

Professor Bente Gammelgaard
Section of Analytical Biosciences/Metallomics Lab

Master's thesis students 1996-2016

- 2016: Development and evaluation of an LC-MS/MS method for quantification of cortisol, melatonin and testosterone in serum, Louise Saurbrey Pals & Mai Quynh Phan (National Research Center for the Working Environment).
Udvikling og validering af ekstraktionsmetode til kvantitativ bestemmelse af cannabinoider i hår ved UHPLC-MS/MS analyse, Kamilla Nyborg Nielsen (The Department of Forensic Medicine)
- 2015: Non-targeted and semi-targeted screening for drugs in whole blood by UPLC-TOF-MS, Christian Brinch Møllerup (The Department of Forensic Medicine)
- 2014: Analysis of LMW selenium metabolites in plasma from cancer patients treated with selenite, Konstantina Flouda
Development of a method for characterization and quantification of inorganic impurities in ash of drug excipients by microwave acid digestion and ICP-OES as an alternative to conventional ash determination, Mads Madsen Henriksen (Lundbeck A/S)
Development and validation of a quantitative method for acetaminophen and its metabolites in urine using HPLC-MS/MS, Kathrine Rønning Hansen (The Department of Forensic Medicine)
Characterization of amphetamine with head-space-GC-MS and HPLC-DAD, Louise Tanderup Høstrup (The Department of Forensic Medicine)
- 2013: Development of an immunoprecipitation method coupled with LC-MS for quantification of glucagon-like-peptide-1 in low picomolar range and detection of the major metabolite, Simone K. Nielsen (Novo Nordisk)
Development and validation of an automated multianalyte sample preparation method for whole blood using protein precipitation for LC-MS/MS analysis, Christian Reuss Mikkelsen (The Department of Forensic Medicine)
Development of a method for quantitative determination of testosterone, melatonin and cortisol in human hair using LC-MS/MS analysis, Torben Wrona Schramm (National Research Center for the Working Environment)
- 2012: Quantitative determination of human serum albumin based on labeling with ioprenoxic acid and size exclusion chromatography coupled to inductively coupled plasma mass spectrometry (SEC-ICP-MS), Julie Maria Dersch
Extraction of tetrahydrocannabinol 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol, 11-hydroxy- Δ^9 -tetrahydrocannabinol, cannabidiol and cannabinol from hair analyzed by UPLC-MS/MS, Tina Holst Nielsen (The Department of Forensic Medicine)
Development of three analytical methods for quantitative comparison of cocaine samples, GC-MS, HS-GC-MS and HPLC-DAD, Mette Nærø (The Department of Forensic Medicine)
Studies on the in vitro metabolism of methylone, Trine Hedebrink Petersen (The Department of Forensic Medicine)

- 2011: Development and validation of a quantitative method for 31 basic analytes in blood by UPLC-TOF-MS, Katrine Åsberg Madsen and Diana Ina Petersen (The Department of Forensic Medicine)
Therese Buch Gregersen: Development and validation of a quantitative method for determination of acidic and neutral drugs in hair by LC-MS-MS (The Department of Forensic Medicine)
Development of a detection method for the identification of selenomethionine by the use of liquid chromatography coupled to electrospray ionization mass spectrometry, Mette Lukasiewicz
Development of a method for the identification of selenoamino acids in biological material by the use of gas chromatography mass spectrometry, Katrine Bloch-Jørgensen
In vitro metabolism of penetratin investigated by LC-MS and software tools capable of identifying metabolites, Malene Vinther Christensen (Novo Nordisk)
- 2010: Characterization of the transport of selected selenium compounds in Caco-2 cells, Laura Hyrup Rasmussen
Development and validation of a screening method for acidic and neutral drugs in whole blood by UPLC-TOF-MS, Unnar D Sigurdsson (The Department of Forensic Medicine).
Development and validation of an automated SPE method for the extraction of acidic and neutral drugs from whole blood, Stella R. Sigurdardottir (The Department of Forensic Medicine).
Development of an LC-MS/MS method for the analysis of cortisol in saliva, Jeanette Lindgaard Petersen (National Research Center for the Working Environment).
Development and validation of an LC-MS/MS assay for measurement of total and free lorazepam, oxazepam and temazepam concentrations in human plasma for studying changes in protein binding with age, Helle Skytte Larsen (University of Christchurch, New Zealand)
- 2009: Simultaneous extraction of GHB, GBL, 1,4BD, GVL and ketamine from hair analyzed by LC-MS/MS, Marie Baasch Pindbo (The Department of Forensic Medicine).
Development and validation of an LC-MS/MS assay for nortriptyline and its metabolites E-OH-nortriptyline and Z-OH-nortriptyline in human plasma, Gitte Bonke (University of Otago, Christchurch, New Zealand)
Quantification of asthma pharmaceuticals in blood and plasma by LC-MS/MS, Trine Vand and Christina Wann (The Department of Forensic Medicine)
- 2008: Comparison of metabolism profile for insulin human in-vivo and in-vitro, Christina Halberg and Vibeke Winther Birch (Novo Nordisk).
Simultaneous extraction of amphetamine, buprenorphine, cocaine, methylenedioxymethamphetamine, methadone, morphine, tetrahydrocannabinol and zolpidem from hair analysed by LC-MS-MS, Marie Gulstad and Maria Skiffard (The Department of Forensic Medicine).
Investigation of selenium containing metabolites using HPLC-ICP-MS. Metabolism of methylseleninic acid in a cell model, Jakob Odgaard.
- 2007: The metabolism of selenium. Separation and identification of selenium metabolites in an intestinal cell model, Kristoffer Lunøe

- 2006: Detection of sulphur in glitazones and rosiglitazone metabolites by HPLC-UV-DRC-ICP-MS, Lise Bang Henriksen
Quantitative determination of salicylic acid, paracetamol, phenobarbital, carisoprodol and meprobamate in whole blood by liquid-liquid extraction and LC-ESI-MS/MS, Lene Hansen and Maike Buck (The Department of Forensic Medicine)
- 2005: Separation and quantification of selenoproteins in human plasma by immobilized metal ion affinity chromatography and size exclusion chromatography ICP-MS, Ulrik Hostrup Larsen
Metabolite profiling of Lu AA26778 in rat with focus on solid phase extraction, Søs Abel and Sanne Bengtsson (Lundbeck A/S)
Simulation of selenium metabolism in hepatic models, Dorte Teglgard Hansen and Michelle Ingvorsen
Validation of an HPLC method for measurement of adrenaline, Rie Devantier Juhl Madsen (National Research Center for the Working Environment)
- 2004: Establishment of an enzyme immunoassay for measurement of skeletal troponin I in human serum, Tina Dam Mikkelsen (National Research Center for the Working Environment)
Development of a selective radio-HPLC method for detection of 3H-TD1414 and its metabolites, as well as investigations of the metabolism of 3H-TD1414 in vitro and in vivo, Pia Nymann Pedersen and Tina Egeberg Christensen (LEO Pharma)
Quantitative determination of seleno-metabolites in human urine, Naja Wessel Jakobsen
Establishment and evaluation of an ELISA-method for measurement of skeletal troponin I in human serum, Sara Larsen (National Research Center for the Working Environment)
- 2002: Purification, isolation and identification of selenium compounds from human urine, Jesper Bjerrum
Development and evaluation of a method for determination of 6-sulfatoxymelatonin in urine, Mette Pind (National Research Center for the Working Environment)
- 2001: Quantitative determination of epiallopregnanolone in rat brain, Tue Askaa (Lundbeck A/S)
- 2000: Development of adsorption capacity test for control of the vaccine adjuvant Alhydrogel, Anne Piechowicz (ALK Abelló)
The use of ultrasonic nebulization in inductively plasma mass spectrometry for the determination of organohalogens, Lars Lundager Madsen (AstraZeneca R&D, Lund)
- 1999: Development of a method for determination of urinary cortisol, Anja Claudia Hoffman and Hanne Lindvig Ziegler (National Research Center for the Working Environment)
- 1998: Optimization and validation of a method for determination of urinary 6-sulphatoxymelatonin, Anne Okkels Birk and Lotte Kibsgaard Høgh (National Research Center for the Working Environment)
Selenium speciation in human urine, Kenny Damkjær Jessen and Frank H. Kristensen
- 1996: Development of analytical method for measurement of β -endorphine in human plasma, Jette Tylak (National Research Center for the Working Environment)