

23rd International Feed Industry Symposium

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*All Symposium sessions take place at
the Lexington Convention Center (LCC)*

FUN RUN

A Symposium tradition, the Fun Run on Monday morning will take you on a scenic tour of downtown Lexington and the Transylvania University campus. Wear your running gear! Bus service to the route will be provided.

INTERNATIONAL DINNER

We invite all delegates to attend the International Dinner in the beautiful Bluegrass Ballroom at the Lexington Convention Center on Sunday evening. Reception starts at 6:30 pm with dinner immediately following.

ALLTECH FACILITY TOUR

Buses will depart frequently from the LCC to Alltech's Corporate Headquarters on Sunday. The tour will take approximately two and a half hours.

KENTUCKY HORSE PARK

On the way back from the Alltech facility, you will have the opportunity to visit Lexington's world-famous Kentucky Horse Park, site of the **2010 Alltech FEI World Equestrian Games**. Discounted admission fee to the Kentucky Horse park is \$12 per person.

KENTUCKY NIGHT

Wear your boots, belts, denim and a cowboy hat, if you have one, for a night of down home country/western music, great food and even better company!

SPOUSE/GUEST OUTING

If your spouse or guest in attendance can take advantage of Tuesday's opportunity for a VIP tour of Old Friends, a Kentucky retirement facility for thoroughbreds; a tour of the historic Henry Clay estate called Ashland, and a visit to the famous local Old Kentucky Chocolate factory. The cost is \$35, which includes admission fees and lunch. Please sign up for the tour at the Information Desk.

For information on any of these activities, please ask an Alltech representative or visit the Alltech Information Desk at the Lexington Convention Center.

Sunday, May 20

Registration	9:30 a.m. - 5:00 p.m.
Alltech Tours	10:00 a.m. - 2:30 p.m.
International Dinner	7:00 p.m.
(Bluegrass Ballroom at Lexington Convention Center)	

Monday, May 21

Fun Run	6:30 a.m.
Registration	7:00 a.m. - 9:00 a.m.
Opening	9:00 a.m. - 11:30 a.m.
Symposium sessions	1:00 p.m. - 4:30 p.m.
Kentucky Night buses depart from all hotels	6:00 p.m. - 6:30 p.m.

Tuesday, May 22

Symposium sessions	8:30 a.m. - 12:00 p.m.
Spouse/Guest Outing	8:30 a.m. - 4:30 p.m.
Poster Session	12:00 p.m. - 3:00 p.m.
Heritage Hall Prefunction Areas	
General Session	3:00 p.m. - 4:15 p.m.
Alltech's Lexington Brewing Company Tours	4:30 p.m. - 6:00 p.m.

Wednesday, May 23

Closing session	8:30 a.m. - 10:30 a.m.
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MON.

Opening

- 9:00-9:05** **Welcome and Introduction to the 2007 Symposium**
Karl Dawson, Director of Research, Alltech,
Nicholasville, KY, USA
- 9:05-9:25** **Official welcome to Lexington, Kentucky**
Home of the Bluegrass and the Alltech FEI World
Equestrian Games 2010
Mayor Jim Newberry, Lexington, KY, USA
- 9:30-10:10** **Fast Forward: The Challenge of the Future.**
How will we feed a hungry world and provide
energy requirements in an era of increasing
consumer demands and awareness?
T. Pearse Lyons, Alltech, Nicholasville,
KY, USA
- 10:15-10:50** **Medal of Excellence Presentation**
is mycotoxin threat integrated enough into
agricultural concerns
Recipients: Dr. Alexandros Yiannikouris and Dr.
Jean-Pierre Jouany, of L'Institut National de la
Recherche Agronomique (INRA), St. Genès
Champanelle, France
- 11:30-1:00** **BREAK FOR LUNCH**
(on your own)

Medal of Excellence Recipient



Alexandros Yiannikouris



Jean-Pierre Jouany

Dr. Alexandros Yiannikouris and Dr. Jean-Pierre Jouany

This year's recipients, Dr. Alexandros Yiannikouris and Dr. Jean-Pierre Jouany, of L'Institut National de la Recherche Agronomique (INRA), will present their work in modeling and designing strategies for eliminating mycotoxin risk.

1:00-1:05	Introduction: Chairs: John Thornton, Juan Tricarico	8:30-8:35	Introduction: Chairs: John Thornton, Juan Tricarico
1:05-1:15	Setting the stage: The global meat and milk markets Sarah Muirhead, Feedstuffs Magazine, Carol Stream, IL, USA	8:35-8:55	Finding strategies to fit future needs: Nitrogen and amino acid options for ruminants Alejandro Castillo, Alejandro R. Castillo, UC Cooperative Extension, Merced, CA, USA
1:20-1:40	Facing the diminishing corn supply: Dairy energy alternatives Michael Hutjens, University of Illinois, Urbana, IL, USA	9:00-9:20	Optigen® II: Theory, reality, and results Jay Johnston, Ritchie Feed & Seed Inc., Ottawa, ON, Canada
1:45-2:05	Precision feeding of lactating dairy cows: A role for Optigen® II in nitrogen supplementation William Chalupa, Global Dairy Consultancy Ltd., Holderness, NH, USA	9:25-9:45	Using Mycosorb® to address physiological changes induced by endophyte-infected tall fescue David Bohnert, Oregon State University, Burns, OR, USA
2:10-2:30	Optigen® II in the European market: One year's experience David Wilde, Alltech UK, Stamford, Lincolnshire, UK	9:50-10:10	A new paradigm for heifer nutrition: Cut manure output 20 to 40% A.J. Heinrichs, The Pennsylvania State University, University Park, PA, USA
2:30-3:00	BREAK	10:10-10:40	Break
3:00-3:20	The value of nucleotides in infant formulas: A way toward healthier calves? Chris Mateo, Rural Technologies, Inc., Brookings, SD, USA	10:40-11:00	You can lead a cow to water...but can you make her drink it? Water composition, intake and animal performance Charles Elrod, Springfield Farm Enterprises Inc., Newfield, NY, USA
3:25 – 3:45	Nutritional and management strategies for alleviating heat stress in dairy cattle Rosemarie Burgos Zimbelman, University of Arizona, Tucson, AZ, USA	11:05-11:25	Organic milk production: Growing from a fad into the future Clark Driftmire, Aurora Organic Dairy, Boulder, CO, USA
3:50 – 4:10	Selenium, Immune functions and cow health Xin Zhao, McGill University, Ste. Anne de Bellevue, Quebec, Canada	11:30-11:50	Turning down the heat: Causes and controls of aerobic deterioration of allage David Davies, Institute of Grassland and Environmental Research, Plas Gogerddan, Aberystwyth, Ceredigion, UK
4:15 – 4:35	Sel-Plex® vs inorganic selenium: Production, reproduction and immunity of lactating dairy cows in Florida and California William Thatcher, University of Florida, Gainesville, FL, USA	12:00-1:30	BREAK FOR LUNCH (on your own)
6:00	Buses leave for Kentucky Night	1:30-3:00	2007 Poster Session
		3:00-4:15	General Session (Refer to page 20 for details)

MON.

pig
nutritional sciences

TUES.



1:00-1:05 **Introduction**
Chairs: Jules Taylor-Pickard and Paul Groenewegen

1:05 -1:15 **Setting the stage**
Rod Smith, Feedstuffs Magazine, Carol Stream, IL, USA

1:20-1:40 **Understanding organic mineral uptake mechanisms: Experiments with Bioplex® Cu**
Scott Radcliffe, Purdue University, West Lafayette, IN, USA

1:45-2:05 **Bridging the post-weaning piglet growth gap: The NuPro® experience In the Asia Pacific region**
Darryl D'Souza, Alltech Biotechnology, Melbourne, VIC, Australia

2:10-2:30 **Post-weaning multi-systemic wasting syndrome in pigs: Why did it emerge?**
François Madec, AFSSA Ploufragan, Ploufragan, France

2:30-3:00 **BREAK**

3:05-3:25 **Pressure on mineral reserves: What's the best way to meet the needs of highly prolific sows?**
Don Mahan, The Ohio State University, Columbus, OH, USA

3:30-3:50 **Effects of feed-borne *Fusarium* mycotoxins on metabolism and reproduction in gestating and lactating sows: Response to Mycoorb®**
Trevor Smith, University of Guelph, Guelph, ON, Canada

3:55-4:15 **Defining organic mineral requirements for pigs**
Bruce Mullan, Agriculture Western Australia, Perth, WA, Australia

4:20 – 4:40 **Open Q&A / breakout**

6:00 **Buses leave for Kentucky Night**

8:30-8:35 **Introduction**
Chairs: Jules Taylor-Pickard and Paul Groenewegen

8:35-8:55 **Selenium metabolism, the glutathione peroxidase system and their interaction with some B vitamins in pigs**
Jacques Matte, Agriculture et Agroalimentaire Canada, Lennoxville, QC, Canada

9:00-9:20 **Nutritional approaches to maximize fertility in modern pig genotypes**
Paul Groenewegen, Alltech Canada, Guelph, ON, Canada

9:25-9:45 **Does dietary fiber change resistance to enteric disease?**
James E. Pettigrew, University of Illinois, Urbana, IL, USA

9:50-10:10 **Organic trace minerals for sows: The Brazilian experience**
Gustavo Lima, Embrapa Suínos e Aves, Concórdia, Santa Catarina, Brazil

10:15-10:45 **BREAK**

10:45-11:05 **Effective application of enzymes and microbes to enhance the nutritional value of pig feed ingredients: A case for liquid feeding**
C.F.M. de Lange, University of Guelph, Guelph, ON, Canada

11:10-11:30 **Producing pigs to comply with ever-increasing environmental restraints**
Dave Henman, QAF Meat Industries, Corowa, New South Wales, Australia

11:30-11:55 **Open Q&A / breakout**

12:00-12:20 **Panel Discussions**

12:20-1:30 **BREAK FOR LUNCH (on your own)**

1:30-3:00 **2007 Poster Session**

3:00-4:15 **General Session**
(Refer to page 20 for details)



1:00-1:05	Introduction Chairs: Aidan Connolly and Guilherme Minozzo	8:30-8:35	Introduction Chairs: Aidan Connolly and Scott Crow
1:05-1:15	Setting the stage: Challenges facing the world's poultry industries Simon Shane, Durham, NC, USA	8:35-8:55	EU clearance of Sel-Plex®: expanding the possibilities for new nutraceutical foods Peter Surai, Alltech (UK) Ltd., Stamford, Lincolnshire, UK
1:20-1:40	Breeder nutrition: A look at recent developments — challenging the status quo John Brake, North Carolina State University, Raleigh, NC, USA	9:00-9:20	The future: Veterinary and nutritional sciences working in concert. New training concepts involving postmortems and gut integrity Stephen R. Collett, University of Georgia, Athens, GA, USA
1:45-2:05	Physiological dynamics at the intestinal brush border Zehava Uni, Hebrew University, Tel Aviv, Israel	9:25-9:45	The health implications of broiler litter: Reducing <i>E. coli</i> in broiler litter with Bio-Mos® Ciro Ruiz-Feria, Texas A&M University, College Station, TX, USA
2:10-2:30	Improving prestarter diets for broilers: The role of nucleotides Fernando Rutz, Universidade Federal de Pelotas, Brazil	9:50-10:10	Control of coccidiosis and performance enhancement in poultry in a post-arsenical world Larry McDougald, University of Georgia, Athens, GA, USA
2:30-3:00	BREAK	10:15-10:45	BREAK
3:05-3:25	The relationship between trace mineral nutrition and high quality broiler meat Curtis Novak, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA	10:45-11:05	Bioplex® Zn: Redefining the zinc requirement of chicks during the starter phase James Pierce, Alltech-University of Kentucky Nutrition Research Alliance, Lexington, KY, USA
3:30-3:50	Omega-3 fatty acids in broiler breeder diets — <i>fad or future?</i> Athanasios Pappas, Scottish Agricultural College, Edinburgh, UK	11:10-11:30	Are you ready for the raw material of the future: Fiber! How microbes can work for us using Solid State Fermentation Mark Lyons, Alltech, Nicholasville, KY, USA
3:55-4:15	Feed and robust chickens: Insights from one of Europe's largest animal feed producing companies Loek de Lange, De Heus Feeds BV, The Netherlands	11:35-11:55	Sel-Plex® maintains small intestine integrity in Reovirus-infected broiler chickens Frank Edens, North Carolina State, Raleigh, NC, USA
4:15 — 4:30	Panel Discussion	12:00-12:20	Panel Discussions
6:00	Buses leave for Kentucky Night	12:20-1:30	BREAK FOR LUNCH (on your own)
		1:30-3:00	2007 Poster Session
		3:00-4:15	General Session (Refer to page 20 for details)

MON.
feed
quality, and regulation

TUES.



- 8:30-8:35 **Introduction**
Chairs: Steve Traylor and Monica Fantl
- 8:35-8:55 **Global overview of trademarks, claims and deceptive advertising**
Mark Honeycutt, Alltech, General Counsel, Nicholasville, KY, USA
- 9:00-9:20 **Alltech quality system: Developing a global plan**
Becky Timmons, Alltech, Director of Applications Research and Quality Assurance, Nicholasville, KY, USA
- 9:25-9:45 **Traceability: What's needed and what's coming?**
Robert Boyles, Feed Industry Consultant, St. Louis, MO, USA
- 9:50-10:10 **Update on GRAS determinations and notifications**
James Griffiths, Burdock Group, Vero Beach, FL, USA
- 10:15-10:45 **BREAK**
- 10:45-11:05 **EU food chain legislation: Restoring consumer confidence**
Elinor McCartney, Pen & Tec Consulting, Barcelona, Spain
- 11:10-11:30 **The FDA and AAFCO regulatory system: A possible model and lessons to be learned**
Steve Traylor, Alltech, Regulatory Technical Coordinator, Nicholasville, KY, USA
- 11:35-11:55 **Nanotechnology and nanotoxicology of food and feed ingredients**
George Burdock, Burdock Group, Vero Beach, FL, USA
- 12:00-1:30 **BREAK FOR LUNCH (on your own)**
- 1:30-3:00 **2007 Poster Session**
- 3:00-4:15 **General Session**
(Refer to page 20 for details)

equine
nutrition and health

TUES.



- 1:00-1:05 **Introduction**
Chairs: Tyler Bramble and Steve Elliott
- 1:05-1:15 **Setting the stage: A quick look at the equine sector**
Steve Elliott, Alltech, Nicholasville, KY, USA
- 1:20-1:40 **Nutrition and exercise: Working together to build strong bones**
Brian Nielsen, Michigan State University, East Lansing, Michigan, USA
- 1:45-2:05 **The polytrack: Toward the safest possible racing surface**
Nick Nicholson, Keeneland Association, Inc., Lexington, Kentucky, USA
- 2:10-2:30 **Horses remain firmly in the saddle in US culture**
Domenick Castaldo, Kishwaukee College, Malta, IL, USA
- 2:30-3:00 **BREAK**
- 3:05-3:25 **From the chariot races to the FEI Games: Evolution of equestrian sport**
Michael Stone, Fédération Equestre Internationale, Lausanne, Switzerland
- 3:30-3:50 **Sponsoring the 2010 FEI Games: A vision for the future**
Catherine Keogh, Alltech Ireland, Dunboyne, Co. Meath, Ireland
- 3:55-4:15 **Off the track, off the truck, and out of luck: Working with 'problem' mares**
Michelle LeBlanc, Rood & Riddle Equine Hospital, Lexington, KY, USA
- 4:20-4:40 **Open Q&A / breakout**
- 6:00 **Buses leave for Kentucky Night**

- 8:30-8:35 **Introduction**
Chairs: Tyler Bramble and Steve Elliott
- 8:35-8:55 **Nucleotides: Essential Ingredients in human infant formulas: A role in foal milk replacer?**
Chris Mateo, Rural Technologies, Inc., Brookings, SD, USA
- 9:00-9:20 **New directions in equine study programs: Changes for university animal science departments**
L. Wayne Greene, Auburn University, Auburn, AL, USA
- 9:25-9:45 **Tired to exhaustion: Feeding management after an endurance ride**
Steven Duran, Performance Horse Nutrition, Weiser, ID, USA
- 9:45-10:00 **Open discussion, Q & A**
- 10:00-10:30 **BREAK**
- 10:35-10:55 **Antioxidant supplementation of performance horses: Protection against oxidative stress**
Paul Siciliano, North Carolina State University, Raleigh, NC, USA
- 11:00-11:20 **The genetics of equine performance: Toward science-based breeding and selection**
Ernest Bailey, University of Kentucky, Lexington, KY, USA
- 11:20-11:40 **Open Q&A / breakout**
- 12:00-1:30 **BREAK FOR LUNCH (on your own)**
- 1:30-3:00 **2007 Poster Session**
- 3:00-4:15 **General Session**
(Refer to page 20 for details)

MON.

pets
diet quality, safety & health

TUES.



1:00-1:05 **Introduction- Chairs: Peter Spring and Juan Gomez**

1:05-1:15 **Setting the Stage**
Aidan Connolly, Alltech Ireland, Dunboyne, Co. Meath, Ireland

1:15-1:35 **Convenience, enjoyment, and health: Parallel between marketing human and pet foods**
Uli Pesi, Pesi Research & Consultant GmbH, Bremen, Germany

1:40-2:00 **Cancer: What we have learned from humans and the applications for pets. Models for prevention**
Barbara Kitchell, Michigan State University, East Lansing, MI, USA

2:05-2:25 **GIT Integrity: Balancing gut microbial populations and protecting against GI dysfunction through nutrition**
Petra Hellweg, Institut für Tierernährung, Berlin, Germany

2:30-3:00 **BREAK**

3:05-3:25 **How can you manage the risk of unwanted compounds such as melamine and toxins: Best practices to safeguard your products**
Steve Traylor, Alltech Inc., Nicholasville, KY, USA

3:30-3:50 **Crisis management or reputation enhancement? – In the eye of the beholder**
Steve Bourne, Alltech (UK) Ltd., Stamford, Lincolnshire, UK

3:50-4:00 **Breakout Sessions**

4:05-4:30 **Panel Discussions**

6:00 **Buses leave for Kentucky Night**

8:30-8:35 **Introduction
Chairs: Peter Spring and Juan Gomez**

8:35-8:55 **Food and behavior: Does good food make a good dog? What properties are important?**
Wouter Hendricks, University of Wageningen, Wageningen, The Netherlands

9:00-9:20 **What can wild birds and fish tell us about selenium requirements of farmed species?**
Peter Surai, Alltech (UK) Ltd., Stamford, Lincolnshire, UK

9:25-9:45 **Companion birds: Nutrition – art or science?**
Guy Werquin, Versele-Laga, Deinze, Belgium

9:50-10:20 **BREAK**

10:25-10:45 **Panel evaluations: How they are used to evaluate palatability and 'healthiness' of foods. Getting at the truth**
Christine Iben, Veterinarmedizinische Universitaet, Wien, Austria

10:50-11:10 **Obesity: A problem for pets as much as for humans. Can gene expression help us understand how to control it?**
Kelly Swanson, University of Illinois, Urbana, IL, USA

11:15-11:35 **Breakout Session**

11:40-12:00 **Panel Discussions**

12:00-1:30 **Break for lunch (on your own)**

12:00-3:00 **2007 Poster Session**

3:00-4:30 **General Session
(Refer to page 20 for details)**



1:00-1:05	Introduction Chairs: John Sweetman and Jorge Arias		
1:05-1:15	Setting the stage: A forward focus for Alltech John Sweetman, Alltech Inc., Lixouri, Cephalonia, Greece	8:30-8:35	Introduction Chairs: John Sweetman and Jorge Arias
1:20-1:40	The global aquaculture market in 2007: Opportunities, challenges James Tidwell, Kentucky State University, Frankfort, KY, USA	8:35-8:55	Comparative mineral nutrition: Why the differences among species? Santosh P. Lall, Institute for Marine Biosciences, Halifax, Nova Scotia, Canada
1:45-2:05	Changing technologies, ingredients and formulations to replace fish meal in salmonid diets: Strategies for the future Frederic T. Barrows, USDA / Agricultural Research Service, Hagerman, ID, USA	9:00-9:20	Nutritional strategies for manipulating gene expression in fish: Where will this take us? Ewen McLean, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA
2:10-2:30	Designing organic aquaculture systems: Can we integrate microbial products and by-products? Steven R. Craig, Virginia/Maryland Regional College of Veterinary Medicine; Virginia Polytechnic Institute and State University, Blacksburg, VA, USA	9:25-9:45	Recognizing the reality of the aquaculture mycotoxin problem: Searching for an effective solution Dan Fegan, Alltech Inc., Bangkok, Thailand
2:30-3:00	BREAK	9:50-10:10	Causes and corrections for off-flavour problems: A case study Mario Roman, Alltech Chile, Santiago, Chile
3:05-3:25	Formulating with NuPro®: Can we reduce reliance on fish meal in salmonid diets? Stephen Gunther, Empresas Aquachile S.A., Puerto Montt, Chile	10:15-10:45	BREAK
3:30-3:50	Selenium and fish nutrition John Halver, NAS, University of Washington, Seattle, WA, USA	10:50-11:05	Maintaining gut health in aqua species: The key to productivity Colm Moran, Alltech Biotechnology Centre, Dunboyne, Co. Meath, Ireland
3:55-4:15	Advances in mineral nutrition in salmonids: Assessment of organic and inorganic dietary zinc and selenium bioavailability in practical rainbow trout diets Simon J. Davies, Marine Institute, University of Plymouth, Devon, UK	11:10-11:30	Response to dietary Bio-Moe®: Feed utilization, growth, immune parameters and disease resistance of sea bass Izquierdo, Marisol, Grupo de Investigacion en Acuicultura, ULPGC & ICCM, Las Palmas de Gran Canaria, Spain
4:20-4:40	Finding the optimal zinc requirement of Mediterranean sea bass using Bioplex® Zn: Impact on health status Ioannis Nengas, Hellenic Research for Marine Research, Athens, Greece	11:35-11:55	Value added products from biorefineries Mark Coffman, Alltech, Nicholasville, KY, USA
6:00	Buses leave for Kentucky Night	12:00-1:30	BREAK FOR LUNCH (on your own)
		1:30-3:00	2007 Poster Session
		3:00-4:15	General Session (Refer to page 20 for details)

TUES.

general sessions

WED.

general sessions

1:30-3:00

2008 Poster Session

Researchers from across the globe will be on hand to present results of a wide range of studies on topics central to modern animal production and nutrition:

- Novel ingredients & enzyme applications
- Roles for, and responses to, organic minerals
- Nutrition & disease prevention
- Environmental nutrition
- Control of rumen & cecal function
- Feed ingredient preservation
- Natural plant growth & disease control
- Aquaculture
- Field studies

Plenary Sessions

3:00-3:05

Chairman - Mark Lyons, Alltech

3:05-3:35

Selenium and the HIV pandemic: A role in viral evolution, virulence and the pathogenesis of AIDS
Kate Jacques, Alltech Inc., Nicholasville, KY, USA

3:40-4:10

Nutrigenomics: Feeding the genes for fertility
Ronan Power, Alltech Inc., Nicholasville, KY, USA

4:15-4:30

2nd Annual Global Young Animal Scientist Award
What was launched in 2006 with over 100 contenders has grown to over 300 contestants from around the world. The field has been narrowed to the final four. The award will be presented to the winning contestant.

8:30-8:35

Introduction by T. Pearse Lyons

8:35-9:00

Branding within the food chain
Kevin Murphy, Founder and Owner
Food-Chain Communications

9:05-9:30

Science through the looking glass: Our industry, our lives, our destiny. The three key issues: Animal health, raw material costs, mycotoxins. Creating our future by using the scientific tools of tomorrow, today. An amazing array in our nutritional toolbox. A new nutritionist emerges.
Karl Dawson, Alltech Inc., Nicholasville, KY, USA

9:35-10:00

Closing remarks
T. Pearse Lyons, President, Alltech Inc.,
Nicholasville, KY, USA

