

Program

Saturday, June 25th

8:30 - Registration

9:00 - 10:00 General meeting of councillor

10:00 - 10:05 Opening remarks

10:05 - 11:05 Young researchers Presentation

Chair: Kazuaki Hisatsune (Forensic Science Laboratory, Aichi Prefectural
Police Headquarters)

Koutaro Hasegawa (Department of Legal Medicine,
Hamamatsu University School of Medicine)

Y-1 Development of simple methamphetamine screening method by electrochemiluminescence with an electric contactless power transfer system
○Fumiki Takahashi, Mayu Kaneko, Ryutaro Tanaka (Shinshu University)

Y-2 Analysis of degradation products of nerve agents in biological fluids by ion chromatography-tandem mass spectrometry
○Mai Otsuka, Hajime Miyaguchi (National Research Institute of Police Science)

Y-3 Development of an on-site cannabis DNA detection method using a mobile real-time PCR device
○Tadashi Yamamuro, Yuko T. Iwata, Yuki Okada, Hiroki Segawa, Kenji Kuwayama, Kenji Tsujikawa, Tatsuyuki Kanamori (National Research Institute of Police Science)

Y-4 Evaluation of post-mortem interaction between hemoglobin and oxime-type carbamate pesticides
○Yoshikazu Yamagishi¹, Sayaka Nagasawa^{1,2}, Hirotarō Iwase¹, Yasumitsu Ogra^{1,2}
(¹Graduate School of Medicine, Chiba University, ²Graduate School of Pharmaceutical Sciences, Chiba University)

Y-5 An autopsy case of death due to insulin overdose
○Sayaka Nagasawa^{1,2}, Rutsuko Yamaguchi^{1,3}, Fumiko Chiba^{1,3}, Suguru Torimitsu^{1,3}, Hirotarō Iwase^{1,3} (¹Chiba University Department of Legal Medicine, ²Chiba

University Department of Forensic Toxicology, ³University of Tokyo Department of Forensic Medicine)

11:10 - 11:30 Lecture by recipient of the Yoshimura Prize

Chair: Youkichi Ohno (Professor emeritus, Nippon Medical School)

Studies about comprehensive analysis of hypnotic metabolites and search for novel metabolites

○Koji Yamaguchi

(Department of Legal Medicine, Nippon Medical School)

11:45 - 12:45 Luncheon Seminar (Sponsor: Biodesign)

Development of specific detection methods for doping-prohibited substances, health food ingredients, and herbal medicine ingredients.

Seiichi Sakamoto (Kyushu University Graduate School of Pharmaceutical Sciences)

13:00 - 13:45 JAFT General meeting

13:45 - 15:15 Symposium “New development in Forensic Toxicology”

Chair: Hiroshi Kinoshita (Kagawa University)

S-1 Molecular mechanism of acetaminophen-induced liver injury

○Yuko Ishida, Toshikazu Kondo

(Department of Forensic Medicine Wakayama Medical University)

S-2 Toxicity evaluation of compound semiconductor materials (ZnO nanoparticles and GaSb thin films)

○Junko Fujihara

(Department of Legal Medicine, Shimane University Faculty of Medicine)

S-3 Studies on unknown effects of natural poisons

○Shogo Kasuda

(Department of Legal Medicine, Nara Medical University)

15:15 - 15:30 Break time

15:30 - 16:30 Oral Session 1

Chair: Noriyuki Usami (Hokuriku University)

O-1 Conversion of analogs of methyl 3-oxo-2-phenylbutyrate to phenylacetone

○Kenji Tsujikawa, Yuki Okada, Hiroki Segawa, Tadashi Yamamuro, Kenji Kuwayama, Tatsuyuki Kanamori, Yuko T. Iwata (National Research Institute of Police Science)

O-2 Changes in urinary concentration after inhalation exposure to vaporized methoxyphenamine in humans -Aiming to discriminate recreational methamphetamine users from the secondhand smokers-

○Haruka Morinaka¹, Asuka Kaizaki-Mitsumoto¹, Hokuto Morohoshi^{2,3}, Jun Miura², Naoki Uchida⁴, Satoshi Numazawa¹

(¹Division of Toxicology, Department of Pharmacology, Toxicology and Therapeutics, Showa University School of Pharmacy, ²Clinical Research Institute for Clinical Pharmacology and Therapeutics, Showa University, ³Department of Hygiene, Public Health and Preventive Medicine, Showa University School of Medicine, ⁴Department of Pharmacology (Clinical Pharmacology), Showa University School of Medicine)

O-3 The effect of gastric acid secretion mechanism on the transfer of blood methamphetamine into the stomach.

○Kei Yoshitome^{1,3}, Masanobu Miura^{1,3}, Fumio Moriya^{2,3}

(¹Department of Legal Medicine, Kawasaki Medical School, ²Department of Nursing, Faculty of Nursing, Kawasaki University of Medical Welfare, ³Department of Legal Medicine, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)

O-4 Pathophysiological analysis of methamphetamine-induced cardiomyopathy model

○Hiroki Yamamoto, Yuko Ishida, Akiko Ishigami, Mizuho Nosaka, Yumi Kuninaka, Shimada Emi, Akihiko Kimura, Toshikazu Kondo (Wakayama medical University)

O-5 A case of acute methamphetamine poisoning death with non-lethal blood level

○Haruki Yasuda, Hiroki Yamamoto, Akiko Ishigami, Yuko Ishida, Mizuho Nosaka,
Tatsunori Takayasu, Toshikazu Kondo
(Department of Forensic Medicine, Wakayama Medical University)

16:30 - 17:05 Oral Session 2

Chair: Tooru Kamata (Forensic Science Laboratory, Osaka Prefectural Police
Headquarters)

O-6 Elucidation of distribution of ambroxol in human hair cross section

○Yasuo Seto¹, Takahiro Iwai¹, Simpei Watanabe¹, Toshio Nakanishi¹, Yoshiki
Komura¹, Tomoya Uruga², Sadao Honda², Koichi Chiba³, Satoki Okabayashi³, Kenji
Kuwayama⁴
(¹RIKEN SPring-8 Center, ²JASRI, ³Kwansei Gakuin University, ⁴National Research
Institute of Police Science)

**O-7 The association with the human organic anion transporter and the human
organic cation transporter for pharmacokinetics of Caffeine and it's metabolites**

○Shoetsu Chiba, Toru Ikawa, Yukino Oide, Kazue ichiba, Morihisa Sagi,
Ayako Ro
(Dept. Legal Medicine, St. Marianna University School of Medicine)

**O-8 Simulation of blood cyanide concentration during inhalation of cyanide by
physiological-based pharmacokinetic analysis and its application**

○Yuuri Tokugawa^{1,2}, Kazuo Harada^{1,2}, Hiroshi Matsumoto¹
(¹Legal Medicine, Osaka University, ²Pharmaceutical Sciences, Osaka Univeristy)

17:05 - 17:15 Break time

17:15 - 18:25 Oral Session 3

Chair: Kenji Tsujikawa (National Research Institute of Police Science)

**O-9 Time-frame analysis of the effects of novel synthetic cannabinoids: a study on
behavioral response and endogenous cannabinoids disruption**

○Pineda Garcia Jorge Carlos¹, Li Renshi^{1,2}, Ruri Kikura-Hanajiri³, Yoshitaka
Tanaka¹, Yuji Ishii¹
(¹Kyushu University Graduate School of Pharmaceutical Sciences, ²China
Pharmaceutical University, ³National Institute of Health Sciences)

O-10 Determination of major metabolites of AB-FUBINACA in solid tissues obtained from its abuser

○Kayoko Minakata, Itaru Yamagishi, Hideki Nozawa, Koutaro Hasegawa, Naotomo Miyoshi, Masako Suzuki, Kunio Gonmori, Osamu Suzuki
(Hamamatsu University School of Medicine)

O-11 Identification of hexahydrocannabinol (HHC) in illegal products.

○Rie Tanaka, Ruri Kikura-Hanajiri
(National Institute of Health Sciences)

O-12 Study on analytical methods of LSD and its derivatives

○Maiko Kawamura, Rie Tanaka, Mizutani sakumi, Takuji Shoda, Yosuke Demizu, Ruri Kikura-Hanajiri
(National Institute of Health Sciences)

O-13 Differentiation of LSD and its isomers by GC-QTOF-MS

○Sakumi Mizutani, Maiko Kawamura, Takuji Shoda, Yosuke Demizu, Ruri Kikura-Hanajiri
(National Institute of Health Sciences)

O-14 Development of a screening method for the detection of designer benzodiazepines using an exact mass database

○Shihoko Fujii¹, Shuntaro Matsuta¹, Hiroe Kamata¹, Noriaki Shima¹, Munehiro Katagi², Takako Sato², Hiroshi Nishioka¹
(¹Forensic Science Laboratory, Osaka Prefectural Police H.Q. ²Osaka Medical and Pharmaceutical University)

Sunday, June 26th

8:30 - Registration

09:00 - 09:45 Oral Session 4

Chair: Tadashi Ogawa (Aichi Medical University School of Medicine)

O-15 Usefulness of IVEX-screen M-1pro in Forensic Autopsy Cases

○Masanobu Miura^{1,2}, Yukie Yamasaki², Kaori Taniguchi², Chie Kobayashi²,
Sera Takei², Hiroshi Kinoshita³, Fumio Moriya^{2,4}, Satoru Miyaishi²

(¹Kawasaki Medical School, ²Okayama University, ³Kagawa University, ⁴Kawasaki University of Medical Welfare)

O-16 Investigative cooperation in two date rape cases by drug analysis in hair

○Katsuhiko Okuda, Masaru Asari, Yuta Takahashi, Kanae Mori, Ryo Namba,
Keiko Shimizu

(Asahikawa Medical University)

O-17 An autopsy case detected isopropanol and acetone at high concentration.

○Ayako Nasu, Chiaki Fuke, Hikaru Kuninaka, Momoka Tanabe, Noriko Ogawa,
Yuya Kato, Moe Mukai, Kazuho Maeda, Yosuke Usumoto, Yoko Ihama

(Yokohama City University)

O-18 A case of suspected taking the dietary supplement Lipodrene® for suicidal intent

○Kyoko Maebashi¹, Akira Namera², Shojiro Takasu¹, Kana Sakamoto¹,
Masataka Nagao², Kimiharu Iwadata¹

(¹Department of Forensic Medicine, The Jikei University School of Medicine

²Department of Forensic Medicine, Graduate School of Biomedical and Health Sciences, Hiroshima University)

09:45 - 10:00 Break time

10:00 - 11:00 Memorial Symposium "Past and future of JAFT"

Organizer

Chiaki Fuke (Yokohama City University)

Yuji Ishii (Kyushu University)

Symposiast

Yuji Ishii (Kyushu University)

Satoshi Numazawa (Showa University)

Noriyuki Usami (Hokuriku University)

Shin-ichi Kubo (Fukuoka University)

11:00 - 12:00 Special Lecture

Chair: Hiroshi Kinoshita (Kagawa University)

Perspective from toxicologic pathology

- Approach to safety evaluation and its application -

Masanao Yokohira

(Department of Medical Education, Faculty of Medicine, Kagawa University)

12:10 - 13:10 Luncheon Seminar (Sponsor: Japanese Society for Forensic Pathology)

Application of energy dispersive X-ray fluorescent spectrometry in the field of forensic medicine.

Hiroshi Kinoshita (Kagawa University)

13:15 - 13:50 Oral Session 5

Chair: Hajime Miyaguchi (National Research Institute of Police Science)

O-19 Study on identification of psilocybin mushrooms using psilocybin biosynthesis genes -Part 2-

○Jun Ogata, Sakumi Mizutani, Ruri Kikura-Hanajiri

(National Institute of Health Sciences)

O-20 Design of oxidant functionalized single chemiluminescent probe for simple detection of bloodstains

○Saki Nakama, Naoya Kishikawa, Mahmoud El-Maghrabey, Naotaka Kuroda

(Nagasaki University)

O-21 Evaluation of behavioral effects of hallucinogenic agents using a head-twitch response (HTR) detection system in surveillance of illegal drugs in Tokyo metropolitan area.

○Mari Nakamura¹, Yuko Hasegawa¹, Motoki Hojo¹, Kiyomi Ikushima¹, Aya Saiga¹, Sakiko Nomura¹, Kyuoko Hiramatsu¹, Kyouko Hataoka¹, Jin Suzuki¹, Takako Moriyasu², Akiko Inomata¹

(¹Tokyo Metropolitan Institute of Public Health, ²Tokyo Food Sanitation Association Food Reserch Laboratory)

13:50 - 14:50 Oral Session 6

Chair: Noriaki Shima (Forensic Science Laboratory, Osaka Prefectural Police Headquarters)

O-22 Feature of phenyl phase column for simultaneous analysis of drugs by liquid chromatography mass spectrometry

○Masahiko Takino (Agilent Technologies Japan, Ltd.)

O-23 The determination of a new insomnia medication, lemborexant, in human serum by LC-MS/MS

○Brian Waters¹, Masato Masuda², Ryoko Nakano^{1,3}, Aya Matsusue¹, Mio Takayama¹, Masayuki Kashiwagi¹, Nobuaki Eto², Leo Gotoh², Hiroaki Kawasaki², Shin-ichi Kubo¹

(¹Fukuoka University Department of Forensic Medicine, ²Fukuoka University Department of Psychiatry, ³Fukuoka University Department of Anesthesiology)

O-24 Development of an LC-MS/MS method for determination of neonicotinoid insecticides in blood: Construction of LC conditions and verification of matrix effect and recovery efficiency

○Tadashi Ogawa^{1,2}, Fumio Kondo^{1,3}, Masae Iwai^{1,2}, Tomohito Matsuo^{1,2}, Katsutoshi Kubo^{1,4}, Hiroshi Seno^{1,2}

(¹Department of Legal Medicine, Aichi Medical University School of Medicine, ²Poison Analysis Center, Aichi Medical University School of Medicine, ³Department of Biomedical Sciences, Chubu University College of Life and Health Sciences, ⁴Department of Oral Pathology/Forensic Odontology, Aichi Gakuin University School of Dentistry)

O-25 Analysis of vaporized caffeine in smoke from e-cigarette on LC-MS/MS and clarify of minor components

○Makoto Takada¹, Suzuna Saruwatari¹, Yutaro Yanagita¹, Junpei Mutoh¹,
Hajime Harada², Naoya Kishikawa³, Takashi Kitahara², Naotaka Kuroda³,
Mitsuhiro Wada¹

(¹Faculty of Pharmaceutical Sciences, Sanyo-Onoda City University, ²Department of
Pharmacy, Yamaguchi University Hospital, ³Graduate School of Biomedical
Sciences, Nagasaki University)

O-26 Relationship between metabolism and hepatocytotoxicity of benzylsibutramine

○Yoshifumi Morikawa¹, Daisuke Egawa², Syunsuke Zinbo³, Yuji Sakai¹,
Yasuhide Sasajima¹, Koichi Suenami¹, Kiyohito Sato¹, Yuji Takekoshi¹,
Toshiyuki Matsunaga²

(¹Forensic Science Laboratory, Gifu Prefectural Police Headquarters, Gifu,
²Laboratory of Bioinformatics Department of Biofunctional Analysis, Gifu
Pharmaceutical University, ³Laboratory of Herbal Garden, Gifu Pharmaceutical
University)

14:50 - 15:05 Closing remarks