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<tr>
<th>Time</th>
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<tr>
<td>16:50-17:40</td>
<td>Opening ceremony</td>
<td>Room A</td>
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<td>Opening remarks</td>
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<td>Tetsuro Takamatsu</td>
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<td>President, ICHC 2012</td>
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<td>Robert Y. Osamura</td>
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<td>17:40-18:20</td>
<td>David Glick Lecture 1</td>
<td>Room A</td>
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<td>Chair: R.Y. Osamura (Tokyo, Japan)</td>
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<td>DGL1 Gastric leptin: From immunocytochemistry to clinical application</td>
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<td>Moïse Bendayan (Montréal, Canada)</td>
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<td>18:20-19:00</td>
<td>Keynote Lecture / David Glick Lecture 2</td>
<td>Room A</td>
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<td>Chair: N. Saito (Kobe, Japan)</td>
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<td>KL/DGL2 Navigating the cellular landscape with new optical probes, imaging strategies and technical innovations</td>
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<td>Jennifer Lippincott-Schwartz (Bethesda, USA)</td>
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<td>19:10-</td>
<td>Welcome Reception</td>
<td>Banquet Hall Swan</td>
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<td>Kyoto International Conference Center, Banquet Hall Swan</td>
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<td>All participants including accompanying persons are cordially invited.</td>
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8:20-8:50  Plenary Lecture 1  
Chair: T. Takamatsu (Kyoto, Japan)  
**PL1 Optical sectioning and fast optical focussing in microscopy**  
Tony Wilson (Oxford, UK)  

8:50-9:20  Plenary Lecture 2  
Chair: P. Nakane (San Luis Obispo, USA)  
**PL2 Autophagosome formation site and recruitment of selective substrates**  
Noboru Mizushima (Tokyo, Japan)  

9:30-11:30  Symposium 1  
**Super resolution microscopy**  
Chairs: K. Fujita (Suita, Japan)  
A. Egner (Göttingen, Germany)  
**S1-1 Developments in fluorescence nanoscopy**  
Alexander Egner (Göttingen, Germany) (40 min)  
**S1-2 Three-dimensional structured illumination imaging of chromosome structure in meiotic cells**  
Peter M. Carlton (Kyoto, Japan) (30 min)  
**S1-3 Resolution enhancement methods using a wide field fluorescence microscope**  
Tomonobu Watanabe (Osaka, Japan) (30 min)  
**S1-4 Super-resolution confocal microscopy using saturated and nonlinear excitation**  
Katsumasa Fujita (Osaka, Japan) (20 min)  

Chair: J. Roth (Seoul, Korea)  
**J1 Nuage proteins – Their localization in subcellular structures of spermatogenic cells revealed by immunoelectron microscopy**  
Sadaki Yokota (Sasebo, Japan)  

13:20-14:50  Workshop 1  
**Histochemical Society-sponsored session “Correlative integrative microscopy”**  
Chair: C. Frevert (Seattle, USA)  
**WS1-1 On-line correlative light and electron cryo-microscopy:**  
Development of an integrated fluorescence and electron microscope  
Hirofumi Iijima (Tokyo, Japan) (20 min)  
**WS1-2 Merging ultrastructural and molecular data for connectomics**  
Robert E. Marc (Salt Lake City, USA) (20 min)  
**WS1-3 Live correlative light and electron microscopy of mammalian and yeast cells**  
Yasushi Hiraoka (Osaka, Japan) (20 min)  
**WS1-4 Building a synaptome: Tools for delineating true boundaries for segmenting and reconstructing synapses in their three-dimensional space**  
Eduardo Rosa-Molinar (San Juan, USA) (20 min)
16:20-18:20  Symposium 5  Room A

New technologies of fluorescent probes for life science
   Chairs: Y. Urano (Tokyo, Japan)
   K. Johnsson (Lausanne, Switzerland)

S5-1  Visualizing biochemical activities in living cells through chemistry
   Kai Johnsson (Lausanne, Switzerland) (27 min)

S5-2  Functional imaging of intracellular signals using protein-fragment reconstitution techniques
   Takeaki Ozawa (Tokyo, Japan) (27 min)

S5-3  Phosphorescence imaging of tumors using iridium complexes
   Toshitada Yoshihara (Kiryu, Japan) (27 min)

S5-4  Rapid in vivo cancer imaging by topically spraying a newly designed activatable fluorescence probe
   Yasuteru Urano (Tokyo, Japan) (27 min)

18:30-19:00  Plenary Lecture 3  Room A

Chair: C. van Noorden (Amsterdam, The Netherlands)

PL3  Pathogen recognition and innate immunity
   Shizuo Akira (Suita, Japan)

19:00-19:30  Plenary Lecture 4  Room A

Chair: D. Aoki (Tokyo, Japan)

PL4  The multiple uses of fluorescent proteins to visualize cancer in vivo
   Robert M. Hoffman (San Diego, USA)

19:30- Banquet  Banquet Hall Sakura

   Kyoto International Conference Center, Banquet Hall Sakura
9:30-11:30  Symposium 2 Room B-1

Epigenetic parameters involved in cell differentiation and carcinogenesis

Chairs: T. Koji (Nagasaki, Japan)
P.L. Molloy (Sydney, Australia)

S2-1  Identification and application of DNA methylation biomarkers in colorectal cancer
Peter Molloy (Sydney, Australia) (24 min)

S2-2  Genetic and epigenetic etiology of Parkinson diseases
Zhuohua Zhang (Changsha, China) (24 min)

S2-3  Epigenetic dysregulation in human thyroid cancer
Tetsuo Kondo (Chuo, Japan) (24 min)

S2-4  Detection of DNA methylation in pathology sections
Sohei Kitazawa (Toon, Japan) (24 min)

S2-5  Differentiation-dependent changes in DNA methylation level of specific base sequences during mouse spermatogenesis, as assessed by HELMET
Takehiko Koji (Nagasaki, Japan) (24 min)

11:40-12:40  Luncheon Seminar 1 Room B-1

Sponsored by Takeda Pharmaceutical Co. Ltd.
From observation to manipulation: Protein ablation method by using light (CALI method)

Chair: K. Takei (Yokohama, Japan)

LS1-1  Screening for new proteins required for cellular function by Chromophore Assisted Light Inactivation
Daniel G. Jay (Boston, USA)

LS1-2  Genetically-encoded tools for chromophore-assisted light inactivation of biomolecule functions
Takeharu Nagai (Osaka, Japan)

13:20-14:50  Workshop 2 Room B-1

Light-mediated protein ablation in living tissues and cells

Chairs: K. Takei (Yokohama, Japan)
D.G. Jay (Boston, USA)

WS2-1  Chromophore assisted light inactivation: A history and future
Daniel G. Jay (Boston, USA) (20 min)

WS2-2  Multiphoton excitation-evoked CALI for understanding cardiac pathophysiology
Hideo Tanaka (Kyoto, Japan) (15 min)

WS2-3  Inhibition of synaptic release with chromophore-assisted light inactivation utilizing a genetically-encoded singlet oxygen generator
John Y. Lin (La Jolla, USA) (20 min)

WS2-4  Genetically-encoded functional probes applicable in conjunction with photo-manipulation technologies
Takeharu Nagai (Suita, Japan) (15 min)

WS2-5  Irradiation-induced protein inactivation reveals acute requirements in biogenesis of the Golgi complex
Adam D. Linstedt (Pittsburgh, USA) (20 min)
Autophagy and cell death

Chairs: Y. Uchiyama (Tokyo, Japan)
K.A. Roth (Birmingham, USA)

S6-1 Autophagy targeted therapies for malignant glial neoplasms
Kevin A. Roth (Birmingham, USA) (24 min)

S6-2 Bafilomycin and ATP6V0C as putative mediators of autophagy lysosome pathway function
John J. Shacka (Birmingham, USA) (24 min)

S6-3 Autophagy inhibition reduces neonatal mouse hypoxic-ischemic brain injury
Klas Blomgren (Stockholm, Sweden) (24 min)

S6-4 Hyaluronan tetrasaccharide rescues hippocampal pyramidal neuron death after hypoxic-ischemic injury
Yasuo Uchiyama (Tokyo, Japan) (24 min)

S6-5 Function of apoptosis in early brain development
Masayuki Miura (Tokyo, Japan) (24 min)
9:30-11:30  Symposium 3  Room B-2

Glycogene and disease

Chairs: J. Nakayama (Matsumoto, Japan)
       G.W. Hart (Baltimore, USA)

S3-1  Crosstalk between O-GlcNAcylation & phosphorylation: Roles in diabetes, cancer and Alzheimer’s disease
Gerald W. Hart (Baltimore, USA) (27 min)

S3-2  Roles of globo-series glycolipids in the regulation of LPS-TLR4 signals
Koichi Furukawa (Nagoya, Japan) (27 min)

S3-3  Dual roles of gastric gland mucin-specific O-glycan on prevention of gastric cancer
Jun Nakayama (Matsumoto, Japan) (27 min)

S3-4  Helicobacter pylori cholesteryl α-glucosides control its pathogenesis through host immune response by invariant natural killer T cells
Minoru Fukuda (La Jolla, USA) (27 min)

11:40-12:40  Luncheon Seminar 2  Room B-2

Virtual microscopy (VM) vendor group presents;
“Frontiers of virtual microscopy; introducing the newest machines”
Organized by JRSTPI (Japanese Research Society of Telepathology and Pathology Informatics)

Chairs: R. Coleman (Haifa, Israel)
       Y. Tsuchihashi (Kyoto, Japan)

LS2  Detailed Program to be presented at the congress site

13:20-14:50  Workshop 3  Room B-2

Differentiation and death of germ cells

Chairs: T. Takizawa (Tokyo, Japan)
       R.E. Braun (Bar Harbor, USA)

WS3-1  Somatic regulation of germ cell differentiation in mice
Robert E. Braun (Bar Harbor, USA) (30 min)

WS3-2  Notch signaling as modulator of gonocyte fate in the perinatal testis
Marie-Claude Hofmann (Houston, USA) (30 min)

WS3-3  Essence of “fertile” spermatogenesis and GPI anchored proteins
Yoshihiko Araki (Urayasu, Japan) (30 min)

16:20-18:20  Symposium 7  Room B-2

Virtual microscopy (Acta Histochemica-JRSTPI* session)
*Japanese Research Society of Telepathology and Pathology Informatics

Chairs: R. Coleman (Haifa, Israel)
       Y. Tsuchihashi (Kyoto, Japan)

S7-1  Keynote lecture 1: Virtual microscopy: A review and update of the current equipment, methods and E-learning possibilities
Raymond Coleman (Haifa, Israel) (30 min)

S7-2  Keynote lecture 2: Acta Histochemica Keynote Lecture Sponsored by Elsevier, Germany
Quantitative pathology in virtual microscopy – History, possibilities, perspectives
Gian Kayser (Freiburg, Germany), Klaus Kayser (Berlin, Germany) (30 min)

S7-3  Practice of pathology education with a virtual slide system for medical students in Yamaguchi University
Atsunori Oga (Ube, Japan) (20 min)

S7-4  Use of virtual microscopy (VM) for diagnosis and research purposes
Yasunari Tsuchihashi (Kyoto, Japan) (20 min)
9:30-11:30  Symposium 4  Room C-2

Turkish Society for Electron Microscopy-sponsored session

Chair:  S. Arbak (Istanbul, Turkey)
        S. Yilmazer (Istanbul, Turkey)

S4-1  The interaction of nanomaterial guided mesenchymal stem cells with the inflammatory milieu
Petek Korkusuz (Ankara, Turkey) (30 min)

S4-2  A potential reason for mesenchymal stem cell (MSC) therapy in osteochondrodysplasias: C-type natriuretic peptide signaling
A. Cevik Tufan (Denizli, Turkey) (30 min)

S4-3  Mesenchymal stem cells and their applications in tissue engineering
Deniz Yucel (Istanbul, Turkey) (30 min)

S4-4  Stem cell and extracellular matrix related molecular changes in the skin of postmenopausal rats: Effects of melatonin
Serap Arbak (Istanbul, Turkey) (30 min)

13:20-14:50  Workshop 4  Room C-2

Molecular targeted cancer therapy and histochemistry

Chairs:  S. Masuda (Tokyo, Japan)
        L. Fu (Tianjin, China)

WS4-1  Individualized diagnosis by molecular markers in breast cancer
Li Fu (Tianjin, China) (20 min)

WS4-2  Breast biomarkers: External quality control and direct impact of patient treatment regime
Merdol Ibrahim (London, UK) (20 min)

WS4-3  Role of microRNAs in estrogen receptor α-positive breast cancer
Hiroko Yamashita (Sapporo, Japan) (20 min)

WS4-4  Gene amplification of ESR1 in breast cancers - Fact or fiction? - A fluorescence in situ hybridization and multiplex ligation-dependent probe amplification study
Akishi Ooi (Kanazawa, Japan) (20 min)

16:20-18:20  Symposium 8  Room C-2

Development and function of endocrine (cancer) cells

Chairs:  R.Y. Osamura (Tokyo, Japan)
        S.A. Camper (Ann Arbor, USA)

S8-1  Pituitary gland development and function: Stem cell biology and roles of β-catenin
Sally A. Camper (Ann Arbor, USA) (30 min)

S8-2  Molecular insights into the benign nature of pituitary tumors
Vera Chesnokova (Los Angeles, USA) (30 min)

S8-3  Identifying the sites of aldosterone production in human adrenal and its disorders: recent progress
Hironobu Sasano (Sendai, Japan) (30 min)

S8-4  Pathobiology and Histochemistry of Neuroendocrine Tumors (NET): Diagnosis, prognosis and therapy
Robert Y. Osamura (Tokyo, Japan) (30 min)
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<td>8:20-8:50</td>
<td>Plenary Lecture 5</td>
<td>Room A</td>
<td>A. Matsuno (Ichihara, Japan)</td>
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<td>8:50-9:20</td>
<td>Plenary Lecture 6</td>
<td>Room A</td>
<td>T. Ito (Kumamoto, Japan)</td>
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<td>9:30-11:30</td>
<td>Symposium 9</td>
<td>Room A</td>
<td>T. Takamatsu (Kyoto, Japan)</td>
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<td>D. Orringer (Boston, USA)</td>
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<td>12:50-13:20</td>
<td>Journal sponsored lecture: AHC</td>
<td>Room A</td>
<td>T. Koji (Nagasaki, Japan)</td>
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<td>13:20-14:50 Workshop 5</td>
<td>Room A</td>
<td>K. Takata (Maebashi, Japan)</td>
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<td>T. Misgeld (München, Germany)</td>
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### Plenary Lecture 5

**PL5** Nanoparticle-based immunocytochemistry reveals micro-architecture of the cell nucleus
Pavel Hozák (Prague, Czech Republic)

### Plenary Lecture 6

**PL6** TGF-β signaling in progression of cancer
Kohei Miyazono (Tokyo, Japan)

### Symposium 9

**S9-1** Label free in vivo stimulated Raman scattering microscopy for cancer surgery
Daniel Orringer (Boston, USA)

**S9-2** Label-free optical imaging of biological molecules for the detection of lesional tissues
Yoshinori Harada (Kyoto, Japan)

**S9-3** Photoacoustic imaging and sensing in medicine
Miya Ishihara (Tokorozawa, Japan)

**S9-4** Intravital multiphoton imaging revealing cellular dynamics in bone physiology, inflammation and cancers
Masaru Ishii (Osaka, Japan)

**S9-5** In vivo optical diagnosis and detection of gastric precancer and cancer at endoscopy
Zhiwei Huang (Singapore, Singapore)

### Journal sponsored lecture: AHC Lecture

**J2** Aquaporin water channels of the cell membrane
Kuniaki Takata (Maebashi, Japan)

### Workshop 5

**WS5-1** In vivo imaging in the mouse spinal cord
Thomas Misgeld (München, Germany) (22 min)

**WS5-2** In vivo imaging of axon branch stabilization by correlated neuronal activity
Edward S. Ruthazer (Montreal, Canada) (22 min)

**WS5-3** Imaging analysis of synapse dynamics in vivo
Shigeo Okabe (Tokyo, Japan) (22 min)

**WS5-4** Imaging of cellular dynamics during the adaptive immune response
Takaharu Okada (Yokohama, Japan) (22 min)
16:20-18:20  Symposium 13  Room A

Bruker-sponsored symposium  
Mass spectro imaging  

Chairs: A. Walch, (Münich, Germany)  
M. Ikegawa (Kyoto, Japan)

S13-1  *In situ* proteomics by MALDI-imaging mass spectrometry  
Masaya Ikegawa (Kyoto, Japan)

S13-2  Histochemistry of phospholipids  
Mitsutoshi Setou (Hamamatsu, Japan)

S13-3  Approaching MALDI imaging mass spectrometry for clinical research: Current state and fields of application  
Axel Walch (Neuherberg, Germany)

S13-4  MALDI-Imaging MS: Integrating molecular structure and histology in drug development  
Stephen Castellino (Research Triangle Park, USA)

18:30-19:00  Plenary Lecture 7  Room A

Chair: T. Matsuzaki (Maebashi, Japan)

PL7  New fluorescent probes and new perspectives in neuroscience  
Atsushi Miyawaki (Wako, Japan)

19:00  Sponsored Evening Session  Banquet Hall Swan

Sponsored by Olympus  
All participants and accompanying persons are cordially invited.
9:30-11:30 Symposium 10 Room B-1

Lipid droplet, a dynamic organelle with many different faces

Chairs: T. Fujimoto (Nagoya, Japan)  
P. Liu (Beijing, China)

S10-1 Physiological significance of heart lipid droplets and droplet-associated proteins
Takashi Osumi (Kamigori, Japan) (30 min)

S10-2 Role of lipid droplets in metabolic diseases
Pingsheng Liu (Beijing, China) (30 min)

S10-3 Lipid droplet and lipid storage regulation in Drosophila
Xun Huang (Beijing, China) (30 min)

S10-4 Derlin-1 and UBXD8 are related to dislocation and degradation of lipidated ApoB-100 at the ER-LD junction
Michitaka Suzuki (Nagoya, Japan) (30 min)

11:40-12:40 Luncheon Seminar 3 Room B-1

Sponsored by Roche

Chair: S. Masuda (Tokyo, Japan)

LS3 TBA
Merdol Ibrahim (London, UK)

13:20-14:50 Workshop 6 Room B-1

Neurobiology of social behavior

Chairs: M. Nishi (Kashihara, Japan)  
H. Hu (Shanghai, China)

WS6-1 Genetic and neuronal contributions to emotional changes in the postpartum brain
Stephen C. Gammie (Madison, USA) (20 min)

WS6-2 Effects of early life adverse events on the brain plasticity
Mayumi Nishi (Kashihara, Japan) (20 min)

WS6-3 Behavioral choice between parenting or infanticide and the underlying neural mechanism in mice
Kumi O. Kuroda (Wako, Japan) (20 min)

WS6-4 Neural circuit mechanism of social hierarchy
Hailan Hu (Shanghai, China) (20 min)

16:20-18:20 Symposium 14 Room B-1

Neuronal degeneration and regeneration

Chairs: N. Saito (Kobe, Japan)  
A. Kanthasamy (Ames, USA)

S14-1 Novel protein kinase-C signaling in experimental models of Parkinson's disease:
Relevance to translational strategies in neuronal degeneration
Anumantha Kanthasamy (Ames, USA) (30 min)

S14-2 Involvement of PKCgamma in neurodegenerative disease
Naoaki Saito (Kobe, Japan) (30 min)

S14-3 Running exercise prevents inflammation-induced dopaminergic neuron loss in the substantia nigra
Yu-Min Kuo (Tainan, Taiwan) (30 min)

S14-4 Novel mechanism of functional recovery from spinal cord injury
Chihiro Tohda (Toyama, Japan) (30 min)
9:30-11:30  Symposium 11  Room B-2

What’s new and what’s coming in molecular pathology

Chairs: R. Katoh (Yamanashi, Japan)
       B. Jasani (Cardiff, UK)

S11-1  What’s new and what’s coming in molecular pathology
Bharat Jasani (Cardiff, UK) (30 min)

S11-2  What’s new in cancer diagnostics? - An upcoming innovative approach based on mass spectrometry and regression logistics -
Sen Takeda (Chuo, Japan) (30 min)

S11-3  What’s new in diagnostic pathology of thyroid tumors
Ryohei Katoh (Yamanashi, Japan) (30 min)

S11-4  New era of dynamic morphology by the realtime confocal microscopy: With special reference to Ca” dynamics in living tissues
Yoh-ichi Satoh (Yahaba, Japan) (30 min)

11:40-12:40  Luncheon Seminar 4  Room B-2

Sponsored by FEI company

LS4  Correlative microscopy - Different flavors

13:20-14:50  Workshop 7  Room B-2

Vesicle formation and trafficking

Chairs: J. Heuser (St. Louis, USA)
       J.A. Swanson (Ann Arbor, USA)

WS7-1  Phosphoinositide signal cascades in macropinocytic cups
Joel A. Swanson (Ann Arbor, USA) (25 min)

WS7-2  Control of macropinocytosis by photo-manipulation of Rac1 activity
Nobukazu Araki (Miki, Japan) (20 min)

WS7-3  Morphological aspects of the biogenesis of ER-derived autophagic isolation membranes
Satoshi Waguri (Fukushima, Japan) (20 min)

WS7-4  Deciphering caveolar dynamics by “deep-etch” electron microscopy
John Heuser (Kyoto, Japan) (25 min)

16:20-18:20  Symposium 15  Room B-2

Recent advances in electron microscopic methods for imaging

Chairs: S. Ohno (Chuo, Japan)
       N. Ohno (Cleveland, USA)

S15-1  Novel morphological characteristics of actin bundle using quantitative electron tomography
Keisuke Ohta (Kurume, Japan) (30 min)

S15-2  Semi-automated reconstruction of neural circuits using serial-section electron microscopy
Shin-ya Takemura (Ashburn, USA) (30 min)

S15-3  Mitochondrial dynamics in axons revealed by focused ion beam- (FIB-) and serial block face- (SBF-) scanning electron microscopy (SEM)
Nobuhiko Ohno (Cleaveland, USA) (30 min)

S15-4  Strategies for doing cryo-electron tomography in situ
Alexander Rigort (Martinsried, Germany) (30 min)
9:30-11:30 Symposium 12
Room C-2

Chinese Society-sponsored session “Neuronal injury and repair”
Chair: H. Li (Wuhan, China)

S12-1 Directed differentiation of GABAergic projection neurons from human embryonic stem cells
Lixiang Ma (Shanghai, China) (24 min)

S12-2 Peptidyl-prolyl cis-trans isomerase PIN1 inhibits cytotoxicity of mutant huntingtin through modulating activity of nuclear proteasome and Akt
Ting Peng (Wuhan, China) (24 min)

S12-3 Phosphorylation of transcription factor Olig1 regulates differentiation and myelination of oligodendroglia
Lan Xiao (Chongqing, China) (24 min)

S12-4 HMGB1 is not originally a hallmark of DAMPs during evolution
Yongjun Wang (Nantong, China) (24 min)

S12-5 Electroacupuncture promotes the differentiation of transplanted bone marrow mesenchymal stem cells overexpressing TrkC and functional recovery in rat spinal cord transected
Ying Ding (Guangzhou, China) (24 min)

13:20-14:50 Workshop 8
Room C-2

Quantitative methods in histochemistry and cytochemistry
Chair: V. Zinchuk (Kochi, Japan)
B. Wollscheid (Zurich, Switzerland)

WS8-1 A chemoproteomic technology for the ligand-based receptor identification on living cells and tissues
Bernd Wollscheid (Zurich, Switzerland) (30 min)

WS8-2 Strategy to test fluorophores stability for typical histological samples
Arne Seitz (Lausanne, Switzerland) (30 min)

WS8-3 Quantification of spatial correlations of fluorescent markers for studying interactions of proteins
Vadim Zinchuk (Kochi, Japan) (30 min)

16:20-18:20 Symposium 16
Room C-2

Health effects of radiation-experimental and epidemiological studies
Chairs: S. Fushiki (Kyoto, Japan)
Q. Sun (Beijing, China)

S16-1 Introduction
Shinji Fushiki (Kyoto, Japan) (5 min)

S16-2 Effects of long-term low-dose-rate irradiation on gene structure and gene expression in mice
Tetsuya Ono (Rokkasho, Japan) (28 min)

S16-3 Pathological study of Aspm deficient mice; an animal model for human type V microcephaly (MCPH5)
Akira Fujimori (Chiba, Japan) (28 min)

S16-4 Overview of the studies on health effects among the residents in Yangjiang high-background radiation area, China
Quanfu Sun (Beijing, China) (28 min)

S16-5 Urinary bladder lesions influenced by persistent long-term, low-dose ionizing radiation after the Chernobyl accident
Alina M. Romanenko (Kiev, Ukraine) (28 min)
August 29, 2012 - Wednesday

8:20-8:50  Plenary Lecture 8  Room A
Chair: H. Ozawa (Tokyo, Japan)

PL8  Mechanisms of endosomal cholesterol trafficking
Elina Ikonen (Helsinki, Finland)

8:50-9:20  Plenary Lecture 9  Room A
Chair: Y. Ibata (Kyoto, Japan)

PL9  50 Years of the matrix cell research -Phenomena and the genetic basis of cytodifferentiation in CNS-
Setsuya Fujita (Kyoto, Japan)

9:30-11:30  Symposium 17  Room A
Joint session of Japan Society for Laser Microscopy: Novel techniques in microscopy
Chair: Y. Kawata (Hamamatsu, Japan)

S17-1  Customizable super-resolution imaging with random and periodic nanoplasmonic substrates
Donghyun Kim (Seoul, Korea) (20 min)

S17-2  Molecular imaging with x-ray free electron lasers
Changyong Song (Sayo, Japan) (20 min)

S17-3  Live cell nanomaging by direct excitation of focused electron beam
Wataru Inami (Hamamatsu, Japan) (20 min)

S17-4  In-solution EM observation of cells and tissues using the Atmospheric Scanning Electron Microscope (ASEM): High throughput immunocytochemistry and intra operative cancer diagnosis with wet tissues
Chikara Sato (Tsukuba, Japan) (20 min)

S17-5  On-line correlative light and electron cryo-microscopy: Applications to biological systems close to living states
Kuniaki Nagayama (Okazaki, Japan) (20 min)

12:50-13:20  Journal sponsored lecture – JHC lecture  Room A
Chair: J.R. Couchman (Copenhagen, Denmark)

J3  Protein phosphorylation remains a black box in signal transduction: Developing a new method to search for substrates of protein kinases
Kozo Kaibuchi (Nagoya, Japan)

14:50-15:00  Closing Ceremony  Room A
Poster awards ceremony
Closing remarks
Tetsuro Takamatsu
President, ICHC 2012

Toyoshi Fujimoto
Vice-president, ICHC 2012
9:30-11:30  Symposium 18  Room B-1

Hormone and brain

Chairs: M. Kawata (Kyoto, Japan)  
J. Morris (Oxford, UK)

S18-1  Annexin 1: Control of proliferation of stem cell populations in the brain and other tissues  
John Morris (Oxford, UK) (24 min)

S18-2  Fluorescent visualization of vasopressin and oxytocin neurons in the hypothalamus and their terminals in the hypothalamus in transgenic rats  
Yoichi Ueta (Kita-kyushu, Japan) (24 min)

S18-3  Long-lasting influence of maternal stress on the brain functions of adult offspring  
Kyungjin Kim (Seoul, Korea) (24 min)

S18-4  Feedback effects of gonadal steroids on kisspeptin signaling system in the rat brain  
Hitoshi Ozawa (Tokyo, Japan) (24 min)

S18-5  Effects of gonadal steroid hormones on the nervous system: From molecular imaging to behavior  
Mitsuhiro Kawata (Kyoto, Japan) (24 min)

11:40-12:40  Luncheon Seminar 5  Room B-1

Sponsored by Yakult Honsha Co., Ltd.  
Chair: E. Otsuji (Kyoto, Japan)

LS5-1  Cell-autonomous development of mammalian circadian clock during the differentiation culture of ES cells  
Kazuhiro Yagita (Kyoto, Japan)

LS5-2  What can we see using diffusion-weighted MR imaging?  
Kei Yamada (Kyoto, Japan)
Future challenges of immunohistochemistry in pathology

Chairs: N. Nemoto (Tokyo, Japan)
Y. Ishikawa (Tokyo, Japan)

S19-1 Roles of immunohistochemistry for lung cancer subclassification: Neuroendocrine nature in small cell carcinoma and adenocarcinoma
Yuichi Ishikawa (Tokyo, Japan) (30 min)

S19-2 Screening of anaplastic lymphoma kinase rearrangement by immunohistochemistry in non-small cell lung cancer - Correlation with fluorescence in situ hybridization
Jin-Haeng Chung (Seoul, Korea) (30 min)

S19-3 ALK over-expression by immunohistochemical study correlated with EML4-ALK fusion gene in non-small cell lung cancers
Shiu-Feng Huang (Miaoli, Taiwan) (30 min)

S19-4 Combination of morphology and molecular analysis as a companion diagnostics for personalized medicine
Norimichi Nemoto (Tokyo, Japan) (30 min)

11:40-12:40 Luncheon Seminar 6

Sponsored by FEI company

LS6 Overview 3D electron microscopy techniques
**Young Histochemist Award**

**Room C-2**

9:30-11:30

**Chair:** H. Multhaupt (Helsinki, Finland)
Z. Kmiec (Gdansk, Poland)

**YHA 1**  **Role of vinculin in meiosis during the mouse spermatogenesis**
Jana Rohožková (Prague, Czech Republic) (20 min)

**YHA 2**  **Analysis of Fas-Raf-MST2-RASSF1A-LATS1-YAP1-p73-PUMA-BAX p53-independent apoptotic pathway in colorectal cancer**
Piotr M. Wierzbicki (Gdansk, Poland) (20 min)

**YHA 3**  **Metabolic mapping reveals functional mechanisms of IDH1 mutation in glioblastoma multiforme**
Nadia A. Atai (Amsterdam, The Netherlands) (20 min)

**YHA 4**  **Mesenchymal stem cells and their applications in tissue engineering**
Deniz Yucel (Istanbul, Turkey) (20 min)

**YHA 5**  **Visualization of plasma cells producing disease-specific antibodies with the enzyme-labeled antigen method**
Yasuyoshi Mizutani (Toyoake, Japan) (20 min)

**YHA 6**  **Mutant huntingtin reduces free zinc level in the brain of Huntington’s disease transgenic mouse by inhibiting binding of Sp1 to promoter of zinc transporter 3 gene**
Li Niu (Wuhan, China) (20 min)

Note: YHA1 – YHA6 are also presented as posters throughout the congress in Room D.