

GESELLSCHAFT FÜR TOXIKOLOGISCHE UND FORENSISCHE CHEMIE

Präsident Volker Auwärter, Freiburg im Breisgau

XXIV. GTFCh-Symposium

Datum und Ort / Date and location

03. April bis 05. April 2025 in Mosbach (Baden)

Tagungspräsidentin / Conference President

Daniela Wissenbach, Institut für Rechtsmedizin, Universitätsklinikum Jena, Jena

Wissenschaftliches Komitee / Scientific Committee

Hilke Andresen-Streichert, Institut für Rechtsmedizin, Uniklinik Köln, Köln

Katharina Rentsch, Labormedizin, Universitätsspital, Basel, Schweiz

Katja Schulz, Institut für Rechtsmedizin, Technische Universität Dresden, Dresden

Gisela Skopp, Forensisch Toxikologisches Centrum GmbH, München

Tagungszentrum / Conference Center

Alte Mälzerei, Alte Bergsteige 7, 74821 Mosbach (Baden), E-Mail: info@maelzerei.de

Vorprogramm/Pre-program

Mittwoch, 02. April 2025

20:00 Uhr **Mittwochsvortrag für die Mosbacher Öffentlichkeit (Alte Mälzerei) /
Wednesday lecture for the Mosbach public**

**Engelstropfete, Herbstzeitlose, Eibe und Zucchini: Pflanzliche Wirkstoffe als
Rauschmittel, Medikament und Gift / Angel's trumpet, autumn crocus, yew
and zucchini: Active plant substances as intoxicants, medicines and poisons**

Prof. Dr. Jörg Pietsch, Institut für Rechtsmedizin, Technische Universität Dresden,
Dresden

Donnerstag, 03. April 2025

12:00 bis **Young Scientists – Treffen / Meeting of young scientists**

13:30 Uhr Treffen der Doktorandinnen/Doktoranden und jungen Wissenschaftlerinnen/
Wissenschaftler in der Alten Mälzerei, Hopfenkeller

Thema: Fachtitel der GTFCh

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Satellitensymposium / Satellite symposium

TDM von Psychopharmaka - wichtiges klinisches Tool für die forensische Toxikologie? / *TDM of psychotropic drugs - an important clinical tool for forensic toxicology?*

- 14:00 Uhr** **Eröffnung und Begrüßung / *Opening and welcome***
- 14:05 Uhr** **SV 01 - SV 03 Satellitensymposium / *Satellite symposium***
- SV 01 **Therapeutisches Drug Monitoring: Nutzen, Grenzen und Möglichkeiten**
Prof. emer. Dr. Christoph Hiemke, Klinik für Psychiatrie und Psychotherapie,
Universitätsmedizin der Johannes Gutenberg-Universität Mainz, Mainz
- SV 02 **Consensus Guideline for Therapeutic Drug Monitoring in
Neuropsychopharmacology (AGNP): was gibt es Neues im Update 2025?**
Dr. Xenia Marlene Hart, Zentralinstitut für Seelische Gesundheit, Mannheim
- SV 03 **Möglichkeiten und Grenzen von TDM im klinischen Alltag**
Prof. Dr. Stefan Unterecker, Klinik für Psychiatrie und Psychotherapie, Sozialstiftung
Bamberg, Klinikum Bamberg, Bamberg
- 15:45 Uhr** **Kaffeepause / *Coffee break***
- 16:15 Uhr** **SV 04 - SV 06 Satellitensymposium / *Satellite symposium***
- SV 04 **Einblicke in den Alltag eines klinisch orientierten TDM-Labors**
PD Dr. Christoph Seger, Labordiagnostic St. Gallen West AG, St. Gallen, Schweiz
- SV 05 **Klinisch oder forensisch? – Unterschiede und Gemeinsamkeiten in der Analytik**
PD Dr. Hilke Andresen-Streichert, Institut für Rechtsmedizin, Uniklinik Köln, Köln
- SV 06 **Nutzen der klinischen Leitlinien und Interpretation der bestimmten
Psychopharmaka-Konzentrationen im forensischen Alltag**
PD Dr. Frank T. Peters, Institut für Rechtsmedizin, Universitätsklinikum Jena, Jena
- 18:15 Uhr** **Sitzungsende des Satellitensymposiums / *End of satellite symposium***

Die GTFCh dankt

**dem Bund gegen Alkohol und Drogen im Straßenverkehr (BADS) und Thermo Fisher
für die großzügige Unterstützung des Satellitensymposiums.**

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XXIV. GTFCH-Symposium

Freitag, 04. April 2025

09:00 Uhr Eröffnung des Symposiums und Grußworte / Opening and welcome

09:10 Uhr Vorträge Session 1: Fallberichte über toxikologisch relevante Substanzen / *Oral presentations session 1: case reports about toxicological relevant substances*

Vorsitz/ Scientific chair: Laura Huppertz¹, Jörg Röhrich²

¹ Institute of Forensic Medicine, Forensic Toxicology, Medical Center – University of Freiburg, Freiburg

² Department of Forensic Toxicology, Institute of Legal Medicine, Universitätsmedizin Mainz, Mainz

V01 **The importance of large case cohorts to investigate time-dependent postmortem redistribution of various drugs (of abuse): A comparison study**

Lana Brockbals¹, Yannick Wartmann¹, Dylan Mantinieks^{2,3}, Sandra N. Pöttsch¹, Linda L. Glowacki³, Dimitri Gerostamoulos^{2,3}, Thomas Kraemer¹, Andrea E. Steuer¹

¹Department of Forensic Pharmacology and Toxicology, Zurich Institute of Forensic Medicine, Zurich (Switzerland)

²Department of Forensic Medicine, Monash University, Melbourne (Australia) ³Victorian Institute of Forensic Medicine, Melbourne (Australia)

V02 **The ring must be destroyed - Mass-spectrometric identification of two unusually formed main metabolites of the novel synthetic opioid dipyanone involved in two fatal cases**

Johannes Kutzler^{1,2,†}, Diletta Berardinelli^{1,3,†}, Omayema Taoussi³, Simona Zaami⁴, Simona Pichini⁵, Francesco P. Busardò³, Volker Auwärter¹, Jeremy Carlier³

¹Institute of Forensic Medicine, Forensic Toxicology, Medical Center - University of Freiburg, Faculty of Medicine, Freiburg

²Hermann Staudinger Graduate School, University of Freiburg, Freiburg

³Marche Polytechnic University, Legal Medicine, Forensic Toxicology, Ancona (Italy)

⁴Sapienza University, Department of Forensic Sciences, Rome (Italy)

⁵National Institute of Health, National Centre on Addiction and Doping, Rome (Italy)

[†]Both authors contributed equally to this research project

V03 **A case of fatal intoxication with the new synthetic opioid N-pyrrolidino protonitazene (protonitazepyne)**

Sophia Wrbas¹, Tom Sundermann², Laura M. Huppertz¹, Volker Auwärter¹

¹Institute of Forensic Medicine, Forensic Toxicology, Medical Center – University of Freiburg, Freiburg

²Institute of Legal and Traffic Medicine, Forensic Toxicology, University Hospital, Heidelberg

V04 Metabolic characterization and toxicological analysis of *N*-ethylpentedrone: *In vitro* and human *in vivo* data

Tilman F. Arnst, Juel Maalouli Schaar, Selina Hemmer, Lea Wagmann, Markus R. Meyer

Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

V05 Deadly confusion: A fatal case of ADB-BUTINACA mislabeled as 'Monkey Dust' - The dark side of novel psychoactive substances

Annette Zschiesche^{1,2}, Nadine Theofel³, Stefan Braukmüller⁴, Edwin Ehrlich³, Martin Jasyk³, Maximilian Methling³, Michael Tsokos³, Stefan Scholtis³, Laura M. Huppertz¹, Volker Auwärter¹

¹Institute of Forensic Medicine, Medical Center, University of Freiburg, Freiburg

²Hermann Staudinger Graduate School, University of Freiburg, Freiburg

³Department of Forensic Toxicology, Governmental Institute of Legal Medicine and Forensic Sciences, Berlin

⁴Institute of Organic Chemistry, University of Freiburg, Freiburg

V06 Case report: A fatal intoxication involving the novel benzodiazepine pro-drug clonazafone and fluoro-etonitazene

Jonas Malzacher¹, Benedikt Pulver², Lana Brockbals¹, Thomas Kraemer¹, Andrea E. Steuer¹, Sandra N. Poetzsch¹

¹Institut für Rechtsmedizin, Universität Zürich, Zürich (Schweiz)

²Institut für Rechtsmedizin, Universitätsklinikum Freiburg, Freiburg

V07 Drug-induced psychosis associated with Kratom? – A case report

Josephine Krauskopf, Alexander Paulke, Stefan W. Toennes

Forensische Toxikologie, Institut für Rechtsmedizin, Universitätsmedizin Frankfurt, Frankfurt am Main

V08 Prohibited yet persistent: A clinical toxicology analysis of two pesticide poisoning cases

Juel Maalouli Schaar, Lea Wagmann, and Markus R. Meyer

Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

V09 Suicide with sodium nitrite? Detectability of nitrite and nitrate in postmortem blood

Danny Schmitz¹, Martin Juebner¹, Stefan Scholtis², Stefanie Iwersen-Bergmann³, Julia Krüger⁴, Miriam Klima⁵, Hilke Andresen-Streichert¹, **Lina Lucuta**¹

¹Institut für Rechtsmedizin, Uniklinik Köln, Köln

²Landesinstitut für gerichtliche und soziale Medizin, Berlin

³Institut für Rechtsmedizin, Universitätsklinikum Hamburg-Eppendorf, Hamburg

⁴Institut für Rechtsmedizin, Ludwig-Maximilians-Universität München, München

⁵Brandenburgisches Landesinstitut für Rechtsmedizin, Potsdam

11:00 Uhr Kaffeepause / *Coffee break*

11:30 Uhr Vorträge Session 2: Alternative Matrices für die toxikologische Analytik / *Oral presentations session 2: Toxicological analysis in alternative matrices*

Vorsitz/ Scientific chair: Alexander Müller¹, Andrea Steuer²

¹ Institut für Rechtsmedizin, Universitätsklinikum Hamburg-Eppendorf, Hamburg

² Institut für Rechtsmedizin, Universität Zürich, Zürich (Schweiz)

V10 Orbitrap-based untargeted screening or triple quadrupole-based targeted screening for drug testing in oral fluid?

Aline C. Vollmer¹, Lea Wagmann¹, Christoph Sauer², Sergej Bleicher², Markus R. Meyer¹

¹Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

²Synlab MVZ Weiden GmbH, Weiden

V11 Utilizing Glu-C digestion for sensitive LC-MS/MS analysis of insulin variants and C-peptide in postmortem vitreous humor and cerebrospinal fluid

Hans Brabec, Jörg Röhrich, Tanja Germerott, Cora Wunder

Department of Forensic Toxicology, Institute of Legal Medicine, Universitätsmedizin Mainz, Mainz

V12 Evaluation of the oxidative melanin markers PTCA and PTeCA in hair: LC-MS/MS method development and application in authentic hair samples

Christoph Leu¹, Thomas Kraemer², Tina M. Binz¹

¹Center for Forensic Hair Analysis, Zurich Institute of Forensic Medicine, University of Zurich, Zurich (Switzerland)

²Forensic Pharmacology and Toxicology, Zurich Institute of Forensic Medicine, University of Zurich, Zurich (Switzerland)

V13 Evaluation of a new automated assay for indirect identification of synthetic urine

Laura Franke¹, Christian Fuczik², Dirk K. Wissenbach¹

¹Institute for Forensic Medicine, University Hospital Jena, Jena

²Drogentest Wien, Vienna (Austria)

V14 Detection of phosphatidylethanol after ethanol intake with targeted blood alcohol concentrations of 0.6 g/kg and 0.75 g/kg

Matthias Bantle¹, Franziska Spleis^{2,3}, Dominik Schuldis^{2,3}, Lorenz Bell^{2,3}, Annette Thierauf-Emberger^{2,3}, Wolfgang Weinmann¹

¹Forensische Toxikologie und Chemie, Institut für Rechtsmedizin der Universität Bern, Bern (Schweiz)

²Forensische Toxikologie, Institut für Rechtsmedizin, Universitätsklinikum Freiburg, Freiburg

³Institut für Rechtsmedizin, Universitätsklinikum Freiburg, Freiburg

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- V15 Calibration transferability between dried blood spot sampling devices for accurate quantification of phosphatidylethanol**
- Jeremai Hose¹**, Martin Juebner¹, Mario Thevis², Hilke Andresen-Streichert¹
- ¹Institute of Legal Medicine, Medical Faculty, University of Cologne, Cologne
²Institute of Biochemistry, German Sport University Cologne, Cologne
- 12:40 Uhr Mittagspause / Lunch break**
- 13:20 Uhr Posterausstellung (Präsentation aktueller toxikologischer Themen) / Poster session (presentation on current toxicological topics)**
- P01 *In vitro* neurotransmitter reuptake inhibition and forensic case series in Sweden of the synthetic cathinones 2-, 3-, and 4-Me-alpha-PiHP**
- Henrik Green^{1,2}, Maria Wikström², Mattias Persson^{1,2}, **Manuela Monti¹**
- ¹Division of Clinical Chemistry and Pharmacology, Linköping University, Linköping (Sweden)
²National Board of Forensic Medicine (Rättsmedicinalverket), Linköping (Sweden)
- P02 Cross-reactivity study on old and new benzodiazepines in the CEDIA™ benzodiazepine assay**
- Josephin Lindner¹, Jasna Neumann¹, Markus Bertges², Nicky Günther¹, **Michael Böttcher¹**
- ¹MVZ Medizinische Labore Dessau Kassel GmbH, Dessau-Roßlau
²Labor Mönchengladbach MVZ Dr. Stein & Kollegen GbR, Mönchengladbach
- P03 Qualitative and semi-quantitative evaluation of an untargeted, LC- HRMS screening method in 500 authentic, whole-blood forensic toxicology routine cases**
- Annina Bovens**, Lana Brockbals, Thomas Kraemer, Andrea E. Steuer
- Department of Forensic Pharmacology and Toxicology, Zurich Institute of Forensic Medicine, University of Zurich, Zurich (Switzerland)
- P04 Non-invasive blood alcohol monitoring with NIR spectroscopy**
- Tom R. Sundermann¹**, Lisa Fiege¹, Tobias Baumgartner², Felix Schmidt²
- ¹Forensic Toxicology, Institute for Legal and Traffic Medicine, University of Heidelberg, Heidelberg
²trinamiX GmbH, Ludwigshafen
- P05 LSD in urine: New potential metabolite and biomarkers**
- Sina Favrod¹**, Friederike Holze², Matthias E. Liechti², Thomas Kraemer¹, Andrea E. Steuer¹
- ¹Department of Forensic Pharmacology and Toxicology, Zurich Institute of Forensic Medicine, Zurich (Switzerland)
²Division of Clinical Pharmacology and Toxicology, Department of Biomedicine and Department of Clinical Research, Basel (Switzerland)

- P06** **The mystery of post-mortem gamma-hydroxybutyrate formation - method development and validation for the detection of endogenous GHB and its metabolites**
- Jana Kietzerow¹, Mario Thevis², Hilke Andresen-Streichert¹
- ¹Department of Forensic Toxicology, Institute of Legal Medicine, University Hospital Cologne, Cologne
²Center for Preventive Doping Research/Institute of Biochemistry, Sport University Cologne, Cologne
- P07** **Detection of synthetic cannabinoids in dental hard tissue after single exposure: a promising approach for postmortem toxicology**
- Sabine Peisert^{1, †}, Annette Zschiesche^{1, †}, Nadine Schaefer², Nadja Walle², Adrian A. Doerr², Markus J. Altenburger³, Merja A. Neukamm¹
- ¹Forensic Toxicology, Institute of Forensic Medicine, Medical Center, University of Freiburg, Freiburg
²Institute of Legal Medicine, Saarland University, Homburg (Saar)
³Department of Operative Dentistry and Periodontology, Medical Center, University of Freiburg, Freiburg
[†]These authors contributed equally to this work.
- P08** **Detection of exogenous substances in postmortem bones**
- Sarah Schröder, Jörg Röhrich, Tanja Germerott, Cora Wunder
- Department of Forensic Toxicology, Institute of Legal Medicine, Universitätsmedizin Mainz, Mainz
- P09** **The silent killer: Forensic detection of butane inhalation in a decomposed body**
- Nadine Theofel, Anna Müller, Martin Jasyk, Maximilian Methling, Michael Tsokos, Stefan Scholtis
- Governmental Institute of Legal Medicine and Forensic Sciences, Berlin
- P10** **Headspace analyses for gaseous molecules in Western Switzerland**
- Frank Sporkert, Joëlle Bächler, Marc P. Augsburger
- Forensic Toxicology and Chemistry Unit, University Centre of Legal Medicine Lausanne-Geneva, Lausanne (Switzerland)
- P11** **THC concentrations in blood samples before and after legalisation of cannabis in Germany**
- Thomas Franz, Gisela Skopp, Frank Mußhoff
- Forensisch Toxikologisches Centrum GmbH, München
- P12** **Driving under hexahydrocannabinol – Results of the examination of blood samples in Lower Saxony from 2021 to 2024**
- Lisa Marquenie¹, Jörg Teske¹, Marek Dziadosz¹, Wolfgang Rosenberger¹, Michael Klintschar¹, Marcel Grapp²
- ¹Institute of Legal Medicine, Hannover Medical School (MHH), Hannover
²Forensic Toxicological Laboratory, University Medical Center, Georg-August-University Göttingen, Göttingen

- P13** **EMCDDA framework for naming cathinones**
- Svenja Fischmann¹, Benedikt Pulver², Rachel Christie³, Ana Gallegos³**
- ¹Landeskriminalamt Schleswig-Holstein, Kriminaltechnisches Institut, Kiel
-
- P14** **Stabilities of selected amphetamine synthesis markers from clandestinely disposed production waste in soil environment**
- Maximilian Greif^{1,2}, Eva Maria Wölfel², Stephan Wagner², Michael Pütz¹**
- ¹Bundeskriminalamt, Kriminaltechnisches Institut, Wiesbaden
²Hochschule Fresenius, Institute for Analytical Research, Idstein
-
- P15** **Unveiling Berlin’s drug market: The surging dominance and complexity of cathinones**
- Martin Jasyk, Nadine Theofel, Maximilian Methling, Michael Tsokos, Stefan Scholtis**
- Governmental Institute of Legal Medicine and Forensic Sciences, Berlin
-
- P16** **Drugchecking Berlin – Highlights, lowlights and trends from 2900 samples**
- Martin Jasyk, Nadine Theofel, Tessa Bauersfeld, Maximilian Methling, Michael Tsokos, Stefan Scholtis**
- Governmental Institute of Legal Medicine and Forensic Sciences, Berlin
-
- P17** **The EU project “NETZWERK ADEBAR“**
- Sebastian Hamer¹, Folker Westphal¹, Michael Pütz²**
- ¹Landeskriminalamt Schleswig-Holstein, Sachgebiet 432, Kiel
²Bundeskriminalamt, KT 45, Wiesbaden
-
- P18** **Cannabinoid analysis using GC-FID, HPLC-DAD/-QQQ/-Orbitrap: Overcoming analytical challenges with different analysis techniques**
- Anna Stoll¹, Joëlle Werren¹, Marc Andreas Roder¹, Manuela Monti^{1,2}, Götz Schlotterbeck¹, Urs Duthaler¹**
- ¹Forensic Chemistry and Toxicology, Institute of Forensic Medicine, University Basel, Basel (Switzerland)
²Division of Clinical Chemistry and Pharmacology, Linköping University, Linköping (Sweden)
-
- P19** **Validation of method for quantification of antimycotics utilizing DART-MS**
- Zahuindanda Aventura¹, Lukas Brunner², Anna Bui², Saulé Nickuté², Gernot Wolfram²**
- ¹Bruker Daltonics GmbH & Co. KG, Bremen
²RECIPE Chemicals + Instruments GmbH

14:00 Uhr Vorträge Session 3: Neue Trend bei synthetischen Cannabinoiden / Oral presentations session 3: Novel trends in synthetic cannabinoid use

Vorsitz/ Scientific chair: Anna Stoll, Folker Westphal²

¹Forensic Toxicology and Chemistry, Institute for Forensic Medicine, University of Bern, Bern (Switzerland)

²Landeskriminalamt Schleswig-Holstein, Sachgebiet 432, Kiel

V16 Identification of recently emerging (semi-)synthetic cannabinoids and related products sold in shops and vending machines

Sebastian Hamer¹, Folker Westphal¹, Michael Pütz²

¹Landeskriminalamt Schleswig-Holstein, Sachgebiet 432, Kiel

²Bundeskriminalamt, KT 45, Wiesbaden

V17 Shining light on “semi-finished” (“DIY”) kits for synthetic cannabinoids: Investigation of a Swiss clandestine production site, seized samples from casework and prisons, and the CB₁ activity of the precursors and final products

Manuela Monti¹, Tobias Rautio², Markus Schläpfer³, Marie Deventer⁴, Alex Krotulski⁵, Victoria Marland⁶, Robert Reid⁶, Niamh Nic Daeid⁶, Johannes Tveit⁷, Craig McKenzie⁷, Christophe Stove⁴, Henrik Green^{1,8}, Caitlyn Norman¹

¹Division of Clinical Chemistry and Pharmacology, Linköping University, Linköping (Sweden)

²Department of Physics, Chemistry and Biology, Linköping University, Linköping (Sweden)

³Forensisches Institut Zürich (FOR), Zürich (Schweiz)

⁴Laboratory of Toxicology, Department of Bioanalysis, Ghent University, Ghent (Belgium)

⁵Center for Forensic Science Research and Education, Fredric Rieders Family Foundation, Horsham (PA, USA)

⁶Leverhulme Research Centre for Forensic Science, University of Dundee, Dundee (United Kingdom)

⁷Chiron AS, Trondheim (Norway)

⁸National Board of Forensic Medicine, Linköping (Sweden)

V 18 Synthetic cannabinoids and their transesterification products in e-liquids – An investigation of their formation and kinetics

Martin Scheu^{1,2}, Leif Lübke³, Volker Auwärter¹

¹Institute of Forensic Medicine, Medical Center, University of Freiburg, Freiburg

²Hermann Staudinger Graduate School, Faculty of Chemistry and Pharmacy, University of Freiburg, Freiburg

³Hochschule Bonn-Rhein-Sieg, University of Applied Sciences, Rheinbach

- V19** **Chemical analysis of recreational products containing semi-synthetic cannabinoids in Germany**
- Benedikt Pulver**¹, Benjamin Schmitz¹, Michael Evans-Brown², Simon D. Brandt², Volker Auwärter¹
- ¹Forensische Toxikologie, Institut für Rechtsmedizin, Universitätsklinikum Freiburg, Freiburg
²European Union Drugs Agency, Lisbon (Portugal)
³School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Liverpool (United Kingdom)
- V20** **Development of a novel risk score reflecting the relative harm potential of synthetic cannabinoids (SCRAs), based on prevalence estimates, well documented intoxication cases and basic pharmacological data**
- Katharina E. Grafinger**¹, Michaela J. Sommer², Maren Hermans-Clausen³, Volker Auwärter²
- ¹Forensic Toxicology and Chemistry, Institute for Forensic Medicine, University of Bern, Bern (Switzerland)
² Forensic Toxicology, Institute for Forensic Medicine, Universitätsklinikum Freiburg, Freiburg
³Poisoning Information Center, Universitätsklinikum Freiburg, Freiburg
- V21** **Analysis of nitrous oxide in blood by HS-GC/MS**
- Alexander Müller**, Hilke Jungen, Anne Szewczyk, Julian Bickel, Stefanie Iwersen-Bergmann
- Institut für Rechtsmedizin, Universitätsklinikum Hamburg-Eppendorf, Hamburg
- 15:45 Uhr** **Mitgliederversammlung / *Business Meeting*; Ende / end ca. 17:30 Uhr**
- 19:00 Uhr** **Festabend mit Verleihung des Jean-Servais-Stas-Preises und des Förderpreises für junge Wissenschaftler / Congress ceremony and dinner – Presentation of the 2025 laureate of the Jean-Servais-Stas award and of the winner of the GTFCh Young-Scientists award**
- Festvortrag / *Lecture***
- Wenn Staaten töten – wie Geheimdienste mit Gift morden**
Dr. W. Martz

Samstag, 05. April 2025

09:00 Uhr **Vorträge Session 4: erste Erfahrungen mit der Cannabis Legalisierung und freie Themen / *Oral presentations session 4: First impacts of the cannabis legalization and free topics***

Vorsitz/ Scientific chair: Gertrud Rochholz¹, Frank Musshoff²

¹ Institute of Legal Medicine, University Hospital of Schleswig-Holstein, Kiel

² Forensisch Toxikologisches Centrum GmbH, München

V22 **Individual application patterns of Cannabis-based medicines in Germany – Descriptive evaluation of a patient survey and discussion from a forensic perspective**

Marica Hundertmark¹, André Ihlenfeld², Assaf Landschaft³, Jörg Röhrich¹, Tanja Germerott¹, Cora Wunder¹

¹Institut für Rechtsmedizin, Universitätsmedizin Mainz, Mainz

²DRK-Kliniken Berlin-Westend, Berlin

³Fraunhofer-Institut für Intelligente Analyse- und Informationssysteme (IAIS), Sankt Augustin

V23 **The influence of cannabis legalization: A retrospective study of THC-related traffic accidents**

Josefine Herzog, Gisela Skopp, Frank Musshoff

Forensisch Toxikologisches Centrum GmbH, München

V24 **Cannabis legalisation “à la Luxembourgeoise”: First lessons after our one-year experience**

Stefania Oliverio, Serge Schneider

Département Médecine Légale, Laboratoire National de Santé, Dudelange, Luxembourg

V25 **Reliability of roadside pre-tests for the new Δ^9 -tetrahydrocannabinol serum cut-off in Germany**

Anne Szewczyk¹, Karina Böttcher², Alexander Müller¹, Hilke Jungen¹, Julian Bickel¹, Stefanie Iwersen-Bergmann¹

¹Forensische Toxikologie, Institut für Rechtsmedizin, Universitätsklinikum Hamburg-Eppendorf, Hamburg

²Polizei Hamburg, Stab Verkehrsdirektion, Hamburg

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- V 26** **Sweat analysis of medical opioids and metabolites in critically ill pediatric patients**
- Max Polke**¹, Florian Zapf², Tanja Restin³, Julia T. Scherer¹, Thomas Kraemer⁴, Clarissa D. Voegel^{1*}, Tina M. Binz^{1*}
- ¹Center for Forensic Hair Analysis, Zurich Institute of Forensic Medicine, University of Zurich, Zurich (Switzerland)
²Department for Pediatric Intensive Care Medicine and Neonatology, University Children's Hospital Zurich, Zurich (Switzerland)
³Institute of Physiology, University of Zurich, Zurich (Switzerland)
⁴Forensic Pharmacology and Toxicology, Zurich Institute of Forensic Medicine, University of Zurich, Zurich (Switzerland)
*Shared authorship
- V27** **Frequency of positive drug findings in pregabalin positive hair samples**
- Christopher Wiedfeld**, Gisela Skopp, Frank Mußhoff
- Forensisch Toxikologisches Centrum GmbH, München
- V28** **Frequency of new psychoactive substances (NPS) in hair samples analyzed in criminal proceedings**
- Helena Fels**, Gerlinde Schwarz, Gisela Skopp, Frank Musshoff
- Forensisch Toxikologisches Centrum GmbH, München
- V29** **Metabolic fate of the MDMA prodrug MDMA-tryptophan – A multi-model approach**
- Kai S. Wellenberg**¹, Selina Hemmer¹, Philip Schippers^{1,3}, Lea Wagmann¹, Matthias Grill², Rolf Müller³, Markus R. Meyer¹
- ¹Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)
²MiHKAL GmbH, Allschwil (Switzerland)
³Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarland University, Saarbrücken
- 10:35 Uhr** **Kaffeepause / *Coffee break***

11:05 Uhr Vorträge Session 5: Drogen - Metabolismus und Profiling, Fallberichte / Oral presentations session 5: Drug metabolism and profiling, case reports

Vorsitz/ Scientific chair: Lea Wagmann¹, Cora Wunder²

¹ Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

² Department of Forensic Toxicology, Institute of Legal Medicine, Universitätsmedizin Mainz, Mainz

V30 Hepatic metabolism of MDMA analogues: Toward safer therapeutic alternatives?

Selina Hemmer¹, Lea Wagmann¹, Matthias Grill², Markus R. Meyer¹

¹Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

²MiHKAL GmbH, Allschwil (Switzerland)

V31 Metabolic fate of methoxy- and methylthiocathinones - Studies by means of HepaRG cells and hyphenated mass spectrometry

Matthias D. Kroesen¹, Tanja M. Gampfer¹, Lea Wagmann¹, Pierce V. Kavanagh², Simon D. Brandt³, Markus R. Meyer¹

¹Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)

²Department of Pharmacology and Therapeutics, School of Medicine, Trinity Centre for Health Sciences, St. James Hospital, Dublin (Ireland)

³School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Liverpool (United Kingdom)

V32 Characterization of synthesis intermediates and side-products in Δ^9 -tetrahydrocannabinol and hexahydrocannabinol isolated from one product each

Willi Schirmer^{1,2}, Ilche Gjuroski¹, Martina Vermathen², Julien Furrer², Stefan Schürch², Wolfgang Weinmann¹

¹Forensic Toxicology and Chemistry, Institute of Forensic Medicine, University of Bern (Switzerland)

²Department of Chemistry, Biochemistry and Pharmaceutical Sciences, University of Bern (Switzerland)

V33 Drug profiling of synthetic cocaine derivatives: Unveiling the risks and impurity profiles of research chemicals

Max Dautert, Tom R. Sundermann

Institute of Forensic and Traffic Medicine, University Hospital Heidelberg, Heidelberg

V34 Analytical challenges and pitfalls in the identification of rilmazafone

Sebastian Hamer¹, Folker Westphal¹, Michael Pütz²

¹Landeskriminalamt Schleswig-Holstein, Sachgebiet 432, Kiel

²Bundeskriminalamt, KT 45, Wiesbaden

- V35 Clinical toxicological follow-up analysis of a suicide attempt using amisulpride**
- Lea Wagmann¹**, Michael Kunz^{2*}, Michael Schuster³, Felix Götzinger^{2*}, Andreas Link², Felix Mahfoud^{2*}, Markus R. Meyer¹
- ¹Department of Experimental and Clinical Toxicology and Pharmacology, Saarland University, Homburg (Saar)
²Department of Internal Medicine III, Cardiology, Angiology and Intensive Care Medicine, University Hospital Saarland, Saarland University, Homburg (Saar)
³Department of Internal Medicine II, Gastroenterology, University Hospital Saarland, Saarland University, Homburg (Saar)
* Present address: Department of Cardiology, University Heart Center, University Hospital Basel, Basel (Switzerland)
- V36 2-Methyl-2-butanol – A new substance of abuse?**
- Martin Dokter**, Paul Hagen, Britta Bockholdt, Giovanni Talarico
Universitätsmedizin Greifswald, Institut für Rechtsmedizin, Greifswald
- V37 „Off-label use“ of the veterinary drug xylazine**
- Frederike Nordmeier**, Saskia Jung, Gertrud Rochholz, Johanna Preuß-Wössner
Institute of Legal Medicine, University Hospital of Schleswig-Holstein, Kiel
- V38 A rare case of aconite poisoning via injection: Comparison of body fluid and organ tissue concentrations with oral ingestion**
- Lisa S. Fiege**, Tom R. Sundermann
Institut für Rechtsmedizin und Verkehrsmedizin, Universitätsklinikum Heidelberg, Heidelberg
- 12:45 Uhr Schlusswort zum Symposium / *Closing words***
- 13:00 Uhr Tagungsende / *End of the symposium***

Für die Unterstützung des Hauptsymposiums dankt die GTFCh

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Es wird gebeten, die Übernachtung über die üblichen Portale zu buchen.

We kindly request to carry out a hotel booking via the usual portals.

Fakultative kulturelle Angebote / Optional cultural activities

Donnerstag, 03. April 2025 / Thursday, 3rd April 2025

19:15 Uhr Konzert mit Jan Schäper (Orgel) und Wolfgang Weinmann (Trompete), Stiftskirche am Rathaus / *Organ and trumpet night, Stiftskirche at the town hall*

20:00 Uhr Bürgermeisterempfang / *Mayor's reception*

Die GTFCh dankt der Stiftsgemeinde und der Stadt Mosbach für die Unterstützung dieser kulturellen Angebote / *The mayor's reception and the concert are free and are financed by the town of Mosbach*

Freitag, 04. April 2025 / Friday, 4th April 2025

23:00 Uhr After Dinner Party