

Welcome to the joint conference on  
**FORENSIC MEDICINE (NAFM) &  
FORENSIC TOXICOLOGY (NAFT)**

**REYKJAVIK, MAY 11-13, 2022**

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# General information

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## Location

The joint NAFM and NAFT conference will take place at the Grand Hotel Reykjavík.

## Grand Hotel Reykjavík

Sigtún 28

105 Reykjavík

Tel (+354) 514 8000

## Conference rooms and areas at the Grand Hotel Reykjavík – ground floor

Lectures – Gullteigur, Halls A and B

## Conference fee

The registration fee covers welcome reception, conference dinner, coffee/tea during conference breaks, as well as lunch during the 2 conference days.

## Registration & information desk

Will be open on the ground floor in front of the conference halls during the conference day.

## Name badge

Name badges must be worn at all times during the conference. Your personal badge will provide access to the conference, all lectures and sessions, coffee breaks, lunches, welcome reception, and conference dinner. Please remember always to wear your badge for easy identification.

## Preparation for presentations

Speakers are asked to present themselves with their conference lecture during the break prior to their session. A technician will be situated in the conference room to assist.

## Internet access

Wi-fi is free of charge at the Grand Hotel Reykjavík.

## Conference Organizer

Iceland Travel Conferences

Email: [conferences@icelandtravel.is](mailto:conferences@icelandtravel.is)

# Welcome to Reykjavík, Iceland

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Dear distinguished guests.

It is our great pleasure to finally welcome you to the joint Nordic conference of Forensic Medicine and Forensic Toxicology. This will be the second time that we join forces. Over two and a half days we will enjoy science followed by stimulating discussions, as well as getting together for social events. We are honoured to have three prominent scientists give five guest lectures as well as close to one hundred scientific contributions from participants with exciting new data and ideas for discussion. We hope you will enjoy the conference and your stay in Iceland and may we all be inspired for our future endeavours and collaborations.

We appreciate and thank you for your support and patience through the long planning process.

## **The organizing committee:**

Svava Þórðardóttir

Ásdís Elva Aðalsteinsdóttir

Kristín Ólafsdóttir

Pétur Guðmann Guðmannsson

## Venue

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**Grand Hotel Reykjavík** is a first-class hotel for business travellers, conference guests and tourists who demand excellent service and facilities.

The hotel is situated in a quiet area within a short distance from all services, recreation, and business centres. We recommend a stroll through Laugardalur's free entry Botanical Garden, adorned with woods, ponds and birdlife.

All of the hotel's 314 rooms are very spacious and equipped with first-class amenities, including an en-suite bathroom with a bath and shower, large beds, satellite TV, wireless internet, mini-bar, hair dryer, trouser press, coffee maker and a safe.

# Social program

## Wednesday, May 11

**Welcome Reception at Reykjavik Art Museum, Hafnarhúsið**  
(Included in participants registration)

**Address:**

Reykjavik Art Museum, Hafnarhúsið  
Tryggvagata 17  
101 Reykjavík

Bus #14 goes directly to Hafnarhúsið  
from Tún bus stop



*Reykjavik Art Museum, Hafnarhúsið*

## Thursday, May 12

**Conference Dinner at Grand Hotel Reykjavík**  
(Included in participants registration)

**Hall** - Háteigur (4th floor)



*Grand Hotel Reykjavík*

## Friday, May 13

**Optional Sightseeing Tour**  
(not included in the conference fee)

**Time:** From Grand Hotel Reykjavík main  
entrance at 12:00, noon

**Estimated arrival back:** 10:30 pm.



**Lunch:** Participants will receive a lunch box before entering the buses.

**To bring:** Participants must bring their own bathing suits. We also recommend comfortable walking shoes and warm and waterproof clothes. Be prepared for all types of weather in one afternoon in Iceland.

# Program

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## Wednesday, May 11

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**08:00 Registration opens**

**09:00-10:30 Opening Ceremony- Joint Session – Conference room A**

Welcome

Short address from **the National Police Commissioner for Iceland, Sigríður Björk Guðjónsdóttir**.

**Keynote Speaker – Sarah Wille**, Registered Expert in Forensic Toxicology.

**O-01 Forensic Toxicology: challenges and future perspectives**

**10:30-11:00 Coffee/tea and posters**

**11:00-12:15 Scientific Session 1 – Forensic Medicine - Traumatology**

Conference room: A - Moderator: Carl Söderberg

**O-02 Autopsy findings in drivers and passengers from fatal motor vehicle collisions: limited differences in injury patterns and toxicological test results**

**Jan Mario Breen**

**O-03 A retrospective analysis of hyoid and thyroid fractures in hangings – pressure or stretching?**

**Anja Petaros**, Petur Gudmann Gudmannsson

**O-04 Neglect or accident - Pediatric severe hand injuries caused by electric tools/machinery in Finland during 1996 - 2016**

**Mika Martiskainen**, Jarkko Jokihara

**O-05 Five babies with abusive head trauma and confessions of violent shaking**

**Arne Stray-Pedersen**, Mary Jo Vollmer-Sandholm, Torleiv Ole Rognum.

**O-06 Forensic examination of the victims from the January 2019 Great Belt Bridge rail accident**

**Peter Mygind Leth**

**11:00-12:05 Scientific Session 2 – Forensic Toxicology – NPS and methods**

Conference room: B - Moderator: Ilkka Ojanperä

**O-07 The activity of emerging opioids and synthetic cannabinoids on the  $\mu$ -opioid and CB1 receptors as a tool for risk assessment**

**Henrik Green**, Svante Vikingsson, Joakim Strandberg, Matilda Bäckberg, Sara Wall, Anna Åstrand, Hanna Karlsson, Mattias Persson, Robert Kronstrand

**O-08 The EUROSTARS projects QUANTUM SPICE, PSYCHOMICS and NPS-REFORM**

**Jon Eigill Johansen**

**O-09 Activation of the human  $\mu$ -opioid receptor by several new non-fentanyl synthetic opioids.**

# Program

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**Kristin Webling**, Mattias Persson, Dartá Stalberga, Hanna Karlsson, Svante Vikingsson, Henrik Green

**O-10** *Forensic Chemistry & Toxicology Fundamentals of using MassHunter Unknowns Analysis*

**Mads Lundgren Petersen** presents an on-line presentation by **Kirk Lokits** – Agilent Technologies

**12:05-13:30 Lunch and posters** (Lunch at Miðgarður, ground floor)

**13:30-15:00 Scientific Session 3 – Forensic Medicine – Unnatural death**

Conference room: A - Moderator: Arne Stray-Pedersen

**O-11** *The conservation of human remains from the time of the genocide in Murambi, Rwanda*

**Monika Lehmann**<sup>1</sup>, Dorte Schaarschmidt<sup>1</sup>.

**O-12** *Dismemberment and dumping after homicide using setting in concrete — a case report*

**Eilin Jopp-van Well**, Larissa Lohne

**O-13** *Characterization of deceased drug users in Denmark based on treatment status: A nationwide retrospective autopsy study*

Mark Nielsen, **Line Kruckow**, Astrid Kerstine Buch, Kristine Boisen Olsen, Jytte Banner

**O-14** *Trends in forensic autopsy rates in Central Norway during the period 2007-2017: Can media attention impact autopsy practices?*

Martine Ulvik, Nina S. Bratsberg, Ivar S. Nordrum, **Joachim Frost**

**O-15** *Young adults involved in motor vehicle collisions in Norway: observed safety errors are common and contribute to severe injury and death*

**Jan Mario Breen**

**O-16** *Treatment Status and Use of Psychoactive Substances in Deceased Drug Users*

**Line Kruckow**, Christian Tjagvad, Thomas Clausen, Kristian Linnet, Jytte Banner

**13:30-15:00 Scientific Session 4 – Forensic Toxicology – Post-Mortem Toxicology**

Conference room: B - Moderator: Brynja Björk Baldursdóttir

**O-17** *Mitragynine in post-mortem cases – patterns 2009-2021*

**Carl Söderberg**, Gunilla Thelander, Fredrik Kugelberg

**O-18** *Investigation of fatal buprenorphine poisoning using urinary phase 1 and phase 2 metabolite concentrations*

**Claudia Mariottini**, Pirkko Kriikku, Ilkka Ojanperä

**O-19** *Half of hospitalized cancer patients display higher than “therapeutic” levels of post-mortem oxycodone*

**Pirkko Kriikku**, Ilkka Ojanperä

# Program

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**O-20** *Concentrations of psychoactive substances in blood samples from non-fatal and fatal opioid overdoses*

**Hilde Marie Erøy Edvardsen**, Carl Aamodt, Stig Tore Bogstrand, Peter Krajci, Vigdis Vindenes, Eline Borger Rognli.

**O-21** *New psychoactive substance trends in post mortem cases in Sweden 2007 to 2021*

**Gunilla Thelander**, Gisela Pettersson, Robert Kronstrand

**O-22** *Identified synthetic cannabinoid receptor agonists in Iceland and their suspected role in three deaths.*

**Adam E. Bauer**, Pétur G. Guðmannsson, Svava H. Þórðardóttir, Valþór Ásgrímsson, Ingibjörg H. Snorradóttir, Unnur E. Stefánsdóttir

## 15:00-15:30 Coffee/tea and posters

### 15:30-16:30 Scientific Session 5 – Forensic Medicine - Post mortem molecular and biochemical investigations

Conference room: A - Moderator: Anders Rietz

**O-23** *Characteristics of post-mortem beta-hydroxybutyrate-positive cases - A retrospective study on age, gender and BMI in 1407 forensic autopsies*

**Stina Ahlström**, Ingemar Thiblin, Johan Ahlner, Anna K Jönsson, Henrik Green

**O-24** *Postmortem diagnosis of ketoacidosis: levels of beta-hydroxybutyrate, acetone and isopropanol in different causes of death*

**Brita Zilg**, Yakub Eriksson Hydara, Gunilla Thelander

**O-25** *Expanding the potential of forensic molecular autopsies*

Daniel Kling, **Henrik Green**, Anna Green

**O-26** *Post-Mortem Metabolomics and Biomarker Discovery in Inflammatory Diseases*

**Albert Elmsjö**, Svante Vikingsson, Carl Söderberg, Fredrik Kugelberg, Henrik Green

### 15:30-16:15 Scientific Session 6 – Forensic and Post-Mortem Toxicology

Conference room: B - Moderator: María Erla Bogadóttir

**O-27** *Studies of the relationship between propanol and post mortem formed ethanol*

Shimpei Watanabe, Markus Roman, **Robert Kronstrand**

**O-28** *Retrospective Metabolomics Study on Forensic Cases: New Potential Markers and Changes in Metabolism of Drugs*

**Tingting Wang**, Kirstine L. Nielsen, Kim Frisch, Johan K. Lassen, Camilla B. Nielsen, Charlotte U. Andersen, Palle Villesen, Mette F. Andreasen, Jørgen B. Hasselstrøm, Mogens Johannsen

# Program

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**O-29** *Sensitivity of a clinical test of impairment to detect different drugs at different concentration levels*

**Gudrun Høiseth**, Gerrit Middelkoop, Knut Hjelmeland, Jørg Mørland

**18:00-20:00** Welcome Reception with drinks and snacks at Reykjavik Art Museum, Hafnarhúsið, Tryggvagata 17.

## **Thursday, May 12**

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**08:00-09:45** Joint Session – Conference room A

**Online session with Roger Byard**, Professor of Forensic Pathology, University of Adelaide

Topics:

1. Do we at last understand SIDS?
2. Inflicted injury in children

**09:45-10:15** Coffee/tea and posters

**10:15-12:00** Scientific Session 7 – Forensic Medicine – Forensic Anthropology

Conference room: A - Moderator: Anja Petaros

**O-30** *Bones without Names – Identification of the Forgotten*  
**Oliver Krebs**

**O-31** *A complementary method for sexing human remains through the mastoid region*  
**Anja Petaros**, Heather Garvin, Sebastian KTS Wärmländer

**O-32** *Identifying the victims of Finnish 1918 civil war: not easy!*  
**Jukka Palo**

**O-33** *A probability model for assessing age relative to the 18-year old threshold*  
**Nina Heldring**, André Larsson, Ali-Reza Rezaie, Petra Råsten-Almqvist, Brita Zilg

**O-34** *At long last – Reliable age estimation of human skeletal remains*  
**Svenja Weise**

**O-35** *Tycho Brahe, Renaissance Man. Modern Lifestyle Disease in the 16th Century?*  
**Niels Lynnerup**, Sacha Kacki, Petr Veleminsky, Sylva Kaupova, Alize Lacoste Jeanson, Tibor Povysil, Martin Horak, Jan Kucera, Kaare Lund Rasmussen, Jens Vellef, Jaroslav Bruzek

**O-36** *Analysis of 14C, 13C in Bones to Assist Identification of Unknown Human Remains.*  
**Rebecka Tegllind**, Jonas Balkefors, Henrik Druid, Kanar Alkass



# Program

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## **10:15-12:00 Scientific Session 8 – Forensic Toxicology – Analytical methods**

Conference room: B - Moderator: Fredrik Kugelberg

**O-37 Targeted Screening of components in Toxicology analysis using High Resolution Mass Spectrometry (HR-MS)**

**Noud van der Borg**, Bruker Nordic

**O-38 Comparison of estimates of imprecision from quality controls and duplicate measurements of authentic samples in LC MS/MS analysis**

**Stine Lund Hansen**, Kristian Linnet, Brian Schou Rasmussen

**O-39 Not all LC-MS grade solvents are suited for LC-MS analysis**

**Christian Brinch Mollerup**, Brian Schou Rasmussen

**O-40 LC-MS/MS quantitative analysis of low-frequency occurring drugs in whole blood – requires this a full method validation or what is good enough?**

**Jakob Ross Jornil**, Mathias Madsen, Christian Fyhn Reuss, Tina Slots, Lambert Kristiansen Sørensen, Jørgen Bo Hasselstrøm

**O-41 Fast and simple chiral separation of amphetamine enantiomers in whole blood by LC-MS/MS**

**Nina Zacho Andersen**, Marie Katrine Klose Nielsen, Brian Schou Rasmussen, Sys Stybe Johansen, Kristian Linnet

**O-42 The availability and quality/purity of PEth reference materials**

**Huiling Liu**, Alexey Gorovoy, Craig Mckenzie, Jenny Button, Jon Eigill Johansen

**12:00-13:30 Lunch and posters** (Lunch at Miðgarður, ground floor)

## **13:30-14:45 Scientific Session 9 – Forensic Medicine – Presentation of results and accessory investigations**

Conference room: A - Moderator: Sebastian Kunz

**O-43 Application of 3D imaging techniques to document stone sites at Ilulissat, West Greenland.**

**Chiara Villa**, Marie Louise Jørkov, Christian Koch Madsen, Jens Fog Jensen

**O-44 Out of the blue - Luminol cases from Hamburg**

**Oliver Krebs**, Anke Klein, Axel Gehl, Carolin Edler

**O-45 Differences in expressions in autopsy reports regarding cause and manner of death**

**Gustav Engvall**, Erik Edston, Henrik Druid

**O-46 Post-mortem computed tomography is near perfect for skull fracture detection**

Mikkel Henningsen, Sara Larsen, Christina Jacobsen, **Chiara Villa**

**O-47 Implementing routine CT imaging in post mortem forensic examination - the challenges and added diagnostic value based on five years experience**

**Arne Stray-Pedersen**

# Program

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## **13:30-14:45 Scientific Session 10 – Forensic Toxicology – Drug use**

Conference room: B - Moderator: Kirsten Wiese Simonsen

**O-48** *Substances detected in used syringes of injecting drug users: 3-year experience of the approach in Finland*

**Teemu Gunnar**, Anna Pelander, Anne Arponen

**O-49** *Estimation of community drug abuse in the Reykjavik Metropolitan Area by wastewater-based epidemiology*

**Arndís Sue Ching Löve**, Kristín Ólafsdóttir

**O-50** *Adverse effects with sequelae after LSD exposure: a case report.*

Wenche Rødseth Brede, Rachel Aakerøy, Hege Merethe Krabseth, **Joachim Frost**, Lars Slørdal

**O-51** *The emergence of clonazepam and etizolam and their different abuse trends in Iceland*

**Adam E. Bauer**, Valþór Ásgrímsson, Unnur E. Stefánsdóttir, Brynja B. Baldursdóttir

**O-52** *Stability of lisdexamfetamine in sampled whole blood – Implications of sampling tube additives and storage temperature for interpretation of impairment*

**Jørgen Bo Hasselstrøm**

## **14:45-15:15 Coffee/tea and posters**

## **15:15-16:00 Scientific Session 11 – Forensic Medicine – Homicide and violence**

Conference room: A - Moderator: Brita Zilg

**O-53** *Impact of the Covid-19 lockdown on sexual assault cases in Eastern Denmark - a retrospective clinical forensic study*

Johanne Ejby Bidstrup, **Johannes Rødbro Busch**, Julie Munkholm, Jytte Banner

**O-54** *Homicide victims as organ/tissue donors in Finland – a retrospective analysis of quality issues in the Medico-Legal Death Investigation*

**Pia Wahlsten**

**O-55** *Concealed Homicides in Denmark, 1992-2016*

**Asser H. Thomsen**, Peter M. Leth, Hans Petter Hougen, Palle Villesen

## **15:15-16:00 Scientific Session 12 – Forensic Toxicology – Driving under the influence**

Conference room: B - Moderator: Åse Marit Øiestad

**O-56** *The Elimination Half-life of Zopiclone in Apprehended Drivers Based on Two Consecutive Blood Samples*

**Marianne Madland Hagesæther**, Peder Olai Skjeflo Holman, Maren Cecilie Strand, Lena Kristoffersen, Gudrun Høiseth

**O-57** *Overview of driving under the influence of drugs in Estonia 2015–2019*

**Mailis Tõnisson**, Aime Riikoja, Tarmo Barndök

# Program

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**O-58** *Driving Under the Influence of Drugs in Norway. Trends of detected drugs in blood samples during the last decade*

**Gerrit Jan Middelkoop**, Knut Hjelmeland, Alexander Braadvig Årving

**16:15-17:30** **NAFT General assembly** (room B) and **NAFM Meeting** (room A)

**19:00** **Conference Dinner – Grand Hotel Reykjavík** (Háteigur, 4th floor)

## **Friday, May 13**

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**08:00-09:45** **Joint Session – Conference room A**

**Keynote Speaker – Dr. Kimberley Molina**, Chief Medical Examiner for the Baxter County Medical Examiner's Office, San Antonio, Texas

Topics:

1. Statistics and Medicolegal Death Investigation
2. Interesting Aspects of Firearm Deaths

**09:45-10:15** **Coffee/tea and posters**

**10:15-11:30** **Joint Session – Conference room A**

**O-59** *National initiative in Norway for new legislation regulating the use of biological material from forensic investigations in method development and research*

**Joachim Frost**, Lillian Bøylestad, Trond Aamo, Christian Lycke Ellingsen, Lars Uhlin-Hansen, Per Hoff-Olsen, Eirik Natås Hansen, Lena Kristoffersen, Inge Morild, Vigdis Vindenes

**Closing ceremony**

**11:30** **Conference ends**

**12:00-22:30** **Optional Sightseeing Tour to the Reykjanes Peninsula and the Blue Lagoon**

# Waters

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