

25th International Alltech Animal Health and Nutrition Symposium

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Translation into Spanish, Portuguese and Russian available in select sessions. Equipment is available at the information desk.

The Alltech Symposium is recognized by ARPAS and AAVSB. Members are able to earn CEUs. Forms available at the information desk.

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

EXTRA

Fun Activities

ALLTECH FACILITY TOUR

Buses to Alltech's Corporate Headquarters will depart on Sunday beginning at 9:30 am from the Lexington Convention Center. The tour will take approximately two to three hours. The tour will include Alltech's facility and you will have the opportunity to visit Lexington's world-famous Kentucky Horse Park and experience first hand the excitement of the build-up to the 2010 Alltech FEI World Equestrian Games.

FUN RUN

A Symposium tradition, the Fun Run at 6:30 am on Monday morning will take you on a scenic tour of downtown Lexington and the Transylvania University campus. Wear your running gear!

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.

KENTUCKY NIGHT

Buses will begin departing from your hotel at 6:00 pm for our Monday evening social event at Alltech's International Training Center in Nicholasville. 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!

MEDAL OF EXCELLENCE DINNERS

Food for Thought - Join one of the contentious-topic dinners, which promise to be forums for lively discussions. One topic area will be the focus at each of the after-dinner discussions, and you are welcome to participate in a topic of your choosing. If you have not already done so, you can make your reservation at the Symposium Registration desk.

SPOUSE/GUEST OUTING

If your spouse or guest is in attendance, they are invited to take advantage of Tuesday's opportunity for tours of Three Chimneys Farm where some of the world's most famous thoroughbreds including former Kentucky Derby Winners Big Brown and Smarty Jones stand at stud, the spectacular Center for Kentucky History and the world renowned Kentucky Equine Sports Medicine & Rehabilitation Center. Please sign up for the tour at the Symposium Registration desk.

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

TRANSPORTATION FROM MARRIOTT

Shuttle service between the Marriott and LCC is available between 7:00 a.m. and 5:00 p.m. each day.

SYMPOSIUM

Overview

Sunday, May 17

Registration..... 8:30 a.m. - 5:00 p.m.
Alltech Tours 9:30 a.m. - 2:00 p.m.
International Dinner (reception begins at 6:30 pm)..... 7:00 p.m.
(Bluegrass Ballroom at Lexington Convention Center,

Monday, May 18

Fun Run..... 6:30 a.m.
(Walk to Transylvania from the Downtown Lexington Hotel and the Hyatt)
Registration..... 7:00 a.m. - 9:00 a.m.
Opening Session..... 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 19

Symposium Sessions..... 8:00 a.m. - 12:00 p.m.
Spouse/Guest Outing 8:30 a.m. - 4:30 p.m.
Reflecting on Muhammad Ali's humanitarian efforts, his life and legacy.
Launching the Alltech - Muhammad Ali Center Global Education and Charitable Fund 12:00 p.m. - 12:20 p.m.
Research Poster Discussion Luncheon..... 12:30 p.m. - 2:00 p.m.
Alltech Young Animal Scientist Award 2:15 p.m. - 2:30 p.m.
A Roundtable Debate: Sustainability Topics from Environmental Concerns to Raw Material Traceability..... 2:30 p.m. - 4:30 p.m.
Discussion Dinners 7:30 p.m. - 9:30 p.m.
(Lexington Convention Center and Hyatt)
Buses depart for dinners from all outlying hotels at 7:00 p.m.

Wednesday, May 20

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

MONDAY

Opening

- 9:00-9:05** **Introduction and welcome to the 25th Alltech International Animal Health and Nutrition Symposium**
Karl Dawson, Alltech, Kentucky, USA
- 9:10-10:00** **Building High Performance Teams and Unleashing their Hidden Potential — From Selection to Retention**
Declan Coyle, Andec Communications - Media, Co. Meath, Ireland
- 10:05-10:40** **The 2009 Alltech Bioscience Medal of Excellence –**
For almost two decades the feed industry's prestigious annual scientific excellence prize has been awarded to a scientist for making significant contributions to the area of application of natural biosciences to the food and feed industries. This year we change and award it to a man who has made traceability and sustainability a key component to our survival: David Byrne, former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations.
- 10:45-11:30** **Sustaining a Business in Turbulent Times — How a Crisis can Bring Out the Best and the Worst in a Company**
Pearse Lyons, Alltech, Kentucky, USA

2009

Medal of Excellence Recipient



David Byrne

Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

Dr. David Byrne is this year's recipient of the Bioscience Medal of Excellence award in recognition of his leadership. At a time of crisis during the mad cow debacle of the 90's, David Byrne played a central role in demonstrating leadership as he restored consumer confidence into the food chain for 400 million people.

MONDAY

dairy nutrition and health

- 1:00-1:05 Introduction**
Chairs: Patrick Charlton and Sylvie Andrieu
- 1:05-1:25 Sustainable dairy production: Future goals for the dairy industry**
M. Hutjens, University of Illinois, Illinois, USA
- 1:30-1:50 Staying in business: Shaping short-term strategies and long-term goals**
D. Darr, Dairy Farmers of America, Missouri, USA
- 1:55-2:15 The development of dairy replacement heifers, the cornerstone of sustainable dairy production**
A. Bach, IRTA, Barcelona, Spain

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50 BREAK**
- 2:55-3:15 Protecting animal health and product quality: Do we have solutions for the salmonella problem in dairy cattle?**
A. Berge, Berge Veterinary Consulting, Oetingen, Belgium
- 3:20-3:40 30 years of research: How can Yea-Sacc[®] support sustainable milk production as we focus on efficiency?**
J. Tricarico, Alltech, Kentucky, USA

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
Damien McLoughlin, University College Dublin, Dublin, Ireland

- 3:45-4:05 Questions & Answers:**
A brief discussion with the speakers
- 6:00 Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05 Introduction:**
Chairs: Patrick Charlton and Sylvie Andrieu
- 8:05-8:25 Building sustainable dairy production through optimizing nitrogen utilization and decreasing**
V. Ishler, Penn State University, Pennsylvania, USA
- 8:30-8:50 An economic case study: Using Optigen[®] controlled-release urea in commercial dairy herd diets**
R. Shaver, University of Wisconsin, Wisconsin, USA
- 8:55-9:15 The dairy farm mineral balance sheet: Raising income while lowering environmental impact**
A. Castillo, University of California Davis, California, USA

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50 BREAK**
- 9:55-10:15 Mineral form matters! Performance, health, fertility and environmental impact**
L. Sinclair, Harper Adams University College, Shropshire, UK
- 10:20-10:40 Can we quantify health? Finding biomarkers for mycotoxin damage. How the silent killer can be controlled through research**
J. Fink-Gremmels, Utrecht University, Utrecht, Netherlands
- 10:45-11:05 Stopping mycotoxin damage before it begins: How do adsorbents really work?**
A. Yiannikouris, Alltech, Kentucky, USA

Special 5 Minute Business Bookend

Motivating your team in a time of crisis
Declan Coyle, Andec Communications – Media, Dublin, Ireland

- 11:10-11:30 Questions & Answers: Wrap Up**
A brief discussion with the speakers
- 12:00-12:20 Reflecting on Muhammad Ali's humanitarian efforts, his life and legacy. Launching the Alltech - Muhammad Ali Center Global Education and Charitable Fund**
Lonnice and Muhammad Ali
Lexington Convention Center – Heritage Hall West

MONDAY

beef nutrition and health

- 1:00-1:05** **Introduction:**
Chairs: Ty Yeast and Steve Elliott
- 1:05-1:25** **Building sustainable beef production:
How will we address the environmental and
management challenges?**
M. Galyean, Texas Tech University, Texas, USA
- 1:30-1:50** **Staying in business for the long haul:
Using genomics and growth enhancing
technologies for maximum efficacy —
Breeding the cattle of the future**
M. Engler, Cactus Feeders, Texas, USA
- 1:55-2:15** **Genomics: A new tool for the 21st century feedlot.
Will it be essential to be sustainable?**
L. Marquess, Quantum Genetics, Saskatchewan, Canada

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50** **BREAK**
- 2:55-3:15** **A genetic advantage: Improving the reproductive
efficiency of the beef cow herd**
L. Anderson, University of Kentucky, Kentucky, USA
- 3:20-3:40** **Selenium supplementation and safety —
Form determines toxicity — Lessons to be learned
from recent events**
P. Davis, Tennessee Farmers Cooperative, Tennessee, USA

Special 5 Minute Business Bookend

**How a company can gain strategic advantage from having a sustainability
policy** Damien McLoughlin, University College Dublin, Dublin, Ireland

- 3:45-4:05** **Questions & Answers:
A brief discussion with the speakers**
- 6:00** **Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05** **Introduction:**
Chairs: Ty Yeast and Steve Elliott
- 8:05-8:25** **“Natural” feeding programs: Niche market or one
dimension of sustainability?**
S. Timmermans, Horizon Beef, Iowa, USA
- 8:30-8:50** **Focusing nutrition on animal health: Can novel
anti-infective agents support sustainability goals?**
C. Moran, Alltech, Co. Meath, Ireland
- 8:55-9:15** **Role of by-products in feedlot diets for
sustainable agriculture**
A. Stateler, Hubbard Feeds Inc., Nebraska, USA

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and
Consumer Protection and World Health Organization Special Envoy on the Revision of
the International Health Regulations

- 9:20-9:50** **BREAK**
- 9:55-10:15** **NRC nitrogen requirements for beef cattle: A starting
point for sustainable beef production systems**
E. Vanzant, University of Kentucky, Kentucky, USA
- 10:20-10:40** **Watching costs and environmental impact: Using Optigen[®]
to meet nitrogen requirements and minimize waste**
J. Tricarico, Alltech, Kentucky, USA
- 10:45-11:05** **Educating today’s consumers: Why “fiction”
becomes “fact” — How to get our messages out**
Trent Loos, Loos Tales, Nebraska, USA

Special 5 Minute Business Bookend

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- 12:00-12:20** **Reflecting on Muhammad Ali’s humanitarian efforts, his
life and legacy. Launching the Alltech - Muhammad Ali
Center Global Education and Charitable Fund**
Lonnie and Muhammad Ali
Lexington Convention Center – Heritage Hall West

MONDAY

pig nutrition and health

- 1:00-1:05 Introduction**
Chairs: Jules Taylor-Pickard and Paul Groenewegen
- 1:05-1:25 Research to promote sustainable pork production: What do we need to know?**
J. Pettigrew, University of Illinois, Illinois, USA
- 1:30-1:50 On the business end: Strategies for a sustainable future**
T. Clemens, Clemens Food Group, Pennsylvania, USA
- 1:55-2:15 Getting more nutrients out of ingredients in grow-finish diets using solid state fermentation technology. Cellulose — not grain — the new raw material**
R. Teuber and J. Sporke, Agrícola Don Pollo Ltda., Santiago, Chile

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50 BREAK**
- 2:55-3:15 Frequently asked questions for now and the future: 'Can I lower costs without losing performance?'**
N. Williams, PIC North America, Tennessee, USA
- 3:20-3:40 Robust genetic selection and swine health**
M. Engle, PIC North America, Tennessee, USA
- 3:45-4:05 Pigs with PRRS - Can immunomodulation by Bio-Mos® reduce impact of PRRS?**
M. T. Che, University of Illinois, Illinois, USA

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
Damien McLoughlin, University College Dublin, Dublin, Ireland

- 6:00 Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05 Introduction**
Chairs: Jules Taylor-Pickard and Paul Groenewegen
- 8:05-8:25 Basics of monitoring and controlling salmonella in the pork chain**
T. Blaha, Hannover University of Veterinary Medicine, Germany
- 8:30-8:50 Jump-starting piglet health: Bio-Mos® improves colostrum production of sows and survival of piglets**
J. Le Dividich, INRA St. Gilles, France
- 8:55-9:15 New protein source, wean-to-finish economics: Finding where the functional protein NuPro® fits and saves**
G. Gourley, Swine Graphics Ent., Iowa, USA

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50 BREAK**
- 9:55-10:15 Reduce, Reuse, Recycle: Converting pig manure to light and heat — An idea whose time has come**
W. Henry, Rektify Limited, Northern Ireland
- 10:20-10:40 Boosting fertility: The impact of organic minerals — Can we achieve 30+ pigs per sow**
B. Close, Close Consultancy, Berkshire, UK
- 10:45-11:05 Nutrition at the cellular level: What cells do to conserve minerals and how minerals should be fed**
G. Hill, Michigan State University, Michigan, USA

Special 5 Minute Business Bookend

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Lonnie and Muhammad Ali
Lexington Convention Center — Heritage Hall West

MONDAY

poultry nutrition and health

- 1:00-1:05 Introduction**
Chairs: James Pierce and Nick Adams
- 1:05-1:25 Reshaping education and research to promote a sustainable future for poultry production**
P. Ferket, North Carolina State University, North Carolina, USA
- 1:30-1:50 Staying in business: Long term strategies and short term goals**
A. Sacranie, Alltech, United Kingdom
- 1:55-2:15 Practical pathogen control: Present and future — from viruses to bacteria**
D. Wages, North Carolina State University, North Carolina, USA

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50 BREAK**
- 2:55-3:15 Focus on food safety: Reducing salmonella using novel in-feed anti-infective agents**
C. Moran, Alltech, Co. Meath, Ireland
- 3:20-3:40 Immunomodulation vs. immune stimulation: Are we ready to formulate for maximum health?**
B. Humphrey, California Polytechnic State University, California, USA
- 3:45-4:05 Can we control the poor grain quality syndrome in poultry? What role does mycotoxins play**
E. Santin, Federal University of Paraná, PR, Brazil

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
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- 6:00 Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05 Introduction**
Chairs: James Pierce and Nick Adams
- 8:05-8:25 A geneticist's perspective: What are the traits that further sustainable production?**
N. O'Sullivan, Hy-Line International, Iowa, USA
- 8:30-8:50 Trace minerals - Improvements in egg quality**
S. Scheideler, University of Nebraska, Nebraska, USA
- 8:55-9:15 The decline in quality of the shells of breeder and consumer eggs. How do we reverse the trend?**
S. Solomon, Vigonac, Brantome, France

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50 BREAK**
- 9:55-10:15 The product quality goal: Can dietary antioxidants stabilize the omega-3 PUFA in enriched chicken meat and eggs during cooking?**
R. Renema, University of Alberta, Alberta, Canada
- 10:20-10:40 Solid state fermentation: Lifting limitations on ingredient digestion — Cellulose the new raw material. 90% of the energy or grain yet only 15% of the cost.**
B. Hoskins, Alltech, Kentucky, USA
- 10:45-11:05 Use of enzyme supplements to conserve feed resources: Promoting sustainability, profitability and benefit to consumers**
S. Shane, North Carolina State University, (emeritus), North Carolina, USA

Special 5 Minute Business Bookend

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MONDAY

feed quality and regulation

- 1:00-1:05 Introduction**
Chairs: Steve Traylor and Tanya Graf
- 1:05-1:25 Sustainability from the EU regulatory perspective: What are the threats?**
A. Doring, European Feed Manufacturers' Federation, Brussels, Belgium
- 1:30-1:50 Putting sustainability into practical terms in the Netherlands — Can animal agriculture be changed on the farm**
R. Herbes, Food and Consumer Product Safety Authority, The Hague, Netherlands
- 1:55-2:15 Organic food and farming systems — Environmental, economic, health, and societal threats to sustainability or influencing**
J. Riddle, University of Minnesota, Minnesota, USA

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50 BREAK**
- 2:55-3:15 What can organic agriculture contribute to sustainability?**
D. DeCou, OMRI Listed, Oregon, USA
- 3:20-3:40 Developing sustainable products and programs at Alltech: Helping customers navigate new regulatory threats**
T. Graf, Alltech, Kentucky, USA

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
Damien McLoughlin, University College Dublin, Dublin, Ireland

- 3:45-4:05 Questions & Answers: A brief discussion with the speakers**
- 6:00 Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05 Introduction**
Chairs: Steve Traylor and Tanya Graf
- 8:05-8:25 Focusing on survivability: Traceability, business and regulatory realities**
Comments from David Byrne, Frank Bradley and Damien McLoughlin
- 8:30-8:50 Moving new products and ingredients into the EU marketplace: Does the process work**
C. Roncancio Pena, European Food Safety Authority, Parma, Italy
- 8:55-9:15 Novel ingredients in the US marketplace: Can we change the regulatory landscape**
J. Kersey, American Feed Industry Association, Virginia, USA

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50 BREAK**
- 9:55-10:15 Using trace minerals in animal feeds — Regulatory trends and quality challenges**
E. McCartney, Pen & Tec Consulting, Barcelona, Spain
- 10:20-10:40 Q+ : Protecting our business by developing a program for quality assured minerals**
B. Timmons, Alltech, Kentucky, USA

Special 5 Minute Business Bookend

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Lonnie and Muhammad Ali
Lexington Convention Center — Heritage Hall West

equine nutrition and health

- 1:00-1:05 Introduction**
Chairs: Tyler Bramble and Adam Burnsed
- 1:05-1:25 Developing equine nutrition: New achievements and prospects**
W. Martin-Rosset, INRA, Champanelle, France
- 1:30-1:50 Feeding special needs horses: From metabolic problems to geriatric issues - What's new?**
S. Duren, Performance Horse Nutrition, Idaho, USA
- 1:55-2:15 Carbohydrates vs. fats: Fitting dietary energy form to function**
B. McIntosh, University of Tennessee, Tennessee, USA

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

- 2:20-2:50 BREAK**
- 2:55-3:15 The critical challenge: Has modern feed technology improved feeding practices in confined horses?**
B. Schurg, University of Arizona, Arizona, USA
- 3:20-3:40 Targeting phosphorus : Using solid state fermentation technologies to improve digestion, reduce inorganic P needs**
C. Dunnett, Independent Equine Nutrition, Suffolk, UK
- 3:45-4:05 Controlling feed costs without cutting corners**
B. Vandergrift, EquiVision Inc., Kentucky, USA

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
Damien McLoughlin, University College Dublin, Dublin, Ireland

- 6:00 Buses leave for Kentucky Night**

TUESDAY



- 8:00-8:05 Introduction**
Chairs: Tyler Bramble and Adam Burnsed
- 8:05-8:25 Reaching across the fence: Integrating nutrition and veterinary goals**
T. Stephens, University of Florida, Florida, USA
- 8:30-8:50 Focusing nutrition on health and reproductive problems in horses: Developing practical applications**
M. LeBlanc, Rood and Riddle, Kentucky, USA
- 8:55-9:15 Important minerals matter: Do horses need more dietary selenium?**
M. Dunnett, Independent Equine Nutrition, Suffolk, UK

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50 BREAK**
- 9:55-10:15 How do you create a global brand through global activation – The Alltech FEI World Equestrian Games**
C. Keogh, Alltech, Co. Meath, Ireland
- 10:20-10:35 Looking after all the Queen's Horses - Three shows a year culminating at the 2009 Alltech European Equestrian Championships**
S. Brooks-Ward, The HPower Group, Berkshire, UK
- 10:40-11:00 Building collaborative partnerships that lead to increased market share — What will the future bring?**
J. Crowley, Lakeland Animal Nutrition, Florida, USA
- 11:05-11:30 Questions & Answers: Wrap Up**
A brief discussion with the speakers

Special 5 Minute Business Bookend

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MONDAY

aquaculture nutrition and health

- 1:00-1:05** **Introduction**
Chairs: John Sweetman and Jorge Arias
- 1:05-1:25** **Achieving sustainable aquaculture: What key issues must industry and academia address?**
G. Chamberlain, Global Aquaculture Alliance, Missouri, USA
- 1:30-1:50** **Sustainability and profitability: What are the practical approaches for the future?**
D. Jory, Global Aquaculture Alliance, Missouri, USA
- 1:55-2:15** **Use of new tools: What can nutrigenomics tell us about effects of dietary selenium needs?**
L. Puskas, Hungarian Academy of Sciences, Budapest, Hungary

Special 5 Minute Business Bookend

Using corporate social responsibility as a source of competitive advantage
Frank Bradley, University College Dublin, Dublin, Ireland

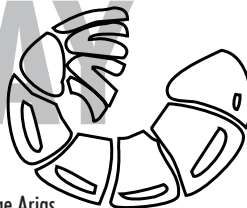
- 2:20-2:50** **BREAK**
- 2:55-3:15** **Selenium supplementation of practical trout diets: Addressing effects on health and implications of husbandry related stress**
S. Rider, The University of Plymouth, Plymouth, UK
- 3:20-3:40** **Improving reproductive performance of Rainbow Trout broodstock: Response to Sel-Plex[®] organic selenium**
F. Estay, Huililco Ltda., Pucon, Chile
- 3:45-4:05** **Making sustainable aquatic feeds: Developing short term strategies for long term goals**
D. Sanchez, Alicorp SAA, Peru

Special 5 Minute Business Bookend

How a company can gain strategic advantage from having a sustainability policy
Damien McLoughlin, University College Dublin, Dublin, Ireland

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

TUESDAY



- 8:00-8:05** **Introduction**
Chairs: John Sweetman and Jorge Arias
- 8:05-8:25** **Novel ingredients for shrimp diets: Can we avoid the protein trap?**
P. Intriago, Shells and Fish, Florida, USA
- 8:30-8:50** **Making marine diets sustainable and cost efficient: Are there options for replacing fish meal**
I. Nengas, Hellenic Centre for Marine Research, Athens, Greece
- 8:55-9:15** **Bio-Mos[®] effects on growth and survival of channel catfish challenged with *Edwardsiella ictaluri***
B. Peterson, National Warmwater Aquaculture Center (USDA/ARS), Mississippi, USA

Special 5 Minute Business Bookend

Focus on traceability David Byrne, Former EU Commissioner of for Health and Consumer Protection and World Health Organization Special Envoy on the Revision of the International Health Regulations

- 9:20-9:50** **BREAK**
- 9:55-10:15** **New approaches for improving resistance to bacterial infection in juvenile sea bass: Bio-Mos[®], mucus production and immune response**
M. Izquierdo, Grupo de Investigacion en Acuicultura, Las Palmas de Gran Canaria, Spain
- 10:20-10:40** **Recirculating aquaculture: The world's largest inland fishery. Is this the future of seafood production**
W. Martin, Jr., Blue Ridge Aquaculture, Virginia, USA
- 10:45-11:05** **Developing sustainable best practices: Lice control in salmon culture using Aquate[®] SPMP**
C. Wallace, Marine Harvest Limited, Scotland, UK; and J. Sweetman, Ecomarine Ltd., Cephalonia, Greece

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- 12:00-12:20** **Reflecting on Muhammad Ali's humanitarian efforts, his life and legacy. Launching the Alltech - Muhammad Ali Center Global Education and Charitable Fund**
Lonnie and Muhammad Ali
Lexington Convention Center – Heritage Hall West

TUESDAY

afternoon general session

12:00-12:20 Reflecting on Muhammad Ali's humanitarian efforts, his life and legacy
Launching the Alltech - Muhammad Ali Center Global Education and Charitable Fund
Lonnie and Muhammad Ali, Muhammad Ali Center, Louisville, Kentucky, USA

12:30-2:00 Poster Discussion Luncheon
Lexington Convention Center – Heritage Hall West
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.

2:15-2:30 Young Scientist Award - Embracing education to create our own destiny: Our youth are our future
2000 students from around the world compete to become the young scientist of the year and in doing so they bring new and fresh ideas.
Inge Russell, Alltech, Ontario, Canada

2:30-4:30 Sustainability - For realists or for dreamers?
A Roundtable Debate: Sustainability Topics from Environmental Concerns to Raw Material Traceability
Join leaders from academia, corporation and foundation as they discuss the future of sustainability in agriculture

Moderator:
Aidan Connolly, Vice President, Alltech

Panelists:
Michael Boehlje, Professor, Dept. of Agricultural Economics and the Center for Food and Agricultural Business, Purdue University
Lutz Goedde, Deputy Director, Agricultural Development, Bill and Melinda Gates Foundation
Philip Wilkinson Order of the British Empire, Executive Director, 2 Sisters Food Group

7:30-9:30 Medal of Excellence Discussion Dinners
Lexington Convention Center and Hyatt
(Buses depart from all outlying hotels at 7:00 p.m.)

WEDNESDAY

morning general session

8:30-8:35 Introduction
Pearse Lyons, Alltech, Kentucky, USA

8:40-9:45 The changing agriculture paradigm: What will you need to quickly adopt the technological innovations that will make animal agriculture sustainable?

The topics:

- Environmental threats to sustainability
- Quality issues that influence sustainability
- Developing processes that drive sustainability
- Embracing innovations that will drive sustainability
- Improving community health to drive sustainability
- Positioning your business for sustainability

Speakers:
Dr. Karl Dawson, Director of Worldwide Research
Dr. Ronan Power, Director of Research
Dr. Mark Lyons, International Projects Director

9:50-10:15 Closing remarks

