

PROGRAMME NCFM/NAFT conference Stockholm, June 10-13, 2015

----- WEDNESDAY, JUNE 10 -----

- 13:00-15:00 **Workshop 1: The challenge of new psychoactive substances.**
Paul Dargan, Guy's and St Thomas' NHS Foundation Trust, London, UK
Axel Grønkjær, SKAT, Customs Drug Enforcement, Denmark
- 13:00-15:00 **Workshop 2: Time of death estimation.**
Burkhard Madea, Institut für Rechtsmedizin, Bonn, Germany
Stefan Potente, Institut für Rechtsmedizin, Frankfurt, Germany
- COFFEE BREAK**
- 15:30-17:30 **Workshop 3: Reporting evidence.**
Anders Nordgaard, Swedish National Crime Lab.
Johanna Loisel, Forensic Medicine, Umeå, Sweden
- 15:30-17:30 **Workshop 4: Molecular autopsy.**
Antti Sajantila, Forensic Medicine, University of Helsinki, Finland
Siri Opdal Hauge, Institute of Public Health, Oslo, Norway
- 15:30-17:30 **Workshop 5: Sample preparation strategies.**
Brian Schou Rasmussen, Retsmedicinsk Institut, Denmark
Anja Valen, Folkehelseinstituttet, Norway
- 15:30-17:30 **Workshop 6: Screening and confirmation strategies.**
Martin Josefsson, National Board of Forensic Medicine, Linköping, Sweden
Anna Pelander, Department of Forensic Medicine, University of Helsinki, Finland
- 15:30-17:30 **Workshop 7: Alternative matrices in forensic toxicology.**
Robert Kronstrand, National Board of Forensic Medicine, Linköping, Sweden,
Elisabeth Oiestad Leere, Institute of Public Health, Division of Forensic Sciences, Norway
- 18:30-20:30 Get together Welcome reception

----- **THURSDAY, JUNE 11** -----

- 08:40-08:45 Welcome greetings
- 08:45-09:00 Swedish Minister for Justice and Migration Morgan Johansson
- 09:00-09:15 Introductory notes
- 09:15-09:45 Music: Linda Lampenius, violin & Carina E. Nilsson, piano

09:45-10:30 COFFEE AND POSTERS

GENERAL SESSION

- 10:30-10:45 *Antipsychotics - Postmortem fatal and non-fatal reference concentrations*
Söderberg C*, Wernvik E, Jönsson AK, Spigset O, Reis M, Druid H
- 10:45-11:00 *Modus Operandi in Serial and Recidivistic Homicide Offenders – Homicide Injury Scale (HIS) and other Factors*
Sturup J
- 11:00-11:15 *Neuropathology of drug abuse and its impact on forensic casework and research*
Büttner A
- 11:15-11:30 *Behavioral studies of the new hallucinogenic phenylethylamine 25I-NBOMe in mice*
Andersson M*, Karlsson M, Kronstrand R, Kugelberg FC
- 11:30-11:45 *A fatal intoxication with the superpotent 5-HT_{2A} receptor agonist 25B-NBOMe*
Thelander G*, Jonsson U, Kronstrand R
- 11:45-12:00 *Intoxications associated with the novel dissociative drug 3-MeO-PCP*
Johansson A*, Thelander G, Roman M, Lindstedt D, Sandler H, Rubertsson S, Ahlner J, Kronstrand R, Kugelberg FC

12:00-13:00 LUNCH

POSTMORTEM BIOCHEMISTRY

- 13:00-13:45 Invited lecture: *Review of postmortem biochemistry*
Cristian Palmière, Lausanne, Switzerland
- 13:45-14:00 *Importance of postmortem biochemistry in cause of death investigation*
Walta AM
- 14:00-14:15 *Postmortem analysis of sodium imbalances*
Zilg B*, Berg S, Alkass K, Druid H
- 14:15-14:30 *Factors Associated with deaths due to hyperglycemia in Sweden*
Walz L*, Jönsson AK, Zilg B, Druid H
- 14:30-14:45 *Lactate levels in postmortem samples and interpretation of results*
Keltanen T
- 14:45-15:00 *Time of Death (TOD) estimation on scene of crime: quality control of classical-, temperature- and biochemical methods*
Rognum TO*, Dahlberg PS, Musse A, Opdal SH, Osberg S, Holmen S, Stray-Pedersen A

15:00-15:30 COFFEE AND POSTERS

**PARALLEL SESSION 1A
GENERAL SESSION**

- 15:30-15:45 *Mental Disorders in Child-homicide Offenders from 1992 to 2012: A Population-based Study from Sweden*
Hedlund J*, Kristiansson M, Masterman T, Sturup J
- 15:45-16:00 *Species identification by species-specific DNA analysis*
Dell'Amico B*, Tillmar A
- 16:00-16:15 *Previous Medical Care for Injuries In Swedish Child Homicide Victims – A Case-Control Study on 74 Cases and 370 Controls*
Bäckström B*, Jinghede A, Hedlund J, Sturup J
- 16:15-16:30 *Genetic investigation of SUDI victims using next-generation sequencing of 100 genes associated with cardiac diseases*
Hertz CL*, Christiansen SL, Larsen MK, Dahl M, Ferrero-Miliani L, Weeke P, Have CT, Pedersen OB, Hansen T, Garup N, Ottesen GL, Frank-Hansen R, Banner J, Morling N

**PARALLEL SESSION 1B
FORENSIC TOXICOLOGY**

- 15:30-15:45 *Comprehensive screening for synthetic cannabinoids in whole blood using UHPLC-Q-TOF*
Roman M*, Jaque C, Kronstrand R
- 15:45-16:00 *Influence of test tube additives in whole blood drug analysis*
Nilsson G*, Ringquist N, Kronstrand R
- 16:00-16:15 *Using forensic toxicology registers in combination with drug dispensing databases to identify prescription drug abuse: the example of tramadol*
Jönsson AK*, Tjäderborn M, Hägg S, Ahlner J
- 17:00-18:00 **Vendor workshops**
- 18:00-19:30 **Bring your own slides session**

-----FRIDAY, JUNE 12-----

**PARALLEL SESSION 2A
FORENSIC PSYCHIATRY**

- 8:30-10:00 Symposium on Forensic Aspects of Child Homicides
- Forensic medicine and Child Homicides – Wahlsten P
- Crime Scene Investigations in Child Homicides – Jingshede A
- Forensic Psychiatric Examinations of Child Homicide Offenders – Kristiansson M

10:00-10:30 COFFEE AND POSTERS

**PARALLEL SESSION 2B
FORENSIC TOXICOLOGY**

- 8:30-8:45 *Evaluation of the hip-flask defence by use of ethyl glucuronide in blood*
Høiseith G*, Berg-Hansen GO, Mørland J
- 8:45-9:00 *Fatal methanol and ethylene glycol poisonings: threshold concentrations of main metabolites in post mortem blood*
Viinamäki J*, Ojanperä I
- 9:00-9:15 *Exploring Supercritical fluid chromatography for chiral separation of drugs*
Hegstad S*, Wiklund T, Havnen H, Frost J
- 9:15-9:30 *Targeted screening and confirmation in urine of 32 commonly abused drugs and narcotics in Iceland using UHPLC coupled with MSMS*
Albertsdóttir AD*, Hermansson S, Sólbergdóttir E
- 9:30-9:45 *Use of oral fluid for analysis of new psychoactive substances*
Øiestad EL*, Nordfjærn T, Edland-Gryt M, Bretteville-Jensen AL, Hovda KE, Persett PS, Vallersnes OM, Bogstrand ST, Gjerde H
- 9:45-10:00 *The synthesis of a number of metabolites from the synthetic cannabinoids JWH-018, THJ-018, AKB-48, 5F-AKB-48 identified in human urine samples*
Josefsson M*, Vikingsson S, Green H, Johansson A, Wallgren J, Wu X

10:00-10:30 COFFEE AND POSTERS

**PARALLEL SESSION 3A
FORENSIC HISTOPATHOLOGY**

- 10:30-11:15 Invited lecture: *Review of forensic histopathology*
Reinhard Dettmeyer, Giessen, Germany
- 11:15-11:30 *Various applications of quantitative autofluorescence microscopy in forensic histopathology: Estimating myocardial infarction age and post mortem interval*
Jensen T*, Jacobsen C, Rossing HH, Vainer B
- 11:30-11:45 *Quantification of leucocytes, T-lymphocytes and macrophages in endomyocardial tissue from 56 normal human hearts in the first year of life at autopsy*
Grasmeyer S, Oswald S, Madea B*
- 11:45-12:00 *Autofluorescence based digital quantification of myocardial tissue components in unstained histological slides*
Jensen T*, Jacobsen C, Rossing HH, Vainer B

10:00-10:30 COFFEE AND POSTERS

**PARALLEL SESSION 3B
TOXICOLOGY**

- 10:30-10:45 *The decrease in fatal poisonings in Finland*
Kriikku P*, Ojanperä I
- 10:45-11:00 *www.farmakologiportalen.no: a common national database for pharmacological laboratory services*
Westin A*, Bjånes T
- 11:00-11:15 *Patterns of drug abuse between drug users with regular and irregular attendance for treatment*
Sundström M*, Pelander A, Simojoki K, Ojanperä I
- 11:15-11:30 *Heroin kinetics in blood and vitreous humor in a living pig model*
Høiseith G*, Gottås A, Arnestad M, Halvorsen S, Bachs L
- 11:30-11:45 *Detection times of carboxylic acid metabolites of the synthetic cannabinoids JWH-018 and JWH-073 in human urine*
Hegstad S, Westin A*, Spigset O

12:00-13:00 LUNCH

**PARALLEL SESSION 4A
TOXICOLOGY**

- 13:30-14:00 Invited lecture: *Reflections and Reminiscences About the History of Forensic Toxicology in Sweden*
A.W. Jones
- 13:30-14:00 Invited lecture: *Nordic meetings in forensic toxicology the past 40 years.*
Jakob Kristinsson
- 14:00-16:15 NAFTA general assembly meeting

**PARALLEL SESSION 4B
GENERAL SESSION**

- 13:00-13:15 *Why are there so few cases of accidental suffocation among Swedish SUDI cases?*
Möllborg P*, Wennergren G, Almqvist P, Alm B
- 13:15-13:30 *Civilian war injuries and casualties – results from a medical fact finding mission to Gaza 2014*
Hougen HP*, Bachmann J, Baldwin-Ragaven L, Kelly K, Leaning J, Özcalıpci Ö, Reynolds L, Vacas A
- 13:30-13:45 *Suicide by the use of Firearms in Sweden 2001 to 2013: Demographics, Depression and Firearms Licenses*
Wingren CJ*, Wadensten E, Ottosson A
- 13:45-14:00 *A Prospective In-depth Study of Real-World Car Collisions Involving youth and young adults*
Breen JM*, Naess PA, Hansen TB, Gaarder C, Stray-Pedersen A
- 14:00-14:15 *Bicyclists killed in traffic in Southeast Norway 2000-2014*
Stål KO*, Breen JM, Stray-Pedersen A
- 14:15-14:30 *Shaken Baby Syndrome/Abusive Head trauma mortality in Sweden*
Andersson J*, Thiblin I
- 14:30-14:45 *"Achtung, Fahrkartenautomatenbombe!" – a case of lethal trauma in a crime gone wrong*
Potente S*, Held H, Verhoff MA

14:45-15:30 COFFEE AND POSTERS

**PARALLEL SESSION 4B, CONTINUED
GENERAL SESSION**

15:30-15:45 *Postmortem heart weight Modeled Using Piecewise Linear Regression in 27,645 Medicolegal Autopsy Cases*
Wingren CJ*, Ottosson A

15:45-16:00 *Bloodstain pattern analysis by infrared photography*
Sterzik V*, Bohnert M

16:00-16:15 *Coverage of Medicolegal Autopsies in Non-natural Deaths in Sweden 1997 to 2012*
Wingren CJ*, Ottosson A

16:15-16:45 *The SURVIVE study Experiences from the Danish National autopsy-based study*
Banner J*, Thomsen J, Boel LWT, Ottesen GL, Lynnerup N

19:00-23:00 BANQUET

-----SATURDAY, JUNE 13-----

GENERAL SESSION

- 8:30-8:45 *Death by self-inflicted asphyxia with helium – First case reports from Norway*
Frost J
- 8:45-9:00 *Autopsy in unresolved deaths and accuracy of mortality statistics; analysis of cause of death investigation in Finland and in Denmark*
Ylijoki-Sørensen S*, Lalu K, Bøggild H, Sajantila A, Boel LWT
- 9:00-9:15 *Internet drug related deaths in Sweden, 2007 – 2014*
Pettersson G*, Thelander G
- 9:15-9:30 *Implementation of CT imaging in post mortem forensic examination*
Osberg S*, Martinsen ACT, Rognum TO
- 9:30-9:45 Pathomorphological conditions of coronary system applying post mortem CT density coded resinjected method in forensic practice
Toro K*, Nemeskeri A, Molnar A, Dudas I, Bartykowszki A, Matlakovics B
- 9:45-10:00 *Person-specific 3D animated models interacting with the virtually reconstructed crime scene*
Villa C*, Larsen P, Lynnerup N

10:00-10:15 STRETCH YOUR LEGS

GENERAL SESSION

- 10:15-10:30 *The goldfish in the mixer: Concerning rationality in criminal proceedings?*
Michard JF
- 10:30-10:45 *Death Scene Investigation in sudden unexpected deaths in infants and small children in Norway*
B.ylestad LL, Vege ., Stray-Pedersen A, Osberg S, Olufsen C, Rognum TO*
- 10:45-11:00 *External causes of sudden unexpected death in infancy an early childhood in Southeast Norway*
Osberg S*, Stray-Pedersen A, Vege ., Olufsen C, B.ylestad L, Rognum TO
- 11:00-11:15 *Postmortem imaging – a systematic review*
Eriksson A*, Gustafsson T, Hultcrantz M, H.istad M, Jacobson S, Persson A

11:15-12:15 SWEDISH FIKA TIME AND FAREWELL

POSTER PRESENTATIONS

1. Sexual child abuse – Histology of hymenal tissue, presenter: Lise Frost
2. The clinical forensic examination in the newly established Child Protection Centers in the northwestern parts of Denmark, presenter: Marlene Beyer Eg
3. Sudden cardiac death due to polycystic kidney disease? presenter: Maiken Kudahl Larsen
4. Sudden infant death - no renal expression of heat shock proteins (HSP) presenter: Burkhard Madea
5. Strangulation suicide at the wheel, presenter: Burkhard Madea
6. Helicopter induced Propeller injuries, Burkhard Madea
7. Concentration changes of potassium, hypoxanthine and xanthine in vitreous humour, presenter: Delia Lepik
8. Distinction between postmortem changes, disease associated findings and forensic evidence presenter: Ulrich Hammer
9. Has previous abuse of flunitrazepam been replaced by clonazepam? presenter: Gudrun Hoiseth
10. Quantification of 16 QT-prolonging Drugs and Metabolites in Postmortem Blood and Postmortem Cardiac Tissue Using UPLC-MS/MS, presenter: Christian Reuss Mikkelsen
11. Suicides with long guns - a 25-year history of circumstances and autopsy findings, presenter: Anne Port
12. Forensic toxicological investigations of fatal poisonings in Iceland 1973-2012, presenter: Svava

- Thordardottir
13. Mathematical approach to quantify osteological age-related changes on 3D models of pelvis joints, presenter: Chiara Villa
 14. Post Mortem CT- Angiography (PMCTA), presenter: Lene Warner Thorup Boel
 15. Case report – cooperation of different experts, presenter: Hildi Kase
 16. Biological fluids in forensic medicine, presenter: Mailis Tõnisson
 17. Accidental death by voluntary nitrous oxide inhalation – effects on subjective dyspnea by nitrous oxide, presenter: Björn Bäckström
 18. Studies on opioid hybrids to reduce opioid toxicity deaths presenter: Henrik Druid
 19. Fatal Brown Bear Attacks, presenter: Torfinn Gustafsson
 20. Intervention Related Deaths, presenter: Torfinn Gustafsson
 21. Deaths in custody in Sweden, presenter: Anders Eriksson
 22. Next generation sequencing of sudden cardiac death genes in forensic sudden unexpected deaths, presenter: Henrik Green
 23. Synthetic cannabinoids in fatal intoxications, presenter: Anders Rietz
 24. Loose bodies in body cavities, presenter: Anders Rietz
 25. A unique fatal moose attack mimicking homicide, presenter: Pétur Guomann Guomannsson
 26. Homicide Injury Quantification: Correlations and Reliability of Injury Severity Scores Applied to Homicide Victims, presenter: Fredrik Tamsen
 27. Medico-legal evaluation of environmental-related death cases, presenter: Klara Törö

EXHIBITORS

Agilent Technologies
Bergman Labora AB
Chiron
Hamilton Robotics
MSCi ApS
Rationell IT
Thermo Fisher Scientific
Triolab AB
Waters Sweden AB