

**EU-USA BILATERAL WORKSHOP ON TOXIGENIC FUNGI AND
MYCOTOXINS**

TECHNICAL PROGRAM

**USDA/ARS/Southern Regional Research Center,
New Orleans, Louisiana, USA
Main Conference Room (3rd Floor)**

JULY 05, 2005

9:00 AM

- Welcome **Dr. John P. Jordan**, Director, SRRC
Dr. Edgar G. King, Jr., Director,
Mid-South Area
- Introductory Remarks by US and EU **Deepak Bhatnagar,**
Representatives **Angelo Visconti**
- EU Mycotoxin Research and Mycoglobe Project **Angelo Visconti,**
Director, Institute of Sciences of Food Production (ISPA),
National Research Council (CNR), Bari, Italy
- Mycotoxin Research Priorities in U.S.A **Jane Robens,**
National Program Leader,
USDA/ARS, Beltsville, MD

10:30 AM **Kenneth Voss** “Fumonisin: Some current toxicology research trends”
USDA/ARS/RBRRC, Athens, GA, USA

11:00 AM **BREAK**

11:30 AM **MOLECULAR BIODIVERSITY OF TOXIGENIC FUNGI**

CHAIR: David Kendra, USDA/ARS/NCAUR, Peoria, IL, USA

Peter Cotty “Ecology of *Aspergillus flavus*” USDA/ARS/SRRC,
Phoenix, AZ, USA

John Leslie “Population diversity in *Fusarium*” Kansas State University,
Manhattan, KS, USA

Antonio Logrieco “Molecular biodiversity of *Aspergillus niger* group from grapes in Europe” Institute of Sciences of Food Production (ISPA), National Research Council (CNR), Bari, Italy

Joe Dorner “Development and commercial use of Afla-Guard, an aflatoxin biocontrol agent” USDA/ARS/NPRL, Dawson, GA, USA

1:00PM WORKING LUNCH (1st Floor-Directors’ Conference Room)

1:45-2:15 PM Jennifer Wortman “The genomics data explosion: challenges and opportunities” The Institute for Genomic Research, MD, USA

2:45 PM MOLECULAR BIODIVERSITY (contd.) (3rd Floor)

CHAIR: Gary Payne, North Carolina State University, Raleigh, NC, USA

Tapani Yli-Mattila “Genetic Diversity and Phylogeny of *Fusarium avenaceum* and related species” Department of Biology, University of Turku, Turku, Finland

Antonio Moretti “Genetic specificity of a population from banana within *Fusarium verticillioides*” Institute of Sciences of Food Production (ISPA), National Research Council (CNR), Bari, Italy

Maria Teresa Gonzalez Jaen “Occurrence and variability of mycotoxigenic fungi associated with cereals in Spain” Dept. Genetica, Facultad de Biologia, Universidad Complutense de Madrid, Madrid, Spain.

Kenneth Ehrlich “Thoughts on the evolution of the aflatoxin gene cluster” USDA/ARS/SRRC, New Orleans, LA, USA

4:15-5:00 PM Individual discussions

5:00 PM DEPARTURE FOR BANQUET

Sun Ray Grill (MidCity)

3700 Orleans Avenue

New Orleans, LA

504-274-0091

<http://www.sunraygrill.com>

BANQUET

5:30 PM SOCIAL

7:00 PM Joan Bennett “The mycology of misery: the story of mycotoxins”
Tulane University, New Orleans, LA, USA

8:00 PM DINNER

JULY 06, 2005

8:30 AM GENOMICS OF MYCOTOXIGENIC FUNGI AND BIOSYNTHESIS OF TOXINS

CHAIR: Thomas E. Cleveland, USDA/ARS/SRRC, New Orleans, LA, USA

Jiujiang Yu “*Aspergillus flavus* EST and Microarray as tools in understanding aflatoxin biosynthesis” USDA/ARS/SRRC, New Orleans, USA

Gary A. Payne “The genome sequencing project for *Aspergillus flavus* and its implications for functional genomics” North Carolina State University, Raleigh, NC, USA

Alan Dobson “Ochratoxin A biosynthesis in *Aspergillus ochraceus*”
Microbiology Department, University College Cork, Cork, Ireland

Rolf Geisen “Genetic background of ochratoxin A production in *Penicillium*”
Federal Research Centre for Nutrition & Food Institute for Hygiene and Toxicology, Karlsruhe, Germany

10:15 AM BREAK

10:45 AM Laszlo F. Hornok and Cees Waalwijk “Transcript profile changes in a Mat-2 strain of *Fusarium verticillioides* (*Gibberella fujikuroi* MP-A)”
Agricultural Biotechnology Center, Godollo, Hungary and Plant Research International B.V. (PRIBV), Wageningen, The Netherlands

Cees Waalwijk “Synteny in toxigenic *Fusarium* species: the fumonisin gene cluster” Plant Research International, Wageningen, The Netherlands

Robert Proctor “Biosynthesis of *Fusarium* toxins and genomics of *Fusarium verticillioides*” USDA/ARS/NCAUR, Peoria, IL, USA

Nancy Keller “Exogenous and endogenous signals mediating sporulation and toxin production” University of Wisconsin - Madison, Madison, WI, USA

12:15 Noon WORKING LUNCH (1st Floor – Directors’ Conference Room)

1:15 -1:45 PM Anne Desjardins “Mycotoxin issues in the Developing World”
USDA/ARS/NCAUR, Peoria, IL, USA

2:30 PM GENOMICS (Continued) (Third Floor)

CHAIR: Antonio Logrieco, Institute of Sciences of Food Production (ISPA), National Research Council (CNR), Bari, Italy

Jeffrey Cary “Regulatory elements in aflatoxin biosynthesis”
USDA/ARS/SRRC, New Orleans, LA, USA

Massimo Reverberi “Oxidant/antioxidant balance in *Aspergillus parasiticus* affects aflatoxin biosynthesis” Department of Biology, University “La Sapienza”, Rome, Italy

Bruce Campbell “Gene targets for fungal and mycotoxin control”
USDA/ARS/WRRC, Albany, CA, USA

3:30 PM BREAK

4:00 PM _ Visit of SRRC labs (Optional)

5:00 PM ADJOURN

JULY 7, 2005

8:30 AM NOVEL METHODS FOR DETECTION OF TOXIGENIC FUNGI OR MYCOTOXINS

CHAIR: Corrado Fanelli, University “La Sapienza”, Rome, Italy

Giuseppina Mulé “Molecular detection and PCR assays for toxigenic fungi: overview of three EU funded projects” Institute of Sciences of Food Production (ISPA), National Research Council (CNR), Bari, Italy

Ludwig Niessen “Molecular detection of OTA producers” Lehrstuhl für Technische Mikrobiologie, Technische Universität München, Freising, Germany

Chris Maragos “Flourescence polarization for mycotoxin determination” USDA/ARS/NCAUR, Peoria, IL, USA

Haibo Yao “Hyperspectral-Imaging of contaminated commodities” Institute for Technology Development, Stennis Space Center, MS, USA

Sarah De Saeger “Novel development in rapid detection methods” Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium

10:15 AM BREAK

10:45 AM PREVENTION OF PREHARVEST TOXIN CONTAMINATION

CHAIR: Hamed Abbas, USDA/ARS/CG&PRU, Stoneville, MS, USA

Robert Brown “Proteomics to identify resistance factors in corn” USDA/ARS/SRRC, New Orleans, LA, USA

Paul Williams “Breeding for resistance in maize” USDA/ARS, Mississippi State, MS, USA

K. Rajasekaran “Genetic engineering to control preharvest aflatoxin contamination of cottonseeds” USDA/ARS/SRRC, New Orleans, LA, USA

Peggy Ozias-Akins “Genetic engineering of peanuts” University of Georgia, Tifton, GA, USA

12:15 PM WORKING LUNCH (1st Floor, Directors' Conference Room)

1:15-1:45 PM Richard Greene “Establishing international scientific cooperation”
USDA/ARS/Office of International Research Programs, Beltsville, MD,
USA

2:00 -2:30 PM (Third Floor)

Angelo Visconti “Information/Discussion on draft constitution of the
International Society for Mycotoxicology”

International Society for Mycotoxicology

International Society for Mycotoxicology (ISM) is being founded in 2005 and will be formally launched at the third conference of the World Mycotoxin Forum. The objectives of the Society are to promote research on mycotoxins and toxigenic fungi, thereby leading to prevention and reduction in exposure to mycotoxins, enhanced food safety and a greater public awareness of this discipline.

2:30 PM DISCUSSION SESSION

FACILITATORS:

Deepak Bhatnagar, USDA/ARS/SRRC, New Orleans, LA, USA

Angelo Visconti, Institute of Sciences of Food Production (ISPA),
National Research Council (CNR), Bari, Italy

- _ Research Areas for Collaboration
- _ Formalization of Concepts for Cooperative Projects
- _ Preparation of Outline for White Paper for the Meeting

4:30 PM CLOSING REMARKS

5:00 PM ADJOURN

7:00 PM _ **Reception at the Audubon Aquarium of the Americas**

<http://www.auduboninstitute.org/aoa>

**1 Canal Street
New Orleans, Louisiana**