Program

Thursday, July 6th

9:10  Registration
9:10 – 9:40  Poster set-up time

9:40 – 9:50  Opening remarks
Ruri Kikura-Hanajiri, Meeting President (National Institute of Health Sciences)

9:50 – 10:30  Oral Session 1 < Pharmacological Evaluation of Drugs of Abuse 1 >
Chair: Satoshi Numazawa (Showa University School of Pharmacy)

O-01
Pathophysiology of the serotonin syndrome model rat: an expression analysis of UCP-3 in skeletal muscles and metabolomics approaches
○ Saki Noda1, Kei Zaitsu1,2, Yumi Hayashi1,2,3, Tomomi Ohara1, Akira Iguchi4, Maiko Kusano1, Takako Sato5, Hitoshi Tsukihashi6, Tetsuya Ishikawa7, Kouichi Suzuki5, Akira Ishii1 (1Department of Legal Medicine & Bioethics, Nagoya University Graduated School of Medicine, 2Department of Advanced Research, Nagoya University, 3Department of Radiological and Medical Laboratory Science, Nagoya University Graduate school of Medical Science, 4Department of Bioresources Engineering, National Institute of Technology, Okinawa College, 5Department of Legal Medicine, Osaka Medical College)

O-02
25B-NBOMe induces rhabdomyolysis in zebrafish
Genri Kawahara1, Hideyuki Maeda2, Ruri Kikura-Hanajiri3, Yukiko Hayashi1, Ken-ichi Yoshida2 (1Department of Pathological Physiology, 2Department of Forensic Medicine, Tokyo Medical University, 3National Institute of Health Sciences)

O-03
Elevation of endogenous cannabinoid 2-AG in brain by synthetic cannabinoid JWH-018: the mechanism and the effect on learning and memory
○ Renshi Li1, Tomoki Takeda1, Satoshi Morimoto2, Ruri Kikura-Hanajiri3, Hideyuki Yamada1, Yuji Ishii1 (1Laboratory of Molecular Life Sciences, Graduate School of Pharmaceutical Sciences, Kyushu University, 2Department of Pharmacognosy, Graduate School of Pharmaceutical Sciences, Kyushu University, 3National Institute of Health Sciences)

10:30 – 11:10  Oral Session 2 < Pharmacological Evaluation of Drugs of Abuse 2 >
Chair: Yuji Ishii (Graduate School of Pharmaceutical Sciences, Kyushu University)

O-04
Brain activities and behaviors induced by Δ9-THC, JWH-018 and 5-fluoro-ADB in mice
○ Reiko Kobayakawa1, Ruri Kikura-Hanajiri2, Ko Kobayakawa1 (1Kansai Medical University, Institute of Biomedical Science, 2National Institute of Health Sciences)

O-05
Natural (Δ9-THC) and synthetic (JWH-018) cannabinoids induce seizures.
○ Olga Malyshevskaya1, Kosuke Aritake1, Nahoko Uchiyama2, Ruri Kikura-Hanajiri2, Yoshihiro Urade1 (1WPI-IIIS University of Tsukuba, 2Division of Pharmacognosy, Phytochemistry and Narcotics National Institute of Health Sciences)

O-06
MDMB-CHMICA induces bradycardia in cannabinoid receptor dependent and behavioral abnormalities in rats.
○ Hideyuki Maeda1, Erika Nagashima1, Kawahara Genri1, Ruri Kikura-Hanajiri3, Yukiko K. Hayashi2, Ken-ichi Yoshida1 (1Department of Forensic Medicine, Tokyo Medical University, 2Department of Pathophysiology, Tokyo Medical University, 3National Institute of Health Sciences)
11:20 –12:20  **Poster Session (Odd Numbers)**

12:30 –13:30  **Luncheon Seminars 1 and 2**  
Sponsor 1: Agilent Technologies  
Sponsor 2: AB SCIEX

13:40 –14:20  **JAFT General Meeting**

14:20 –15:20  **Educational Lecture**  
Chair: Ruri Kikura-Hanajiri (National Institute of Health Sciences)

Pharmacological evaluation of new psychoactive substance (NPS)  
Tsutomu Suzuki  
(Drug Dependence Laboratory, School of Pharmacy and Pharmaceutical Sciences Hoshi University)

15:25 –16:05  **Oral Session 3 < Drug Analysis and Metabolism >**  
Chair: Tooru Kamata (Forensic Science Laboratory, Osaka Prefectural Police)

O-07  
Metabolism of fentanyl and acetylfentanyl by chimeric mouse-derived human hepatocytes  
Tatsuyuki Kanamori, Tetsuya Y. Iwata, Hiroki Segawa, Tadashi Yamamuro, Kenji Kuwayama, Kenji Tsujikawa, Hiroyuki Inoue (National Research Institute of Police Science)

O-08  
Identification and quantification of predominant metabolites of synthetic cannabinoid MAB-CHMINACA in an authentic human urine specimen  
Koutaro Hasegawa 1, Kayoko Minakata 1, Kunio Gonmori 1, Hideki Nozawa 1, Itaru Yamagishi 1, Kanako Watanabe 1, Osamu Suzuki 2 (1Department of Legal Medicine, Hamamatsu University School of Medicine, 2Hamamatsu University School of Medicine)

O-09  
Studies on the metabolites of 5-PPDI in human urine  
Ayumu Ishii 1, Kosuke Kusakabe 1, Noriyuki Kato 1, Shinichi Sasaki 2, Kenji Tsujikawa 3, Takeshi Wada 4 (1Scientific Crime Laboratory, Kanagawa Prefectural Police Headquarters, 2Metropolitan Police Department Criminal Investigation Laboratory, 3National Research Institute of Police Science, 4Faculty of Pharmaceutical Sciences, Tokyo University of Science)

16:05 –17:10  **Symposium < Drug Analysis – Challenge of Young Researchers >**  
Organizer: Hiroyuki Inoue (National Research Institute of Police Science)  
Munehiro Katagi (Forensic Science Laboratory, Osaka Prefectural Police H.Q.)

O-10  
Differentiation of o-, m-, p-positional isomers of fluoromethcathinone by energy-resolved mass spectrometry  
Takaya Murakami 1, Yoshiaki Iwamuro 1, Reiko Ishimaru 1, Yuki Sakamoto 2, Natsuhiko Sugimura 3, Satoshi Chinaka 1 (1Forensic Science Laboratory, Ishikawa Prefectural Police Headquarters, 2Shimadzu Corporation, 3Materials Characterization Central Laboratory, Waseda University)

O-11  
Primary screening of methamphetamine by electrochemiluminescence combined with potential modulation technique  
Fumiki Takahashi, Ryo Shimizu, Saki Nitta (Faculty of Science, Shinshu University)

O-12  
Ultrafast screening method for medicinal toxicants in whole blood by PESI/MS/MS  
Kazuaki Hisatsune 1,2, Kei Zaitsu 1,3, Yumi Hayashi 1,2,4, Tasuku Murata 5, Tomomi Ohara 2, Maiko Kusano 2, Hiroshi Tanihata 2, Minemasa Hida 1, Hitoshi Tsuchihashi 2, Tetsuya Ishikawa 4, Akira Ishii 2
O-13
Analysis of new psychoactive substances in biological samples by LC-Q-TOFMS coupled with Ion Mobility Separation
○Maiko Kawamura, Ruri Kikura-Hanajiri, Takashi Hakamatsuka (National Institute of Health Sciences)

O-14
Contribution of human carboxylesterases to the abundance of 5F-ADB in tissue specimens
○Maiko Kusano1, Kei Zaitsu1, Tomomi Ohara1, Saki Noda1, Kazuaki Hisatsune2, Tomomi Asano3, Takashi Yoshimoto1, Jun’ichi Nakajima3, Jin Suzuki3, Takako Moriyasu3, Hitoshi Tsuchihashi1, Akira Ishii1 (1Department of Legal Medicine and Bioethics, Nagoya University, 2Forensic Science Laboratory, Aichi Prefectural Police Headquarters, 3Tokyo Metropolitan Institute of Public Health)

17:15 –17:45   Evening Seminar
                     Sponsor: Biotage Japan

18:20 – 20:20   Banquet (Hotel New Otani Inn Tokyo)

Friday, July 7th

9:10 – 9:30   Registration

9:30 – 10:10   Oral Session 4 < Analyses of Drugs in Biological Matrices >
                     Chair: Kei Zaitsu (Nagoya University Graduate School of Medicine)

O-15
Different localizations of drugs simultaneously administered in a single hair strand by micro-segmental analysis
○Kenji Kuwayama1, Maika Nariai2, Hajime Miyaguchi1, Yuko Iwata1, Tatsuyuki Kanamori1, Kenji Tsujikawa1, Tadashi Yamamuro1, Hiroki Segawa1, Hiroko Abe2, Hirotaro Iwase2,3, Hiroyuki Inoue1 (1National Research Institute of Police Science, 2Division of Forensic Medicine, Tokyo University, 3Division of Forensic Medicine, Chiba University)

O-16
Variation in drug-distribution among single hair specimens sampled at the same time
○Tooru Kamata1, Noriaki Shima1, Akihito Miki1, Hiroshi Nishioka1, Hiroe Kamata1, Keiko Sasaki2, Shuntaro Matsuta1, Hidenao Kakehashi1, Shihoko Nakano1, Misato Wada1, Takako Sato2, Hitoshi Tsuchihashi3, Munehiro Katagi1 (1Forensic Science Laboratory, Osaka Prefectural Police H.Q., 2Department of Legal Medicine, Osaka Medical College, 3Department of Legal Medicine and Bioethics, Nagoya University)

O-17
Enantiomeric analysis of zopiclone in human hair by one-tube micropulverized extraction and chiral liquid chromatography/high resolution mass spectrometry
○Hajime Miyaguchi, Kenji Kuwayama (National Research Institute of Police Science)

10:10 –10:50   Oral Session 5 < Drug Analysis and Distribution >
                     Chair: Keiko Kudo (Department of Legal Medicine, Kyusyu University)

O-18
Toxicological screening for prescribed drugs in nail using LC-MSMS
○Takeshi Saito1, Akira Namera2, Sadaki Inokuchi1 (1Department of Emergency and Critical Care
O-19
Changes in the stomach-to-blood methamphetamine ratios after its oral and subcutaneous administration
○Kei Yoshitome1,2, Fumio Moriya1, Satoru Miyashii1 (1Department of Hygiene, Kawasaki Medical School, 2Department of Nursing, Faculty of Health and Medicine, Kawasaki University of Medical Welfare, 3Department of Legal Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences)

O-20
Two cases where metabolites and tissue distribution analyses revealed the process from drug administration until death by asphyxiation
○Katsuhiro Okuda1, Yohsuke Makino2, Masaru Asari1, Hiroki Tanaka1, Hiromi Yamada1, Kie Horioka1, Hiroshi Shiono1, Keiko Shimizu1 (1Department of Legal Medicine, Asahikawa Medical University, 2Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo)

10:55 –16:40 Special Lecture
Chair: Rie Tanaka (National Institute of Health Sciences)

Current status of substance use and addiction in Japan: Epidemic and decline of new psychoactive substances
○Takuya Shimane1, Megumi Omagari1, Kunihiko Kitagaki2, Hisateru Tavhimori1, Masahiko Funada1, Kiyoshi Wada1 (1Department of Drug Dependence Research, National Institute of Mental Health, National Center of Neurology and Psychiatry, 2Tokyo University of Pharmacy and Life Sciences, 3Saitama Psychiatric Medical Center)

12:05 – 13:05 Luncheon Seminars 3 and 4
Sponsor 3: Nihon Waters
Sponsor 4: Shimadzu Corporation

13:15 – 14:15 Poster Session (Even Numbers)
14:15 – 14:25 Intermission / Poster removal time
14:25 – 15:00 Award Presentation
Chair: Ruri Kikura-Hanajiri (National Institute of Health Sciences)

Studies for the elucidation about chemical structure of synthetic cannabimimetics and their biological activity found in “dangerous drug products”
○Jun’ichi Nakajima, Recipient of 2017 Yoshimura Award (Tokyo Metropolitan Institute of Public Health)

15:00 –16:05 Oral Session 6 < Drug Analysis and Other Topics>
Chair: Takeshi Saito (Tokai University School of Medicine)
Akira Namera (Department of Forensic Medicine, Hiroshima University)

O-21
Identification and quantification of cannabinoids in Cannabis sativa L. by LC-Q-TOF-MS
○Rie Tanaka1, Sakumi Mizutani1, Maiko Kawamura1, Hiroyuki Fuchino2, Nobuo Kawahara2, Ruri Kikura-Hanajiri1, Takashi Hakamatsuka1 (1National Institute of Health Sciences, 2Research Center for Medicinal Plant Resources, National Institute of Biomedical Innovation, Health and Nutrition)

O-22
Analysis of new psychoactive substances (NPS) by gas chromatography/mass spectrometry (GC/MS) with photoionization (PI)
Mamoru Akutu¹, Ken-ichi Sugie¹, Koichi Saito² (¹Narcotics Control Department, Kanto-Shin'etsu Regional Bureau of Health and Welfare, Ministry of Health, Labour and Welfare, ²Department of Analytical Chemistry, Faculty of Pharmaceutical Sciences, Hoshi University)

O-23
Synthesis of mexedrone with novel finding
Kenji Tsujikawa, Yuko, T. Iwata, Hiroki Segawa, Tadashi Yamamuro, Kenji Kuwayama, Tatsuyuki Kanamori, Hiroyuki Inoue (National Research Institute of Police Science)

O-24
Chemical analysis of counterfeit hepatitis C drug Harboni found in Japan
Nahoko Uchiyama, Hiroyuki Kamakura, Sayaka Masada, Takashi Tsujimoto, Junko Hosoe, Takuro Maruyama, Yukihiro Goda, Takashi Hakamatsuka (National Institute of Health Sciences)

O-25
"Antibody breeding" for more sensitive immunoassays: a case study for anti- cotinine antibodies
Norihiro Kobayashi, Hiroyuki Oyama, Izumi Morita, Yuki Kiguchi (Kobe Pharmaceutical University)

16:05 –16:15  Closing remarks
Satoshi Numazawa, President of the next Meeting (Showa University School of Pharmacy)
**Poster Presentations**

Set-up time: Thursday, July 6\(^{th}\) 9:10 ~ 9:40

**Display time**
Thursday, July 6\(^{th}\) 9:40 ~ Friday, July 7\(^{th}\) 14:15

Poster Session
- Odd numbers: Thursday, July 6\(^{th}\) 11:20 ~ 12:20
- Even numbers: Friday, July 7\(^{th}\) 13:15 ~ 14:15

Removal time: Friday, July 7\(^{th}\) 14:15 ~ 14:25

**P-01**
Computation study on prediction of biological activity for regulation of illegal drugs
- Yosuke Demizu, Rie Tanaka, Takashi Hakamatsuka, Masaaki Kurihara, Ruri Kikura-Hanajiri
  (National Institute of Health Sciences)

**P-02**
Evaluation of carboxamide type synthetic cannabinoids with chiral center as the cannabinimimetic compounds
- Takahiro Doi, Takaomi Tagami, Akihiro Takeda, Akiko Asada, Yoshiyuki Sawabe
  (Osaka Prefectural Institute of Public Health)

**P-03**
Analysis of intracellular signaling induced by cannabinoid-related chemicals through the cannabinoid receptor family
- Zoi Kido\(^{1}\), Hidetoshi Kumagai\(^{1}\), Ryo Nakata\(^{1}\), Yoshihiro Motozawa\(^{1}\), Yuichi Ikeda\(^{1}\), Ruri Kikura-Hanajiri\(^{2}\), Issei Komuro\(^{1}\)
  \(^{1}\)Department of Cardiovascular Medicine, Graduate School of Medicine, The University of Tokyo,
  \(^{2}\)National Institute of Health Sciences

**P-04**
The excitatory mechanism of synthetic cannabinoids
- Kyoko Hataoka, Asuka Kaizaki-Mitsumoto, Satoshi Numazawa
  (Showa University School of Pharmacy)

**P-05**
Establishment of a new assay method for the pharmacological activities of the dissociative-analognes involved in law-evading drugs on NMDA-type glutamate receptors
- Yukari Shigemoto-Mogami\(^{1}\), Kaoru Sato\(^{1}\), Kazue Hoshikawa\(^{1}\), Hideo Shimizu\(^{1}\), Ruri Kikura-Hanajiri\(^{2}\),
  Takashi Hakamatsuka\(^{2}\), Yuko Sekino\(^{1,3}\)
  \(^{1}\)Division of Pharmacology, \(^{2}\)Division of Pharmacognocphy Phytochemistry, Narcotics, National Institute of Health Sciences,
  \(^{3}\)Division of Pharmaceutical Sciences, Tokyo University

**P-06**
The association with drug transporters for pharmacokinetics of stimulants
- Shoetsu Chiba, Toru Ikawa, Ayako Ro, Sanae Kanno, Yukino Oidi, Kazue Ichiba, Morihisa Sagi,
  Toshiji Mukai
  (Department of Legal Medicine, St. Marianna University School of Medicine)

**P-07**
Dysfunction of endothelial barrier by mitragynine
- Yoshifumi Morikawa\(^{1}\), Kyoko Kamase\(^{2}\), Michi Horinouchi\(^{2}\), Sasajima Yasuhide\(^{1}\), Suenami Koichi\(^{1}\),
  Kiyohito Sato\(^{1}\), Yuji Takekoshi\(^{1}\), Satoshi Endo\(^{2}\), Akira Ikari\(^{2}\), Toshiyuki Matsunaga\(^{2}\)
  \(^{1}\)Forensic Science Laboratory, Gifu Prefectural Police Headquarters, \(^{2}\)Laboratory of Biochemistry, Gifu Pharmaceutical University
P-08
Induction of neuronal cell apoptosis by α-pyrrolidinoctanophenone derivatives
(Toshiyuki Matsunaga, Yoshifumi Morikawa, Miki Tanigawa, Kyohei Kamata, Satoshi Endo, Yasuhide Sasajima, Koichi Suenami, Kiyohito Sato, Yuji Takekoshi, Akira Ikari
(1Laboratory of Biochemistry, Gifu Pharmaceutical University, 2Forensic Science Laboratory, Gifu Prefectural Police Headquarters)

P-09
Cytotoxicity and apoptotic pathway induced by nanosilver in human liver cells
(1Yuying Xue, Junjun Wang, Xiaojie Gao, Junko Fujihara, Haruo Takeshita
(1School of Public Health, Southeast University (Nanjing, China), 2Department of Legal Medicine, Shimane University Faculty of Medicine)

P-10
Toxicity evaluation of GaSb thin films
(Junko Fujihara, Naoki Nishimoto, Toshihiro Yasuda, Masanori Hasegawa, Haruo Takeshita
(1Department of Legal Medicine, Shimane University Faculty of Medicine, 2Shimane Institute for Industrial Technology, 3Department of Medical Genetics and Biochemistry, Faculty of Medical Sciences, University of Fukui, 4Criminal Investigation Laboratory, Shimane Prefectural Police Headquarters)

P-11
Effects of cationic surfactants on surface activity of pulmonary surfactant monolayers
(Sanae Kanno, Seishiro Hirano, Yasuo Aoki, Toshiji Mukai
(1Department of Legal Medicine, St. Marianna University School of Medicine, 2Department of Forensic Medicine, Nagoya City University Graduate School of Medical Sciences, 3Center for Health and Environmental Risk Research, National Institute for Environmental Studies)

P-12
Sensitive analysis of six synthetic cannabinoids in urine samples of human cadavers by LC-MS/MS
(Kayoko Minakata, Itaru Yamagishi, Hideki Nozawa, Kunio Gonmori, Osamu Suzuki, Kanako Watanabe
(1Department of Legal Medicine, Hamamatsu University School of Medicine)

P-13
Simultaneous determination of fosphenytoin and phenytoin in blood by LC-MS/MS
(1Takayoshi Suzuki, Tadashi Ogawa, Jun Ueyama, Masae Iwai, Fumio Kondo, Hiroshi Seno
(1Department of Legal Medicine, Aichi Medical University School of Medicine, 2Department of Pathophysiological Laboratory Sciences, Field of Radiological and Medical Laboratory Sciences, Nagoya)

P-14
Quantitative Analysis of THC and Related Cannabinoids in Multiple Matrices Using Solid Phase Extraction with UPLC/MS/MS for Clinical Research
(Mariko Matsumoto, Xin Zhang, Jonathan Danaceau, Kim Haynes, Erin Chambers
(1Japan Waters, 2Waters Corp.)

P-15
Evaluation of semi-targeted and non-targeted (‘discovery’) screening tools for toxicology.
(Michelle Wood, Masayo Yabu, Maki Terasaki, Thomas Rosano
(1Waters Corporation, 2Nihon Waters, 3Albany Medical Center Hospital and College, 4National Toxicology Center)

P-16
Development of a non-target drug screening method for blood sample using an in silico approach (2)
(Kanji Sakai, Yukiko Nakazono, Keiko Kudo, Toshikazu Minohata, Masatoshi Kaneshiro, Ichiro Hirano, Kazumasa Furuta, Yusuke Fujii, Yohsuke Makino, Noriaki Ikeda, Hirotaro Iwase
(1Waters Corporation, 2Waters Corp., 3National Institute for Environmental Studies, 4Toxicology Center)
P-17
Drug analysis in blood by thermal desorption and pyrolysis combined with DART-MS : TDP/DART-MS (2)

○ Hiroko Abe¹, Chikako Takei², Motoshi Sakakura³, Teruhisa Shiota³, Kayako Suga⁴, Daisuke Yajima¹, Hirotaro Iwase¹, ⁵

¹Department of Legal Medicine, Graduate School of Medicine, Chiba University, ²BioChromato, Inc., ³AMR, Inc., ⁴AB SCIEX, ⁵Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo

P-18
Chiral analysis of amphetamines and cathinones in urine

○ Akira Namera¹, Maho Kawamura², Akihiro Nakamoto², Yuji Fujita³, Takeshi Saito⁴, Hirokazu Murata¹, Masataka Nagao¹

¹Department of Forensic Medicine, Hiroshima University, ²Forensic Science Laboratory, Hiroshima Prefectural Police Headquarters, ³Department of Emergency Medicine, Iwate Medical University School of Medicine, ⁴Department of Emergency and Critical Care Medicine, Tokai University School of Medicine

P-19
Differentiation of regioisomeric fluoromethamphetamines in urine samples by GC-IR

○ Takashi Uchikawa, Mitsuhiro Ohtsuki, Atsushi Morita, Yusuke Haruta

(Forensic Science Laboratory, Saga Prefectural Police Headquarters)

P-20
Development of target and non-target screening for surfactant in plasma by LC-QTOF-MS

○ Kayako Suga (AB Sciex)

P-21
Reliable determination of cyanide, thiocyanate and azide in whole blood by GC-MS for the application to NAGINATA-drug screening

○ Keiko Kudo¹, Yosuke Usunoto¹, ², Naomi Sameshima¹, Miki Okumura¹, Akiko Tsuji¹, Noriaki Ikeda¹

¹Department of Forensic Pathology and Sciences, Graduate School of Medical Sciences, Kyushu University, ²Department of Legal Medicine, Yokohama City University Graduate School of Medicine

P-22
Drug distribution in teeth of rats treated with carbamazepine

○ Hiroaki Ichinose, Kaori Shintani, Hiroshi Ikegaya

(Department of Forensic Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine)

P-23
Regioisomeric separation of ring-substituted cathinones by LC-MS with a naphthylethyl column

○ Akihiro Takeda, Takaomi Tagami, Akiko Asada, Takahiro Doi, Masami Kawaguchi, Yuka Satsuki, Yoshiyuki Sawabe (Osaka Prefectural Institute of Public Health)

P-24
Isomeric discrimination of N-adamantyl carboxamide-type synthetic cannabinoids by GC-MS

○ Akiko Asada, Takahiro Doi, Takaomi Tagami, Akihiro Takeda, Yoshiyuki Sawabe

(Osaka Prefectural Institute of Public Health)

P-25
The application of supercritical fluid chromatograph to analyze illicit drugs
P-26  
Pattern analysis of metals in the ingredient of recreational drugs by ICP-MS  
○Ryosuke Sasaki, Noriaki Ishizaki, Toshinori Ando, Chitoshi Hino  
(Central Customs Laboratory, Ministry of Finance)

P-27  
Quantitation of THC and CBD in the CBD oil products seized in JAPAN by HPLC-PDA  
○Kei Ieji  
(Narcotics Control Department, Shikoku Regional Bureau of Health and Welfare, Ministry of Health, Labour and Welfare)

P-28  
Screening of Aconitum Alkaloids in Aconitum Using LC-QTOF  
○Masahiko Takino1, Makiko Hayashida2  
(1Agilent Technologies Japan, Ltd, 2Department of Legal Medicine, Nippon Medical School)

P-29  
Methamphetamine was detected in 21 autopsy cases from 2006 to 2016  
○Tatsunori Takayasu1, Hiroki Yamamoto2, Yuko Ishida2, Mizuehko Nosaka2, Mariko Kawaguchi2, Yumi Kuninaka2, Akihiko Kimura2, Toshikazu Kondo2  
(1Forensic Toxicology Unit, Department of Forensic Medicine and Pathology, Graduate School of Medical Science, Kanazawa University, 2Department of Forensic Medicine, Wakayama Medical University)

P-30  
The example ofaconitine poisoning by the monkshood tuberous root purchased from Internet-order  
○Makiko Hayashida1, Kyoko Uekusa1, Youkichi Ohno1, Hiroshi Ohara2  
(1Department of Legal Medicine, Nippon Medical School, 2Critical Medical Care Center, School of Medicine, Toho University)

P-31  
Analysis of gasoline and toluene using gas chromatography and gas chromatography-mass spectrometry in an autopsy case.  
○Tomohiro Matsumoto, Atsushi Akane, Masaki Hashiyada, Sumitaka Yoshimura, Masahiro Ohbayashi  
(Department of Legal Medicine, Kansai Medical University)

P-32  
Analysis of Seirogan® components using gas chromatography/mass spectrometry in forensic samples  
○Kyoko Maebashi1, Isora Tatamatsu1, Kana Sakamoto1, Sakurako Iwade1,2, Kimiharu Iwadate1  
(1Department of Forensic Medicine, The Jikei University School of Medicine, 2Kyorin University School of Health Sciences)

P-33  
Autopsy cases related to pesticides at Chiba University  
○Yumi Hoshioka1, Maika Nariai2, Hiroko Abe1, Daisuke Yajima1, Go Inokuchi1, Fumiko Chiba1,2, Sayaka Nagasawa1, Miyuki Miura1, Keisuke Okaba1, Hiroto Iwase1,2  
(1Department of Legal Medicine, Graduate School of Medicine, Chiba University, 2Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo)

P-34  
A study on decomposition process of the organophosphorus pesticide mixed in food (part 2)  
○Yoshihito Ohmori1,2, Masashi Hojo2, Yoshinori Nishiwaki3
P-35
Generation and in vitro affinity maturation of a single-chain Fv fragment against Δ⁹-tetrahydrocannabinol
○Hiroyuki Oyama¹, Izumi Morita¹, Kazuhisa Matsuda¹, Kengo Katagi¹, Norihiro Kobayashi¹, Hiroyuki Tanaka², Satoshi Morimoto²
(Kobe Pharmaceutical University¹, Graduate School of Pharmaceutical Sciences, Kyushu University²)

P-36
Generation and characterization of novel monoclonal antibodies against ketamine
○Izumi Morita, Hiroyuki Oyama, Yui Kanda, Mayumi Yasuo, Aya Ito, Norihiro Kobayashi
(Kobe Pharmaceutical University)