

MYCORED NAFTA CONFERENCE PROGRAMME 2012 JUNE 24-28, 2012

SUNDAY JUNE 24, 2012

16:00 – 20:00 REGISTRATION

17:30 – 19:00 WINE & CHEESE MIXER

WELCOME

19:00 – 19:45

J. David Miller, Carleton University, Ottawa, Canada,
Yvon Martel, Chief Scientist, International, AAFC, Canada
Kim Matheson, Vice President Research & International, Carleton University, Canada
Antonio Logrieco, CNR, Italy

PLENARY LECTURE

Chairperson: J. David Miller

19:45 – 20:30

Felicia Wu, University of Pittsburgh, USA
Food Security, Trade and Risk to Public Health of Mycotoxins

MONDAY JUNE 25, 2012

07:00 – 08:15 CONTINENTAL BREAKFAST

08:15 – 08:30

OPENING REMARKS
J David Miller, Department of Chemistry, Carleton University, Ottawa, Canada

SESSION 1. ECONOMIC IMPACT OF MYCOTOXINS IN NORTH AMERICA

Chairperson: Felicia Wu

08:30 – 08:50

J David Miller, Carleton University, Ottawa, Canada
Shifting sands in the regulation of deoxynivalenol and ochratoxin in cereals

08:50 – 09:10

Gord Harrison, Canada and TBA
Reaction to regulations and cost of compliance - Millers

09:10 – 09:30

TBA,
Reaction to regulations and cost of compliance - Grain trade

09:30 – 09:50

Jim Bond, Greenfield Ethanol
Reaction to regulations and cost of compliance - Ethanol

09:50 – 10:10

TBA, Canada
Reaction to regulations and cost of compliance - Food processing

10:10 – 10:40

REFRESHMENT BREAK

SESSION 2. GENETIC RESISTANCE TO TOXIGENIC FUNGI AND MYCOTOXIN ACCUMULATION

Chairperson: Gary Munkvold

10:40 – 11:00

Gary P Munkvold, Iowa State University, USA
Insects and mycotoxins - Genetic impact

11:00 – 11:15

Scott Heuchelin, Pioneer Hi-bred NA, TBA
Response to recent Gibberella Epidemics in maize - Corn genetics

11:15 – 11:30

Lana Reid, AAFC, Canada
Impact of public breeding on Maize resistance

| | |
|---------------|--|
| 11:30 – 11:45 | Lily Tamburic, University of Guelph, Canada <i>Impact of public breeding on wheat resistance – Canada</i> |
| 11:45 – 12:00 | Clay Sneller, Ohio State, USA (invited) <i>Impact of public breeding on wheat resistance – Canada</i> |
| 12:00 – 12:15 | Bill Laskar, Pioneer Hi-bred, NA <i>Impact of private breeding on wheat resistance – North America</i> |
| 12:15 – 12:25 | Rudolf Krska, University of Natural Resources and Life Sciences, Austria <i>Proteomics as a tool for investigations of Fusarium Head Blight</i> |
| 12:40 – 14:00 | LUNCH BREAK AND POSTER SESSION |

CONCURRENT WORKSHOPS

| | |
|---------------|---|
| 14:00 – 16:00 | Room 1 <i>Economics along the value chain: impact of changing regulations in North America</i> Chairpersons: Gordon Harrison & Becky McMullin |
| | Room 2 <i>What can fungal genomics teach us about managing mycotoxins</i> Chairpersons: Tom Gaefenhan & Antonio Logregio |
| | Room 3 <i>Effects of low levels of mycotoxins in feed and options to ameliorate the effects of mycotoxins</i> Chairpersons: Ting Zhou & Isabelle Oswald |

SESSION 3. TOXICOLOGY OF MYCOTOXINS

Chairperson: Ron Riley

| | |
|---------------|---|
| 16:30 – 16:55 | Ronald T Riley, USDA-ARS, USA <i>New insights on addressing mixtures of mycotoxins</i> |
| 16:55 – 17:20 | Jim Pestka, <i>New insights on deoxynivalenol</i> |
| 17:20 – 17:45 | Genevieve Bondy, <i>New insights on ochratoxin</i> |
| 18:00 | SUPPER OUTDOORS PICNIC STYLE; VOLLEY BALL & SOCCER |

TUESDAY JUNE 26, 2012

| | |
|---------------|---|
| 07:00 – 08:15 | CONTINENTAL BREAKFAST |
| 08:15 – 08:30 | OPENING REMARKS J David Miller, Department of Chemistry, Carleton University, Ottawa, Canada |

SESSION 4. OCHRATOXIN: A NEW PROBLEM IN REGULATION AND GRAINS MANAGEMENT

Chairperson: Gordon Harrison

| | |
|---------------|--|
| 08:30 – 08:50 | Barbara Lee, Health Canada, Canada <i>Regulation of ochratoxin in Canada</i> |
| 08:50 – 09:10 | Mike Bolger, US Food & Drug Administration, USA (invited) <i>JECFA consideration of ochratoxin: data gaps</i> |
| 09:10 – 09:30 | Lois Haighton, Cantox, Canada <i>Review of Health Canada risk assessment on ochratoxin</i> |
| 09:30 – 09:50 | Felicia Wu, University of Pittsburgh, USA <i>Economic impact of new ochratoxin regulations</i> |
| 09:50 – 10:10 | Tom Whittaker, North Carolina State University, USA <i>Sampling challenges for ochratoxin in bulk grains - Canadian Study</i> |
| 10:10 – 10:35 | REFRESHMENT BREAK |

SESSION 5. MYCOTOXIN ANALYSIS AT THE POINT OF SALE- NEW METHODS USEFUL NEAR THE LOD

Chairperson: Angelo Visconti

| | |
|---------------|---|
| 10:35 – 10:55 | Ronald Niemeijer, r-biopharm, Darmstadt, Germany <i>Rapid analysis kits as part of an HACCP-BMP system for managing mycotoxins through the value chain</i> |
| 10:55 – 11:15 | Chris Margos, USDA-ARS, Peoria, USA <i>Opportunities to improve the performance of ELISA methods</i> |
| 11:15 – 11:35 | Maria De Rosa, Carleton University, Canada & Annalisa De Girolamo, CNR, Italy <i>Aptamer technology for mycotoxin analysis</i> |

| | |
|---------------|---|
| 11:35 – 11:55 | Ray Coker , Toximet Limited, Chatham Maritime , UK <i>ToxiQuant T1 for the analysis of ochratoxin</i> |
| 12:55 – 12:15 | Corrado Fanelli , University of Rome La Sapienza, Italy <i>The role and future of Smart TLC</i> |
| 12:15 – 12:35 | Angelo Visconti , CNR, Italy <i>Validation of screening methods for mycotoxin analysis</i> |
| 12:35 – 14:00 | LUNCH BREAK AND POSTER SESSION |

CONCURRENT WORKSHOPS

| | |
|---------------|--|
| 14:00 – 16:00 | Room 1 <i>Point of sale analyses & models for regulations approaching the LOD</i> Chairpersons: Sheryl Tittlemier & Mark Sumarah |
| | Room 2 <i>Genetic resistance to toxigenic fungi and mycotoxin accumulation</i> Chairpersons: Linda Harris, Laura Sharpe |
| | Room 3 <i>Development & translation of knowledge for reducing mycotoxins in developing countries</i> Chairpersons: George Mahuku, Regina De La Campa |
| | FREE TIME |

WEDNESDAY JUNE 27, 2012

| | |
|---------------|---|
| 07:00 – 08:15 | CONTINENTAL BREAKFAST |
| 08:15 – 08:30 | OPENING REMARKS J David Miller , Department of Chemistry, Carleton University, Ottawa, Canada |

SESSION 6. APPLICATIONS OF FUNGAL GENOMICS TO REDUCE MYCOTOXIN ACCUMULATION

Chairperson: **Keith Seifert**

| | |
|---------------|--|
| 08:30 – 08:55 | Robert Samson , CBS, The Netherlands <i>Reproducible species concepts of critical toxigenic fungi: essential tools for managing mycotoxins in trade and commerce</i> |
| 08:55 – 09:20 | Keith Seifert , AAFC, Canada <i>Quantitative metagenomics to track mycotoxigenic fungi without culturing</i> |
| 09:20 – 09:45 | TBA <i>Lessons learned from genomic studies of toxigenic Fusarium species</i> |
| 09:45 – 10:10 | Ignazio Carbone , North Carolina State University, USA <i>Population genetics as a tool for understanding Aspergillus flavus</i> |
| 10:10 – 10:35 | Gary Payne , North Carolina State University, USA <i>Genomic analysis of Aspergillus flavus and pathogenesis in corn</i> |
| 10:35 – 11:00 | REFRESHMENT BREAK |

SESSION 7. APPLICATIONS OF MYCOTOXIN PREDICTION SYSTEMS AND VALUE CHAIN MANAGEMENT

Chairperson: **Arthur Schaafsma**

| | |
|---------------|--|
| 11:00 – 11:15 | TBA, Grain Famers of Ontario, Canada <i>The future, utility and support for mycotoxin prediction systems - Farmer perspective</i> |
| 11:15 – 12:00 | TBA, Bayer Crop Science, Germany <i>The future, utility and support for mycotoxin prediction systems - Crop Protection Industry perspective</i> |
| 12:00 – 12:15 | TBA, USA <i>The future, utility and support for .mycotoxin prediction systems - Grain buyers</i> |
| 12:15 – 12:30 | Art Schaafsma , University of Guelph, <i>Case study of winter wheat value chain for DON and OTA</i> |
| 12:30 – 12:45 | France Rochette , Dupont, Canada <i>A model for grain quality via Best Management Practices and traceability</i> |

12:45 – 14:00

LUNCH BREAK AND POSTER SESSION

CONCURRENT WORKSHOPS

| | |
|---------------|--|
| 14:00 – 16:00 | Room 1 <i>Applications of Mycotoxin Prediction Systems and Value Chain Management</i> Chairpersons: Art Schaafsma & Gary Munkvold |
| | Room 2 <i>New mechanistic insights on mycotoxins & hazard assessment</i> Chairpersons: Genevieve Bondy & Jim Pestka |
| 16:00 – 18:00 | REFRESHMENTS & FREE TIME |
| 18:00 | MAIN BANQUET |

THURSDAY JUNE 28, 2012

| | |
|---------------|---|
| 07:00 – 08:15 | CONTINENTAL BREAKFAST |
| 08:15 – 08:30 | OPENING REMARKS J David Miller, Department of Chemistry, Carleton University, Ottawa, Canada |

SESSION 8. DELIVERY AND TRANSLATION OF KNOWLEDGE FOR REDUCING MYCOTOXINS IN DEVELOPING COUNTRIES

Chairperson: George Mahuku

| | |
|---------------|---|
| 08:30 – 08:55 | Wenzel Gelderblom, Medical Research Council, South Africa <i>Strategies to reduce the impact of mycotoxins on children in Africa</i> |
| 08:55 – 09:20 | John Pitt, CSIRO, Australia <i>Management of mycotoxins in foods and feeds for improving public health: a new IARC publication</i> |
| 09:20 – 09:45 | Antonia Logrieco, CNR, Italy <i>The impact of MYCORED in developing regions: lessons learned</i> |
| 09:45 – 10:10 | Clare Norred, University of Maryland, USA <i>The role of international agencies</i> |
| 10:35 – 11:00 | REFRESHMENT BREAK |

SESSION 9. REGULATING FEED ADDITIVES THAT REDUCE THE IMPACT OF MYCOTOXINS ON ANIMAL PERFORMANCE

Chairperson: TBA

| | |
|---------------|--|
| 11:00 – 11:20 | Tim Phillips, Texas A&M University, USA <i>25 years of research on aflatoxin-binding clays: what does it take?</i> |
| 11:20 – 11:40 | Gerd Schatzmayr, Biomin, Austria <i>State of the art review of microbial and enzymatic detoxification of mycotoxins</i> |
| 11:40 – 12:00 | Isabelle Oswald, INRA, France <i>Demonstrating improved performance by the addition of mycotoxin binders & treatments</i> |
| 12:00 – 12:20 | Linda Morrison, CFIA, Ottawa <i>Framework for regulatory approval of mycotoxin binders & treatments</i> |
| 12:20 – 12:40 | Randall Lovell, US Food & Drug Administration, Canada <i>Framework for regulatory approval mycotoxin binders & treatments</i> |
| 12:40 – 14:00 | LUNCH BREAK AND FAREWELL |