# **Conference Agenda**

# 44th Mycotoxin Workshop 2023

# Date: Monday, 05/June/2023 8:00am **Registration I** 9:30am Welcome 9:45am 9:45am Occurrence 10:15am 9:45am - 10:00am Mycotoxin occurrence: a survey among major and minor winter cereals Marco Gozzi<sup>1</sup>, Massimo Blandino<sup>2</sup>, Chiara Dall'Asta<sup>1</sup>, Renato Bruni<sup>1</sup>, Laura Righetti<sup>1,3,4</sup> 1: Department of Food and Drug, University of Parma, Italy; 2: Department of Agricultural Forest and Food Sciences, University of Turin, Italy; 3: Laboratory of Organic Chemistry, Wageningen University, The Netherlands; 4: Wageningen Food Safety Research, Wageningen University & Research, The Netherlands 10:00am - 10:15am Putative tremorgenic mycotoxicosis in a dog - case report Leon Hart<sup>1</sup>, Christina Rehagel<sup>1</sup>, Michael Kuhn<sup>2</sup>, Lukas Jozefowitz<sup>3</sup>, Esther Haßdenteufel<sup>3</sup>, Benedikt Cramer<sup>2</sup>, Ewald Usleber<sup>1</sup> 1: Chair of Dairy Sciences, Institute of Veterinary Food Science, Justus-Liebig-University, Giessen, Germany; 2: Institute of Food Chemistry, University of Münster, Münster, Germany; 3: Clinic for Small Animals, Department of Veterinary Clinical Sciences, Justus-Liebig-University, Giessen, Germany 10:15am Coffee break I 11:00am 11:00am Food Safety I 12:00pm 11:00am - 11:15am Fusarium Growth and Production of Toxins during Malting Eva Maria Biehl, Sarah Schneidemann-Bostelmann, Ibrahim-Can Akpak, Michael Rychlik Chair of Analytical Food Chemistry, Technical University of Munich (TUM), Maximus-von Imhof-Forum 2, 85354 Freising, Germany 11:15am - 11:30am Mycotoxins as agricultural & livestock biosecurity threats: from maize seeds to raw milk contamination Marta Sofia Carvalho Ferreira Malheiro Leite<sup>1,2,3</sup>, Andreia Freitas<sup>2,3</sup>, Jorge Barbosa<sup>3</sup>, Fernando Ramos<sup>1,3</sup> 1: University of Coimbra, Faculty of Pharmacy, Health Science Campus; 2: National Institute for Agricultural and Veterinary Research, I.P. (INIAV, I.P.); 3: Associated Laboratory for Green Chemistry (LAQV) of the Network of Chemistry and Technology (REQUIMTE) 11:30am - 11:45am Investigations into the mycotoxin-producing capacity of moulds isolated from cheese Daniela Schale<sup>1</sup>, Bettina Seeger<sup>1</sup>, Nadja Jeßberger<sup>1</sup>, Sophie Kittler<sup>1</sup>, Christina Rehagel<sup>2</sup>, Leon Hart<sup>2</sup>, Ewald Usleber<sup>2</sup>, Madeleine Plötz<sup>1</sup> 1: Institute of Food Quality and Food Safety, University of Veterinary Medicine Hannover; 2: Chair of Dairy Sciences, Institute of Veterinary Food Science, Justus-Liebig-University Giessen 11:45am - 12:00pm Thermal stability of the mycotoxin citrinin Lea Brückner, Benedikt Cramer, Hans-Ulrich Humpf University of Muenster, Germany 12:00pm Lunch I 1:30pm

# 1:30pm Toxicology I

# 2:30pm 1:30pm - 1:45pm

An In-Vitro model for assessing the long-term effect of AFB1 cytotoxicity in HepG2 cell line and the release of HepG2 cells derived exosomes

Farah Mughal<sup>1</sup>, Marthe De Boevre<sup>2</sup>, Georgios Pollakis<sup>1</sup>, William A Paxton<sup>1</sup> 1: University of Liverpool, United Kingdom; 2: Ghent University, Belgium

## 1:45pm - 2:00pm

Combined toxicity of aflatoxin B1 and deoxynivalenol: roles of ribotoxicity and cytochrome P450 enzymes

Bernadette Willoquet, Gladys Mirey, Delphine Payros, Isabelle Oswald Toxalim, Research center in Food Toxicology, Université de Toulouse, INRA, ENVT, INP-PURPAN, UPS, Toulouse, France

### 2:00pm - 2:15pm

# Toxicity of enniatins A, A1, B, B1 and beauvericin on innovative in vitro Human cell models and their impacts on cellular gene expression.

France COULET, Monika COTON, Emmanuel COTON, Nolwenn HYMERY

Univ Brest, INRAE, Laboratoire Universitaire de Biodiversité et Écologie Microbienne, F-29280 Plouzané, France

## 2:15pm - 2:30pm

Computer-empowered digging of big data to tackle toxicity assessment and bioremediation of emerging mycotoxins - a 4-year long romance with fusaric acid Lorenzo Pedroni, Chiara Dall'Asta, Gianni Galaverna, <u>Luca Dellafiora</u> Department of Food and Drug, University of Parma, Italy

# 2:30pm Coffee break II

# 3:00pm

# **3:00pm** Meeting of the Society for Mycotoxin Research

4:30pm

6:00pm

# 5:00pm Activities

- Light art museum in Celle: modern art, light objects
  - Guided tour of the residential palace
    - Guided tour through the half-timbered houses with interesting facts from the city history
    - Minigolf: have fun on 18 holes
    - Explore Celle on your own: Ascent of the city tower: 283 steps to a view over Celle!

## 6:30pm Barbecue

## Date: Tuesday, 06/June/2023

# 8:00am Registration II

## 9:00am Food Safety II

### 10:00am 9:00am - 9:15am

# Mycotoxin contamination in the Arab world: Highlighting the main knowledge gaps and discussing the current legislations

# <u>Mohamed Fathi Abdallah</u><sup>1</sup>, Muhammad Gado<sup>2</sup>, Doha Abdelsadek<sup>3</sup>, Fatma Zahran<sup>4</sup>, Nada N. El-Salhey<sup>5</sup>, Ohaila Mehrez<sup>6</sup>, Sara Abdel-Hay<sup>7</sup>, Sahar Mahrous<sup>8</sup>, Karl De Ruyck<sup>9</sup>, Elisabeth Varga<sup>10</sup>

1: Department of Veterinary Toxicology and Forensic Medicine, Assiut University, Assiut 71515, Egypt; 2: Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt; 3: Faculty of Pharmacy, Cairo University, Cairo 12613, Egypt; 4: Faculty of Pharmacy, Menoufia University, Menoufia 6131567, Egypt; 5: Faculty of Pharmacy, Kafrelsheikh University, Kafrelsheikh 33516, Egypt; 6: Faculty of Pharmacy, Ain Shams University 11566, Cairo, Egypt; 7: Faculty of Pharmacy, Tanta 31527, Egypt; 8: Department of Chemistry, Faculty of Science, Sohag University, Sohag 82524, Egypt; 9: Teagasc Food Research Centre, Ashtown, Dublin 15 D15 KN3K, Ireland; 10: Department of Food Chemistry and Toxicology, Faculty of Chemistry, University of Vienna, 1090 Vienna, Austria

#### 9:15am - 9:30am

#### Mycotoxins in insects for food and feed

<u>Ronald Maul</u><sup>1</sup>, Kim Lara Gützkow<sup>1</sup>, Nina Kröncke<sup>2</sup>, Johanna Ebmeyer<sup>3</sup>, Nadja Kampschulte<sup>4</sup>, Linda Böhmert<sup>3</sup>, Cindy Schöne<sup>5</sup>, Nils Helge Schebb<sup>4</sup>, Albert Braeuning<sup>3</sup>, Rainer Benning<sup>2</sup>

1: Max Rubner-Institut Federal Research Institute of Nutrition and Food, Germany; 2: University of Applied Sciences Bremerhaven, Germany; 3: German Federal Institute for Risk Assessment, Department Food Safety, Germany; 4: University of Wuppertal, Faculty of Mathematics and Natural Sciences, Chair of Food Chemistry, Germany; 5: German Federal Institute for Risk Assessment, Department Safety in the Food Chain, Germany

#### 9:30am - 9:45am

# T-2 and HT-2 toxins in milling oats and oat kernels

Jens Chr. Meyer

H. & J. Brüggen KG, Germany

### 9:45am - 10:00am

## Cyclodextrins as potential mycotoxin binders: the summary of earlier and recent studies <u>Miklós Poór</u>, Eszter Fliszár-Nyúl

Department of Pharmacology, Faculty of Pharmacy, University of Pécs, Pécs, Hungary

# 10:00am Coffee break III

10:30am

# 10:30am Health / Exposure

#### 11:45am 10:30am - 10:45am

#### Ochratoxin A and Parkinson disease: is there a link?

<u>Ariane Vettorazzi<sup>1,4</sup>, Maria Serrano<sup>1</sup>, Elba Beraza<sup>1</sup>, Maria Izco<sup>2</sup>, Amaya Azqueta<sup>1,4</sup>, Elena Gonzalez-Peñas<sup>3</sup>, Adela Lopez de Cerain<sup>1,4</sup>, Lydia Alvarez-Erviti<sup>2</sup></u>

1: Department of Pharmacology and Toxicology, MITOX Research Group, School of Pharmacy and Nutrition, University of Navarra, Pamplona, Spain; 2: Laboratory of Molecular Neurobiology, Center for Biomedical Research of La Rioja (CIBIR), Logroño, Spain; 3: Department of Pharmaceutical Technology and Chemistry, MITOX Research Group, School of Pharmacy and Nutrition, University of Navarra, Pamplona Spain; 4: IdiSNA, Navarra Institute for Health Research, Pamplona, Spain

#### 10:45am - 11:00am

#### The epigenetic interplay of mycotoxins & Epstein Barr virus towards childhood cancer

<u>Thanos Mouchtaris Michailidis</u><sup>1,2,4</sup>, Sarah De Saeger<sup>1,2,3</sup>, Rita Khoueiry<sup>4</sup>, Grace Akinyi Odongo<sup>4</sup>, Laura Corveleyn<sup>2,5</sup>, Maarten Dhaenens<sup>2,5</sup>, Zdenko Herceg<sup>4</sup>, Marthe De Boevre<sup>1,2</sup>

1: Ghent University, Ghent, Belgium; 2: CRIG, Cancer Research Institute Ghent, Ghent, Belgium; 3: Department of Biotechnology and Food Technology, Faculty of Science, University of Johannesburg, Doornfontein Campus, Gauteng, South Africa; 4: Epigenomics and Mechanisms Branch, International Agency for Research on Cancer/World Health Organization, Lyon, France; 5: Laboratory of Pharmaceutical Biotechnology, Faculty of Pharmaceutical Sciences, Ghent University, Gent, Belgium

# Short-time exposure to the Fusarium mycotoxins deoxynivalenol and zearalenone in cows fed a diet inducing rumen acidosis

#### Lydia Kroon<sup>1</sup>, Ant Koopmans<sup>1</sup>, Antonio Gallo<sup>2</sup>, Janine Saltzmann<sup>3</sup>, Sven Dänicke<sup>3</sup>, Ermino Trevisi<sup>2</sup>, <u>Regiane R</u> <u>Santos<sup>1</sup></u>

1: Schothorst Feed Research, P.O. Box 533, 8200 AM Lelystad, The Netherlands; 2: Department of Animal Science, Food and Nutrition (DIANA), Faculty of Agricultural, Food and Environmental Sciences, Università Cattolica del Sacro Cuore, 29122 Piacenza, Italy; 3: Institute of Animal Nutrition, Friedrich-Loeffler-Institute (FLI), Federal Research Institute for Animal Health, D-38116 Brunswick, Germany

#### 11:15am - 11:30am

#### New insights on Citrinin exposure in German children and adults from a urine biomarker study

# <u>Gisela H. Degen</u><sup>1</sup>, Jörg Reinders<sup>1</sup>, Martin Kraft<sup>2</sup>, Yvonni Chovolou<sup>2</sup>, Wolfgang Völkel<sup>3</sup>, Felicia Gerull<sup>4</sup>, Jan G. Hengstler<sup>1</sup>, Hermann Fromme<sup>5</sup>

1: Leibniz Research Centre for Working Environment and Human Factors, Germany; 2: Landesamt für Natur, Umwelt und Verbraucherschutz NRW; D-45133 Essen, Germany; 3: Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, D-80538 München; 4: Landeslabor Berlin-Brandenburg, Fachbereich IV-4, D-12489 Berlin; 5: Institut und Poliklinik für Arbeits-, Sozial- und Umweltmedizin, D-80336 München

## 11:30am - 11:45am

# Walls in Camouflage: Searching for Molds and Mycotoxins in Military Settings

<u>Wiebke Derz<sup>1</sup></u>, Paul Elsinghorst<sup>1,2</sup>

1: Central Institute of the Bundeswehr Medical Service Munich, 85748 Garching, Germany; 2: Institute of Nutrition and Food Sciences, University of Bonn, 53121 Bonn, Germany

# 11:45am Lunch II

1:45pm

# 1:45pm Toxicology II

## 3:00pm 1:45pm - 2:00pm

Analysing epigenetic toxicity caused by multi-mycotoxin exposure using an intestinal and hepatic cell culture model

#### Yasmine Bader

University Ghent, Belgium

#### 2:00pm - 2:15pm

New challenges in genotoxicity testing: the case of the Alternaria mycotoxins alternariol and altertoxin II

## Francesco Crudo<sup>1</sup>, Chenyifan Hong<sup>1</sup>, Vanessa Partsch<sup>1</sup>, Giorgia Del Favero<sup>1</sup>, Luca Dellafiora<sup>2</sup>, Doris Marko<sup>1</sup>

1: Department of Food Chemistry and Toxicology, Faculty of Chemistry, University of Vienna, Vienna, Austria; 2: Department of Food and Drug, University of Parma, Parma, Italy

### 2:15pm - 2:30pm

#### Does replication stress play a role in Ochratoxin A genotoxicity?

Christina Klotz, Julian Brode, Johannes Borchers, Angela Mally

University Würzburg, Germany

#### 2:30pm - 2:45pm

# Pitfalls and challenges when evaluating combinatory effects – a case study on zearalenone and isoflavones

#### Dino Grgic<sup>1,2</sup>, Barbara Novak<sup>3</sup>, Elisabeth Varga<sup>1</sup>, Doris Marko<sup>1</sup>

1: University of Vienna, Faculty of Chemistry, Department of Food Chemistry and Toxicology, Vienna, Austria; 2: University of Vienna, Doctoral School in Chemistry, Vienna, Austria; 3: DSM-Biomin Research Center, Tulln, Austria

#### 2:45pm - 3:00pm

#### Alternariol-sulfates as neglected conjugation products with toxicological potential

Eszter Borsos<sup>1,2</sup>, Luca Dellafiora<sup>3</sup>, Chiara Dall'Asta<sup>3</sup>, Giorgia Del Favero<sup>1,4</sup>, Elisabeth Varga<sup>1</sup>, Doris Marko<sup>1</sup> 1: Department of Food Chemistry and Toxicology, University of Vienna, Vienna, Austria; 2: Doctoral School in Chemistry, University of Vienna, Vienna, Austria; 3: Department of Food and Drug, University of Parma, Parma, Italy; 4: Core Facility Multimodal Imaging, Faculty of Chemistry, University of Vienna, Vienna, Austria

# 3:00pm Coffee break IV

3:30pm

# 3:30pm Toxicology III

## 4:15pm 3:30pm - 3:45pm

#### New possibilities in mycotoxin research by functional intravital imaging

Ahmed Ghallab<sup>1,2</sup>, Reham Hassan<sup>1,2</sup>, Maiju Myllys<sup>1</sup>, Daniela González<sup>1</sup>, Abdellatif Seddek<sup>2</sup>, Andrea Gerdemann<sup>3</sup>, Michael Kuhn<sup>3</sup>, Benedikt Cramer<sup>3</sup>, Hans Ulrich Humpf<sup>3</sup>, Gisela H. Degen<sup>1</sup>, Jan G. Hengstler<sup>1</sup> 1: Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund, Ardeystr. 67, 44139 Dortmund, Germany; 2: Department of Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, South Valley University, Qena 83523, Egypt; 3: Institute of Food Chemistry, Westfälische Wilhelms-Universität Münster, Corrensstr. 45, 48149 Münster, Germany

#### 3:45pm - 4:00pm

#### Insights into the metabolism, kinetics and related toxicity of ochratoxin A in mice models

<u>Michael Kuhn</u><sup>1</sup>, Reham Hassan<sup>2</sup>, Benedikt Cramer<sup>1</sup>, Ahmed Ghallab<sup>2</sup>, Gisela H. Degen<sup>2</sup>, Jan G. Hengstler<sup>2</sup>, Hans-Ulrich Humpf<sup>1</sup>

1: Institute of Food Chemistry, University of Muenster; 2: Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund

## 4:00pm - 4:15pm

Species differences of aflatoxin B1 metabolism in primary mouse, rat and human hepatocytes and in vivo in rodents

<u>Andrea Gerdemann</u><sup>1</sup>, Benedikt Cramer<sup>1</sup>, Matthias Behrens<sup>1</sup>, Ahmed Ghallab<sup>2</sup>, Reham Hassan<sup>2</sup>, Gisela H. Degen<sup>2</sup>, Jan G. Hengstler<sup>2</sup>, Melanie Esselen<sup>1</sup>, Hans-Ulrich Humpf<sup>1</sup>

1: Institute of Food Chemistry, University of Münster, Münster, Germany; 2: Leibniz Research Centre for Working Environment and Human Factors (IfADo), Dortmund, Germany

## 4:30pm Activities II

5:30pm

6:30pm Conference Dinner

## Date: Wednesday, 07/June/2023

# 9:00am Registration III

# 9:15am Analysis / Fungi I

### 10:30am 9:15am - 9:30am

## LC-QToF-HRMS as an Effective Tool for Detecting of Co-Contamination of Mycotoxins and Transformation Products

#### Marcus Trentzsch, Stefan Weigel, Christoph Hutzler

German Federal Institute for Risk Assessment (BfR), Germany

#### 9:30am - 9:45am

# Acceleration of an HPLC-MS / MS multi-class method for the analysis of >1200 biotoxins, pesticides, and veterinary drugs

#### Lidija Kenjeric<sup>1</sup>, Michael Sulyok<sup>2</sup>, Rudolf Krska<sup>2,3</sup>, Kristyna Pavelicova<sup>4</sup>, Alexandra Malachova<sup>1</sup>

1: Austrian Competence Centre for Feed and Food Quality, Safety & Innovation, Austria; 2: 2. University of Natural Resources and Life Sciences Vienna (BOKU), Department of Agrobiotechnology (IFA-Tulln), Institute of Bioanalytics and Agro-Metabolomics, Konrad-Lorenz-Straße 20, 3430 Tulln an der Donau, Austria; 3: Institute for Global Food Security, School of Biological Sciences, Queens University Belfast, University Road, Belfast, BT7 1NN, Northern Ireland, United Kingdom; 4: Department of Chemistry and Biochemistry, Faculty of Forestry and Wood Technology, Mendel University in Brno, Zemedelska 1, Brno, Czech Republic

#### 9:45am - 10:00am

## IR spectroscopy combined with LC-MS/MS analysis for rapid mycotoxin screening

#### Stephan Freitag, Michael Sulyok, Rudolf Krska

Institute of Bioanalytics and Agro-Metabolomics, Department of Agrobiotechnology, IFA Tulln, University of Natural Resources and Life Sciences, Vienna

#### 10:00am - 10:15am

# Disarmed mycotoxins from Stachybotrys chartarum: insights into metabolism and biological activity of phenylspirodrimanes

<u>Alica Fischle</u>, Katharina Steinert, Viola Haupt, Felix Schimang, Hans-Ulrich Humpf, Svetlana A. Kalinina Institute of Food Chemistry, University of Münster, Münster, Germany

#### 10:15am - 10:30am

## Effect of Deoxynivalenol on soil nitrification

Sven Korz, Katherine Munoz RPTU, Institute for Environmental Sciences, Landau, Germany

# 10:30am Coffee break V

11:00am

# 11:00am Fungi II

11:45am 11:00am - 11:15am

Influence of the velvet complex on development, secondary metabolism, aggressiveness and defense of Penicillium expansum

# Chrystian Zetina Serrano, Nadia Tahtah, Ophélie Rocher, Selma Snini, Yannick Lippi, Emilien L. Jamin, Isabelle P. Oswald, Olivier Puel, Sophie Lorber

INRAE, ToxAlim (Research Centre in Food Toxicology), Toulouse, France

## 11:15am - 11:30am

### Linking distinct extrolite profiles to the different genetic populations within Penicillium roqueforti Ewen Crequer<sup>1,2</sup>, Jean-Luc Jany<sup>1</sup>, Gwennina Cueff<sup>1</sup>, Jeanne Ropars<sup>2</sup>, Thibault Caron<sup>2</sup>, Jens Frisvad<sup>3</sup>, Johan

Christiansen<sup>3</sup>, Antoine Branca<sup>2</sup>, Tatiana Giraud<sup>2</sup>, Emmanuel Coton<sup>1</sup>, <u>Monika Coton<sup>1</sup></u>

1: Univ. Brest INRAE, Laboratoire Universitaire de Biodiversité et Ecologie Microbienne, F-29280 Plouzané, France; 2: Université Paris-Saclay, CNRS, AgroParisTech, Laboratoire Ecologie Systématique et Evolution, UMR 8079, France; 3: Department of Biotechnology and Biomedecine, Technical University of Denmark, DK-2800 Kgs. Lyngby, Denmark

	11:30am - 11:45am Environmental influences on the production of Alternariol-Sulfate by Alternaria alternata <u>Adetoye Adeyemo</u> , Markus Schmidt-Heydt Max Rubner-Institute, Germany
11:45am	Closing
- 12:00pm	
	Excursion (free, limited, registration required)
12:30pm	Bus departure for a visit Bruker Daltonics in Bremen (free, limited, registration required).
	Free bus tour to the factory of Bruker Daltonics in Bremen. After the event no transfer back to Celle but to Bremen main station and airport.
2:30pm	Visit of the Bruker Daltonics factory of mass spectrometers (free, limited, registration required)
- 4:15pm	Guided tour through the production factory and visit of the demo labs showing the latest developments of Bruker Daltonics. For individual arrival: Meeting point in front of the main building, Fahrenheitstraße 4, 28359 Bremen
4:15pm	Snacks, drinks and discussions / Shuttle transfer to Bremen station and airport Free drinks and snacks. Opportunity to discuss with experts from Bruker. Flights at 17:30 from Bremen to Munich or 19:10 to Frankfurt will be reached.