinal wave: The assembly of functional circuits in the retina"		1	Marla Beth Feller	USA
	Retinal signal processing by starburst amacrine cells		2	Z. Jimmy Zhou	USA
	Functional significance of gap junctions among retinal bipolar cells		3	Masao Tachibana	Japan
	<b>Part 4: Olfaction</b>		Chairperson 1	Hideto Kaba	Japan
			Chairperson 2	Kensaku Mori	Japan
	VOMERONASAL PROCESSING AND PHEROMONAL LEARNING IN MICE		1	Peter Anthony Brennan	UK
Molecular Basis of Odor Perception in the Mouse		2	Hitoshi Sakano	Japan	
FUNCTIONAL COMPARTMENTALIZATION IN THE MAMMALIAN OLFACTORY BULB		3	Kensaku Mori	Japan	
<b>WD-IV-8</b>	<b>Comprehensive approaches to pain- from molecule to organism-</b>				
<i>Japanese Association for the Study of Pain, Japan Society of Pain Clinicians</i>	<b>Part 1</b>		Chairperson 1	Martin Schmelz	Germany
			Chairperson 2	Megumu Yoshimura	Japan
	Sodium Channels, MicroRNAs and Pain Thresholds		1	John N Wood	UK
	SENSITIZATION FOR PAIN AND ITCH		2	Martin Schmelz	Germany
	VISCOSUPPLEMENTATION TO SCREEN KNEE JOINT NOCICEPTORS AGAINST INFLAMMATORY AGENTS: LOCAL ANALGESIA WITHOUT SIDE EFFECTS		3	Robert F. Schmidt	Germany
	Pain signalling through purinergic receptors of microglia		4	Kazuhide Inoue	Japan
	Supraspinal Glial-Neuronal Interactions Contribute to Descending Pain Facilitation after Nerve Injury		5	Ronald Dubner	USA
	CORTICAL RESPONSES TO PAIN		6	Karen Deborah Davis	Canada
	<b>Part 2</b>		Chairperson 1	Uhtaek Oh	Korea
			Chairperson 2	Kazue Mizumura	Japan
	MUSCULOSKELETAL PAIN AS A FUNCTION OF AGE AND GENDER: CLINICAL AND EXPERIMENTAL		1	Maria Adele Giamberardino	Italy
	Neural mechanisms of change in CNS pain pathways with advancing age		2	Koichi Iwata	Japan
	ANOCTAMIN 1 (TMEM16A), A CLONED CALCIUM-ACTIVATED CHLORIDE CHANNEL AND ITS ROLE IN NOCICEPTION		3	Uhtaek Oh	Korea
	Inflammation-induced shift in spinal GABA-A receptor signaling		4	Michael Seth Gold	USA
	DIFFERENTIAL ROLE OF THE NKCC1 CO-TRANSPORTER IN PRIMARY AND SECONDARY ALLODYNIA AND HYPERALGESIA		5	Donna L. Hammond	USA
SECONDARY HYPERALGESIA AND PRESYNAPTIC INHIBITION: ROLE OF CATION-CHLORIDE COTRANSPORTERS		6	Fernando Cervero	Canada	

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<b>Commission V Secretion &amp; Absorption</b>				
<b>WD-V-9</b>  <i>Grant-in-aid for Scientific Research on Priority Areas on "Transportsome", Grant-in-aid for Creative Scientific Research 'Function and regulatory system of water transporting aquaporin channels'</i>	<b>Epithelial transport: bridges between molecules and function</b>			
	<b>Part 1</b>	Chairperson 1	Ole H. Petersen	UK
		Chairperson 2	Sei Sasaki	Japan
	CALCIUM SIGNALING AND CALCIUM-REGULATED ION CHANNELS IN EPITHELIAL CELLS	1	Ole Holger Petersen	UK
	INTEGRATION OF CELLULAR SIGNALING IN THE REGULATION OF ENAC ACTIVITY	2	Douglas C. Eaton	USA
	Roles of CLC Cl channels and Cl/H exchangers in physiology and pathology	3	Thomas J. Jentsch	Germany
	Aquaporins and kidney diseases: insights into molecular pathogenesis	4	Sei Sasaki	Japan
	ROLE OF GAS CHANNELS IN THE PROXIMAL TUBULE...AND BEYOND	5	Walter F. Boron	USA
	<b>Part 2</b>	Chairperson 1	Yoshikatsu Kanai	Japan
		Chairperson 2	Michael J. Caplan	USA
	TRANSPORTSOME IN RENAL ORGANIC SOLUTE TRANSPORT	1	Yoshikatsu Kanai	Japan
	WNK KINASES AND CATION-CHLORIDE COTRANSPORTERS, NOVEL TRANSPORTSOMES REGULATING BLOOD PRESSURE	2	Shinichi Uchida	Japan
	PARTNERS AND PATHWAYS OF THE NEWLY SYNTHESIZED Na,K-ATPase	3	Michael J. Caplan	USA
	ROLES OF ZO-1 AND ZO-2 IN THE FORMATION OF EPITHELIAL CELL-CELL JUNCTIONS AND PARACELLULAR TRANSPORT.	4	Yuji Yamazaki	Japan
Function of epithelial K <sup>+</sup> transport in inner ear and its integration with modeling	5	Hiroshi Hibino	Japan	
<b>Commission VII Comparative Physiology: Evolution, Adaptation &amp; Environment</b>				
<b>WD-VII-10</b>  <i>Japanese Society for Chronobiology, Japanese Society of Sleep Research, Japanese Society of Biometeorology, Sapporo Symposium on Biological Rhythm</i>	<b>Temporal organization of physiology and behavior</b>			
	<b>Part 1: Molecular and cellular mechanism of circadian clock</b>	Chairperson 1	William Schwartz	USA
		Chairperson 2	Ken-ichi Honma	Japan
	SYSTEMS BIOLOGY OF MAMMALIAN CIRCADIAN CLOCKS	1	Hiroki R Ueda	Japan
	GENETIC INTERACTIONS IN THE MAMMALIAN CLOCKWORK	2	Elizabeth Maywood	UK
	Clock genes and its diseases	3	Hitoshi Okamura	Japan
	<b>Part 2: The chronobiology of cohabitat 1</b>	Chairperson 1	Debra Jean Skene	UK
		Chairperson 2	Hiroki Ueda	Japan
	Circadian entrainment by different daylengths: the roles of dawn and dusk	1	Serge Daan	Netherlands
	CLOCK MECHANISMS IN MAMMALS ENCODING PHOTOPERIODS	2	Sato Honma	Japan
	ON THE SOCIAL DIMENSION OF CIRCADIAN TIMING IN MAMMALS	3	William Schwartz	USA
	<b>Part 3: The chronobiology of cohabitat 2</b>	Chairperson 1	Serge Daan	Netherlands
		Chairperson 2	Sato Honma	Japan
	LIGHT AND THE HUMAN CIRCADIAN TIMING SYSTEM: AGE-RELATED CHANGES	1	Debra Jean Skene	UK
Circadian organization in humans: is there any oscillator(s) for behavioral rhythms independent of those in the SCN	2	Ken-ichi Honma	Japan	
HUMANS SUFFERING FROM DISORGANIZED CIRCADIAN RHYTHMS	3	Makoto Uchiyama	Japan	

Number, Supporting societies	Symposium Titles Presentation titles		Chairpersons/Speakers	COUNTRY	
<b>WD-VII-11</b> <i>Grant-in-aid for Scientific Research on Priority Areas: Molecular Interaction and Modal Shift of Cellular Sensor</i>	<b>Cell sensors: their sensing mechanisms and physiological significance</b>				
	<b>Part 1</b>		Chairperson 1	Junichi Nabekura	Japan
			Chairperson 2	Kai Kaila	Finland
	FUNCTIONAL REGULATION OF NEURONAL K-CL TRANSPORTER BY TYROSINE		1	Junichi Nabekura	Japan
	ROLE OF CATION CHLORIDE COTRANSPORTERS IN NEURONAL DEVELOPMENT AND PLASTICITY		2	Kai Kaila	Finland
	A [Na <sup>+</sup> ] DEPENDENT METABOLOSTAT IN THE SUBFORNICAL ORGAN TO CONTROL SALT INTAKE		3	Masaharu Noda	Japan
	Sensing function of Cl <sub>-</sub> channels. Does it make sense?		4	Andres Stutzin	Chile
	Chemosensory receptors for odors and pheromones		5	Kazushige Touhara	Japan
	<b>Part 2</b>		Chairperson 1	Bernd Nilius	Belgium
			Chairperson 2	Makoto Tominaga	Japan
	Calcium dynamics through IP <sub>3</sub> receptors		6	Katsuhiko Mikoshiba	Japan
	THE GLUCOCORTICOID RECEPTOR: ONE GENE, MANY PROTEINS - AN INTRACELLULAR SENSOR FOR GLUCOCORTICOIDS		7	John A. Cidlowski	USA
	Mechanisms and roles of voltage-sensing proteins without pore structure		8	Yasushi Okamura	Japan
Gating mechanisms of TRP channels: linking function to disease		9	Bernd Nilius	Belgium	
NOVEL INSIGHTS INTO NEURONAL OSMOSENSORY TRANSDUCTION		10	Charles Bourque	Canada	
Physiological significance of thermosensitive TRP channels		11	Makoto Tominaga	Japan	
<b>WD-VII-12</b> <i>Japan Society of Aerospace and Environmental Medicine, International Society for Adaptive Medicine, Japan Aerospace Exploration Agency</i>	<b>Adaptation and environmental physiology</b>				
	<b>Part 1: Adaptation physiology</b>		Chairperson 1	Alan R. Hargens	USA
			Chairperson 2	Yasuaki Kawai	Japan
	THE GRAVITY OF CARDIOVASCULAR ADAPTATIONS		1	Alan R Hargens	USA
	PHYSIOLOGIC LESSONS FROM ANIMALS (MAMMALS) IN MICROGRAVITYS		2	Charles M Tipton	USA
	VASCULAR ADAPTATION TO MICROGRAVITY AND ITS GRAVITY-BASED COUNTERMEASURE		3	Li-Fan Zhang	China
	THE DIMENSIONS OF BRACHIOSAURUS BRANCAI AND THEIR PHYSIOLOGICAL IMPLICATIONS		4	Hanns-Christian Gunga	Germany
	PHYSIOLOGICAL ADAPTATIONS TO EXTREME ALTITUDE		5	John B. West	USA
	WEIGHT SUPPORT SYSTEM USING LBPP: PHYSIOLOGY AND CLINICAL USE		6	Yasuaki Kawai	Japan
	<b>Part 2: Gravitational Physiology 1: Challenge to the Moon and Mars</b>		Chairperson 1	Shoichi Tachibana	Japan
			Chairperson 2	Inesa Kozlovskaya	Russia
	New countermeasure for bone loss and muscle atrophy during long duration human space flight		1	Hiroshi Ohshima	Japan
	MARS EXPLORATION MISSION. SOME APPROACHES TO THE COUNTERMEASURE SYSTEM		2	Inesa Kozlovskaya	Russia
	Effective countermeasure for muscle and bone loss in weightlessness		3	Dieter Felsenberg	Germany
	<b>Part 3: Gravitational Physiology 2: Adaptation of Physiological Properties to Microgravity</b>		Chairperson 1	Yoshinobu Ohira	Japan
			Chairperson 2	V. Reggie Edgerton	USA
	How Much Gravitational Loading Does the Neuromuscular System Need for Maintenance?		1	V. Reggie Edgerton	USA
Effects of microgravity on gaze fixation reaction		2	Elena Tomilovskaya	Russia	
Gravity Stimulates Postnatal Development of Cardiovascular Regulation		3	Shunji Nagaoka	Japan	

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<b>Commission VIII Genomics &amp; Biodiversity</b>				
<b>WD-VIII-13</b>  <i>The Japanese Pharmacological Society</i>	<b>From genome to systems biology</b>			
	<b>Part 1: Muscle systems physiology: Ca signaling and membrane repair</b>	Chairperson 1	Hiroshi Takeshima	Japan
		Chairperson 2	Jianjie Ma	USA
	Functional crosstalk between cell-surface and intracellular channels mediated by junctophilins	1	Hiroshi Takeshima	Japan
	Calsequestrin Regulation of Single Ryanodine Receptor Calcium Release Channels	2	Michael Fill	USA
	Modulation of skeletal muscle excitation-contraction coupling by protein components of the sarcoplasmic reticulum junctional face membrane	3	Francesco Zorzato	Italy
	Membrane Repair - Ca entry and vesicle trafficking	4	Richard A Steinhardt	USA
	MG53, a molecular sensor of the acute membrane repair process in striated muscle	5	Jianjie Ma	USA
	<b>Part 2: Transcriptome systems: toward physiology</b>	Chairperson 1	Gozoh Tsujimoto	Japan
		Chairperson 2	Toshio Tanaka	Japan
	Systematic isolation of mutants defective in transcription factors in <i>C. elegans</i>	1	Shohei Mitani	Japan
	PHARMACOGENOMICS NETWORKS IN HUMAN DISEASE MODELS AND THERAPEUTIC TARGET	2	Toshio Tanaka	Japan
	Application of functional genomics to physiology and pathophysiology: Transcriptome analysis of disease	3	Gozoh Tsujimoto	Japan
	New Generation Sequencing Technology Enables Revolution in Genomics Research	4	Yafei Liu	China
The SOLiD3 system and beyond: A Technology Enabling New Applications	5	Hideki Hanaoka	Japan	
<b>WD-VIII-14</b> <i>Keio University Global COE Program (Education and Research Center for Stem Cell Medicine), Kyoto University Global COE Program (Formation of a strategic base for biodiversity and evolutionary research: from genome to ecosystem)</i>	<b>Developmental biology: from evolution to regenerative medicine</b>			
	<b>Part 1: Evolution and development</b>	Chairperson 1	Masataka Okabe	Japan
		Chairperson 2	Kiyokazu Agata	Japan
	Evolution of the vertebrate pharynx	1	Masataka Okabe	Japan
	Animal Models to Study Kidney Development and Disease	2	Tomoko Obara	USA
	Evolution and development at the fish-tetrapod transition	3	Per Erik Ahlberg	Sweden
	<b>Part 2: Stem cell biology and regenerative medicine</b>	Chairperson 1	Hideyuki Okano	Japan
		Chairperson 2	Alan Colman	
	Use of iPSC to study human aging	1	ALAN COLMAN	UK
	ADVANTAGES OF HAIR FOLLICLE PLURIPOTENT STEM (hfPS) CELLS OVER ES AND IPS CELLS FOR REGENERATIVE MEDICINE	2	Robert M. Hoffman	USA
Neural Differentiation and Cell Therapy using pluripotent stem cells.	4	Hideyuki Okano	Japan	
CELL THERAPY IN PARKINSON'S DISEASE AND STROKE	5	Olle Lindvall	Sweden	

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<b>Other categories</b>				
<b>WD-IX-15</b>  <i>MEI center, Osaka University gCOE program "In silico Medicine"</i>	<b>Challenging roles of Physiome, VPH and in silico Human in medicine</b>			
	<b>Part 1</b>	Chairperson 1	Yoshihisa Kurachi	Japan
		Chairperson 2	Denis Noble	UK
	INTRODUCTION OF PHYSIOME AND SYSTEMS BIOLOGY SYMPOSIUM	1	Yoshihisa Kurachi	Japan
	EXPECTATION FOR DEVELOPMENT OF PHYSIOME PROJECTS IN JAPAN	2	Fumihiko Kajiya	Japan
	Euro Physiome and the Living Human Digital Library Project	3	Marco Viceconti	Italy
	The IUPS Physiome Project	4	Peter Hunter	NZ
	<b>Part 2</b>	Chairperson 1	Andrew McCulloch	USA
		Chairperson 2	Fumihiko Kajiya	Japan
	A Robustness-based Approach to Systems-oriented drug design	1	Hiroaki Kitano	Japan
	Biophysical models of the Coronary Circulation meet clinical decision making	2	Jos Spaan	Netherlands
	SYSTEMS BIOLOGY OF ANGIOGENESIS: FROM MOLECULES TO THERAPEUTICS	3	Amina A. Qutub	USA
	<b>Part 3</b>	Chairperson 1	Toshiaki Hisada	Japan
		Chairperson 2	Marco Viceconti	Italy
	Structure based functional modelling of cellular Ca <sup>2+</sup> dynamics	1	Taishin Nomura	Japan
	Cardiac excitation and neural control	2	Shingo Murakami	Japan
	Multi-Scale Modeling and Systems Biology of the Heart	3	Andrew D McCulloch	USA
	<b>Part 4</b>	Chairperson 1	Peter Hunter	
		Chairperson 2	Hiroaki Kitano	Japan
	UT-Heart - a Multiscale Multiphysics Heart Simulator	1	Jun-ichi Okada	Japan
STUDYING INTEGRATED FUNCTION IN THE LUNG IN THE CLINICAL SETTING: APPLICATION OF IMAGING-BASED LUNG PHYSIOME MODELS	2	Merryn Tawhai	New Zealand	
Biomechanical modeling of multiscale mechanics in the lung	3	Shigeo Wada	Japan	
<b>WD-IX-16</b>  <i>Grant-in-aid for Scientific Research on Priority Areas on "Integrative Brain Research"</i>	<b>Multidisciplinary approaches to basal ganglia functions</b>			
	<b>Part 1</b>	Chairperson 1	Jun Tanji	Japan
		Chairperson 2	Masahiko Takada	Japan
	NORMAL AND PATHOLOGICAL PATTERNING OF THE SUBTHALAMIC NUCLEUS	1	Mark David Bevan	USA
	DOPAMINE-DEPENDENT DYNAMICAL STATE CHANGES IN NETWORK MODELS OF SUBTHALAMIC NUCLEUS AND GLOBUS PALLIDUS	2	Tomoki Fukai	Japan
	Synaptic integration and burst generation in the globus pallidus	3	Hitoshi Kita	USA
	Biasing, learning, and switching of behavior by the basal ganglia	4	Okihide Hikosaka	USA
	INVOLVEMENT OF THE BASAL GANGLIA IN VALUATION AND SELECTION OF ACTIONS	5	Minoru Kimura	Japan
	<b>Part 2</b>	Chairperson 1	Jun Tanji	Japan
		Chairperson 2	Masahiko Takada	Japan
	SYNAPTIC PLASTICITY IN THE STRIATUM: MODULATION BY DOPAMINE	1	Jeffery Russell Wickens	Japan
	Neural circuit mechanisms underlying dopamine-dependent behaviors	2	Kazuto Kobayashi	Japan
	Brainstem interactions with the basal ganglia	3	Peter Redgrave	UK
	Physiological studies of value encoding in the basal ganglia	4	Hagai Bergman	Ireland
	Dichotomous Dopaminergic Control of Striatal Synaptic Plasticity	5	Dalton James Surmeier	USA

Number, Supporting societies	Symposium Titles Presentation titles		Chairpersons/Speakers	COUNTRY
WD-KOJACH-17	<b>Physiological Basis of Acupuncture Effects</b>			
	<b>Part 1</b>	Chairperson 1	Byung-Il Min	Korea
		Chairperson 2	Tadashi Hisamitsu	Japan
	Mechanism of the acupuncture effect on chronic visceral hyperalgesia in rats		Weimin Li	China
	Involvement of spinal adrenergic pathway in acupuncture analgesia		Sungtae Koo	Korea
	EFFECTS OF ACUPUNCTURE ON THE INHIBITORY TRANSMISSION IN THE SPINAL DORSAL HORN		Megumu Yoshimura	Japan
	The Mechanism of Neuro-Immune Modulation by Electroacupuncture		Hyunsu Bae	Korea
	The effect and possible mechanism of acupuncture and moxibustion on the collagen induced arthritis in		Tadashi Hisamitsu	Japan
	<b>Part 2</b>	Chairperson 1	Mieko Kurosawa	Japan
		Chairperson 2	Weimin Li	China
	Neural mechanism of acupuncture effects on cardiac function.		Sae Uchida	Japan
	MODULATION OF HYPERTENSION AND HYPOTENSION WITH ELECTROACUPUNCTURE		Peng Li	USA
	Effect of Acupuncture on Nicotine Addiction		Younbyoung Chae	Korea
	EFFECTS OF ACUPUNCTURE ON THE CENTRAL NERVOUS SYSTEM		Etsuro Hori	Japan
	The neuroprotective mechanisms of acupuncture treatment in Parkinson 's disease		Hi-Joon Park	Korea