EPC2006
XII EUROPEAN POULTRY CONFERENCE VERONA ITALY 10-14 SEPT 2006
VERONAFIERE CONGRESS CENTRE
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Ladies and Gentlemen, dear Colleagues,

I have great pleasure in welcoming you all to Verona and to the 12th European Poultry Conference, which is back in Italy after the second conference edition held in Bologna in 1964.

Before starting with the program, I would like to take the opportunity to express again my sincere gratitude to all those who helped to make this conference possible and to all who are present here today.

The conference program, carefully prepared in cooperation with the chairmen of the WPSA working groups and the scientific committee, has the presumption to look at the most interesting issues related to poultry research. The main aim has been to deal with traditional matters, directly or indirectly related to avian production, described and discussed in many papers, as well as with emerging topics, which researchers are beginning to face.

The proceedings of this European Poultry Conference, as well as the choice of the invited speakers for plenary or specific sessions, reflect the challenges that avian researchers would like to brave but also the priorities of those who elaborated the program.

The organising committee is very pleased with the high number of abstracts sent by researchers from 63 different countries, located in all continents, because it proved the appreciation for this conference and enlarged the boarders of this event outside Europe.

The avian industry, and in particular the Italian one, is going through a dramatic phase due to structural changes and, in particular, to the negative effect of media warning on avian flu. This last phenomenon determined a shaking of the ordinary production cycle, particularly in Italy.

I sincerely hope this European Poultry Conference will give new enthusiasm and impetus to avian researchers, including those participating to the conference youth program, as well as to industries, to be ready to deal with new issues, but in particular to promote innovation and development in this production world.

Beside the scientific matters, I wish all participants and accompanying persons a pleasant stay in this beautiful city and country.

Lastly, I would like to express my deep appreciation to all who supported me in the organisation of this conference and in particular to the Presidents of the WPSA and of the WPSA European Federation, Prof. Akbay and Prof. Flock. Their suggestions and recommendations, based on such a huge experience, allowed me to set up a European Poultry Conference for you to enjoy and remember.

Achille Franchini
Chairman of the Conference
Dear colleagues and friends, guests at the EPC in Verona,

The first European Poultry Conference was held in Utrecht, from 15-18 November 1960 and, as documented in the proceedings, attended by 386 participants from 21 European countries plus one Australian residing in London. This was obviously an exclusively European event. The proceedings cover 11 scientific papers in full length (5 in English, 3 each in German and French) and a special paper by Major Ian MacDougall promoting the idea of European Poultry Conferences in addition to the World Congresses. Since then, travelling has become easier and less expensive, and the current generation has learned to communicate in English, eliminating the need for expensive translations.

The European Poultry Conferences have become established as an important element of the continuing exchange of information among experts working in specialized areas of poultry research and offer a forum for person-to-person contacts between poultry science, industry and the general public. The organizers of the XII European Poultry Conference deserve our thanks for the work they invested into the preparation, and I am confident that all participants will take home pleasant memories of the EPC in Verona, updating poultry science knowledge, but also meeting old and new friends in the special atmosphere of Italian hospitality.

Participants of the EPC have the opportunity to enjoy a large collection of attractive posters. Publication of all abstracts in this special issue of WPSJ is in line with the commitment of our Association to make useful information accessible to people around the world with an interest in poultry, including those who cannot participate in the Conferences.

Calling attention to additional possibilities to benefit from the information network among WPSA members, a section on Working Groups of the European Federation of WPSA Branches is included in this issue of WPSJ. As in the past, selected papers from the EPC will be published in future issues of the World’s Poultry Science Journal, and the Calendar section will inform about future activities of the Working Groups.

I wish the XII European Poultry Conference in Verona a great success and look forward to our 50th anniversary to be celebrated at the XIII EPC in France.

Dietmar Flock
President of the European Federation of WPSA Branches (2002-2006)
Welcome to the 12th European Poultry Conference in Verona!

It is my pleasure to present the Book of Abstracts which is the main publication of the summaries of the scientific contributions at this Conference. Full texts of the plenary papers and offered contributions are provided separately in a CD that is available for registered delegates. As on previous occasions the program covers a wide range of topics reflecting the current scientific, technological and industrial interests.

The Conference is structured so that there is a plenary session early each morning followed by four parallel symposia sessions featuring invited speakers and short oral presentations of offered communications. Similarly four parallel symposia sessions will take place on Monday and Tuesday afternoon. Only two are planned for Wednesday afternoon and this will give us the opportunity to organize two Workshops covering two strategic areas.

In addition a Satellite Symposium on Egg and Meat Quality has been organized by the chairmen of Working Groups 4 and 5 and USA colleagues of group S 292 and these contributions are also contained in the CD.

The speakers who have been invited to the Conference are recognized experts in their specific fields and I am confident that they will update us on important issues of the "poultry world". I am confident too that this Conference will provide an opportunity for detailed discussions and fruitful exchanges of ideas.

We seem to have been successful in getting positive responses from most of the outstanding scientists in almost every area of poultry science, having received submissions of 730 abstracts from around 60 countries. Because of this great number of scientific contributions, only some of them have been selected as oral presentations. The others will be presented as posters and there is ample time in the program, during all three days, for poster viewing.

I am very grateful to the members of the Scientific Committee, the members of the Organizing Committee, the Secretarial Staff (in particular Dr Castillo for her meticulous work in preparing papers and attending to all related correspondence) and to all those others who have helped in the preparation for this Conference. A special word of thanks goes to Dr. Colin Whitehead for his continuing cooperation and helpful suggestions.

Last but not least my personal appreciation to all speakers and participants without whom this Conference would not have been so successful.

Isabella Romboli
Chairwoman of the Scientific Committee
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The Organising Committee of the 12th European Conference wishes to thank all the above mentioned Institutions and Companies for their generous support
# TIMETABLE

## SUNDAY, 10TH SEPTEMBER

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<tr>
<th>Time</th>
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<th>Event Description</th>
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<tr>
<td>9:00 – 17:00</td>
<td>Mozart room and Salieri Room-</td>
<td>Scientific Meeting of European Project Poultryflorgut: “Control of intestinal</td>
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<td>Verona Congress Centre</td>
<td>flora ecology in poultry for ensuring products safety for consumers” - Open to</td>
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<td>11:00 – 17:00</td>
<td>Foyer of Veronafiere Congress</td>
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<td>13:30 – 17:00</td>
<td>Vivaldi room - Veronafiere Congress Centre</td>
<td>USA/Europe Symposium on Egg and Meat Quality</td>
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<td>14:00 – 17:00</td>
<td>Salieri room - Veronafiere Congress Centre</td>
<td>Symposium DSM: “Unlimited Innovation”</td>
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<td>17:00 – 18:00</td>
<td>Veronafiere Congress Centre</td>
<td>Shuttle bus service from Veronafiere Congress Centre to Gran Guardia</td>
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<td>18:00 – 19:00</td>
<td>Auditorium - Gran Guardia</td>
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<td>19:00 – 21:00</td>
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## MONDAY, 11TH SEPTEMBER

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<td>Registration</td>
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<td>9:00 – 17:00</td>
<td>Veronafiere Congress Centre</td>
<td>Opening of the Exhibition</td>
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<td>9:00 – 10:00</td>
<td>Auditorium Verdi - Veronafiere</td>
<td>Plenary session</td>
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<td>10:45 – 17:00</td>
<td>Veronafiere Congress Centre</td>
<td>Scientific Sessions</td>
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<td>17:00 – 18:00</td>
<td>Salieri room - Veronafiere</td>
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<td>Vivaldi room - Veronafiere</td>
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<td>Auditorium Verdi - Veronafiere</td>
<td>WG4 meeting</td>
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<td>17:00 – 18:00</td>
<td>“Argento” room - Veronafiere</td>
<td>WG5 meeting</td>
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<td>Mozart room - Veronafiere</td>
<td>WG9 meeting</td>
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TIMETABLE

TUESDAY, 12TH SEPTEMBER

8:00 – 17:00 Veronafiere Congress Centre  Registration
9:00 – 10:00 Auditorium Verdi - Veronafiere Congress Centre  Plenary session
10:45 – 17:00 Veronafiere Congress Centre  Scientific Sessions
17:10 – 18:15 Auditorium Verdi - Veronafiere Congress Centre  Council Meeting
20.30 – 23.30 Villa Arvedi  Banquet Dinner

WEDNESDAY, 13TH SEPTEMBER

8:00 – 17:00 Veronafiere Congress Centre  Registration
9:00 – 10:20 Auditorium Verdi - Veronafiere Congress Centre  Plenary session
10:45 – 17:00 Veronafiere Congress Centre  Scientific Sessions
10:45 – 11:45 Mozart room - Veronafiere Congress Centre  WG12 meeting
14:30 – 15:30 Mozart room - Veronafiere Congress Centre  WG11 meeting
14:30 – 17:30 Respighi room - Veronafiere Congress Centre  Symposium Alltech: “Delivering the Selenium Promise”
15:50 – 17:00 Mozart room - Veronafiere Congress Centre  WG10 meeting
17.00 – 17.30 Auditorium Verdi - Veronafiere Congress Centre  Closing Ceremony

THURSDAY, 14TH SEPTEMBER

Technical Visits
COMMITTEES

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Junior Vice-President
A. Franchini (Italy)

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S. Yalcin
S. Yahav
F. Huchzermeyer

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Communication and advertising Committee press@wpsa.it
Youth Program ameluzzi@disa.unibo.it
Exhibition Center giarola@verona.fiere.it
Travel, accommodation and tours monica.bellavite@multiservice.vr.it
USA / Europe Symposium on Egg and Meat Quality - Vivaldi Room

Sat. 1.E. Egg Section - Chairperson: Y. Nys (France)

13:30 - 14:00 Effects on processing on the microbiology of commercial shell eggs in the United States. M. T. Musgrove (USA)

14:00 - 14:30 Detection of hatching and table egg defects using hyperspectral imaging. D. Smith (USA)

14:30 - 15:00 Recent advances concerning the functional properties of egg yolk lipoproteins. M. Anton (France)

15:00 - 15:30 Pilot scale methods for separation of albumen proteins and yolk lipids and proteins. H. Aro (Finland)

15:30 - 15:50 Coffee break.

Sat. 1.M. Meat Section - Chairpersons: J. Buhr (USA) and M. Grashorn (Germany)

15:50 - 16:05 Packaging systems: Effects on poultry product colour and other quality factors. J. Acton (USA)

16:05 - 16:20 L*a*b* from skin versus bone surfaces at 6 and 8 weeks of age to assess fillet quality with both sexes from diverse high-yielding broiler strains. E. T. Moran Jr. (USA)

16:20 - 16:40 Salmonella control in broiler farming. N. M. Bolder (The Netherlands)

16:40 - 17:00 Possibility to reduce the presence of Campylobacter in poultry meat using steam and ultrasound. H. Bunkенborg (Denmark)

Symposium DSM : “Unlimited Innovation” - Salieri room

14.00 - 17:00 Symposium DSM : “Unlimited Innovation”
SCIENTIFIC PROGRAM - Monday, 11th September

PLENARY SESSION - Auditorium Verdi
Chairpersons: R. Akbay (Turkey) and D. Flock (Germany)
9:00 - 9:30 Changes in poultry production and trade worldwide. 
   H.W. Windhorst (Germany)
9:30 - 10:00 Poultry meat trends and consumer attitudes. E. Valceschini (France)
10:00 - 10:45 Coffee break and viewing of posters.

SESSIONS
N. Nutrition
 Auditorium Verdi - Chairpersons: R. Akbay (Turkey) and D. Flock (Germany)
10:45 - 11:10 The wheat value: improvements by feed technology, plant breeding and animal genetics. B. Carrè (France)
11:10 - 11:35 Arguments supporting the use of standardised ileal of amino acid digestibility in broilers. V. Hess (Germany)
11:35 - 11:45 Discussion.
 Auditorium Verdi - Chairpersons: B. Carrè (France) and V. Hess (Germany)
11:45 - 13:00 - The nutritive quality and digestibility of different wheat cultivars for broiler chickens. J. Barteczko (Poland)
   - The nutritive value of old wheat and newly harvested wheat for broilers. M. Lensing (The Netherlands)
   - The effect of feed additives, wheat variety and feed form on laying hen performance. M. Scott (Ireland)
   - Relationship between total crude protein content and apparent ileal amino acid digestibility of wheat for broilers. W. L. Bryden (Australia)
   - Improved performance of Cobb 500 birds fed increased amino acid density in wheat or maize based diets. D. Parker (USA)
13:00 - 14:30 Lunch
 Ph.1. Nutritional and Microbial Interactions in the Digestive Tract
 Auditorium Verdi - Chairperson: S. Yahav (Israel)
14:30 - 14:45 Functional adaptation of the digestive tract to nutritional changes. 
   Z. Uni (Israel)
14:45 - 15:00 Immune dynamics of the digestive tract. A. Friedman (Israel)
15:00 - 15:15 Microflora of the digestive tract. J. Apajalahti (Finland)
15:15 - 15:30 Discussion.
15:30 - 15:50 Coffee break and viewing of posters.
 Auditorium Verdi - Chairpersons: M. Antongiovanni (Italy) and J. Apajalahti (Finland)
15:50 - 17:00 - The effects of a probiotic and dried whey supplementation on performance and gut microbiology in male broiler chicks. H. E. Samli (Turkey)
   - Chicken caecal microflora correlates with ME:GE using wheat-based diets. K. McCracken (Ireland)
   - Relationships between gut microbial species and energy metabolism in broiler chickens. V. A Torok (Australia)
   - Fluorescence in situ hybridization of chicken intestinal samples with bacterial rRNA targeted oligonucleotide probes. H. Christensen (Denmark)
SCIENTIFIC PROGRAM - Monday, 11th September

R. Reproduction/ Incubation

“Argento” Room - Chairperson: G. Baggott (UK)
10:45 - 11:10 Advances in semen cryopreservation. E. Blesbois (France)
11:10 - 11:35 Changes of reference parameters in avian incubation. C. Deeming (UK)
11:35 - 11:45 Discussion.

“Argento” Room - Chairpersons: E. Blesbois (France) and C. Deeming (UK)
11:45 - 13:00 - Effect of increased CO₂ in the second half of incubation on embryonic growth and on the hatching process. N. Everaert (Belgium)
- Evidence of in vivo transfection of circulating primordial germ cells in chickens. M. Naito (Japan)
- Serotonin involvement in reproductive failure associated with retinal photostimulation of broiler breeder hens. I. Rozenboim (Israel)
- The effect of photoperiod on testis weights and comb area of male broiler breeders. N. Tyler (South Africa)
- Production of somatic nuclear transferred gonadal germ cells (ntGGCs) using cryopreserved or serum starved somatic karyoplast in domestic chicken. Y. Kohara (Japan)

13:00 - 14:30 Lunch

M. Meat Quality

“Argento” Room - Chairperson: S. F. Bilgili (USA)
14:30 - 14:55 Nutritive value of poultry meat. A. Barroeta (Spain)
15:20 - 15:30 Discussion.
15:30 - 15:50 Coffee break and viewing of posters.

“Argento” Room - Chairpersons: S. Wilson (UK) and C. Cavani (Italy)
15:50 - 17:00 - Effect of natural extract on oxidative stress and anti-oxidant status of free-range chicken. M. Arturo-Schaan (France)
- Excessive whole wheat addition affects production results and carcass quality in broilers. K. M. Balle (Denmark)
- Effects of various n-3 lipid sources on the quality characteristics and fatty acids composition of chicken meat. E. Valavan (India)
- Increasing omega-3-fatty acids in quail meat. M. Piirsalu (Estonia)
- Motivation of chain partners to produce added value poultry meat products. F. Leenstra (The Netherlands)
SCIENTIFIC PROGRAM - Monday, 11th September

S. Poultry Product Safety

“Vivaldi” Room - Chairperson: J. Buhr (USA)

10:45 - 11:10 Microbiological challenges of poultry meat production.  
N. M. Bolder (The Netherlands)

11:10 - 11:35 Microbiological challenges of poultry egg production. P. Curtis (USA)

11:35 - 11:45 Discussion.

“Vivaldi” Room - Chairpersons: N. M. Bolder (The Netherlands) and B. Sheldon (USA)

11:45 - 13:00 - Epidemiological study of Campylobacter contamination of broiler farms in Belgium by amplified fragment length polymorphism analysis.  
W. Messens (Belgium)

- Prevalence and sources of Campylobacter contamination in free-range broiler production in Belgium. S. Vandeplas (Belgium)

- Prevalence of Helicobacter pullorum in broiler chickens reared in intensive and extensive farms. G. Manfreda (Italy)

- Incidence of Salmonella in processed broilers following transportation in contaminated coops. D. E. Conner (USA)

- Critical processing steps in the slaughterhouse for the control of Campylobacter in broilers. F. Reich (Germany).

13:00 - 14:30 Lunch

“Vivaldi” Room - Chairpersons: P. Curtis (USA) and N. M. Bolder (The Netherlands)

14:30 - 15:30 - Chemical carcass decontamination to control Salmonella and Campylobacter in poultry meat. N. M. Bolder (The Netherlands)

- Organic acid water treatment reduced Salmonella horizontal transmission in broiler chickens. D. Parker (USA)

- Reducing microbial cross-contamination in poultry processing. B. W. Sheldon (USA)

- The effect of acid marinades on Listeria Monocytogenes and meat quality in turkey deli loaves. S. McKee (USA)

15:30 - 15:50 Coffee break and viewing of posters.

“Vivaldi” Room - Chairpersons: R. Mulder (The Netherlands) and P. Curtis (USA)

15:50 - 17:00 - Bacterial shell contamination in the egg handling chains of different housing systems for laying hens. K. de Reu (Belgium)

- Development of a competitive exclusion product with defined cultures and its efficacy on reduction of S. Enteritidis in broiler. M. Mohnl (Austria)

- Validation of chlorine dioxide solutions applied pre- and post- chilling to reduce bacterial levels in broilers. M. X. Sanchez-Plata (USA)

- Detection of egg yolk antibodies reflecting Salmonella enteritidis infections using a surface plasmon resonance biosensor. M. E. Thomas (The Netherlands)
EC. Economics

“Salieri” Room - Chairperson: H. W. Windhorst (Germany)

10:45 - 11:10 Production cost in EU and non EU countries and impact on international trade. P. Van Horne (The Netherlands)

11:10 - 11:35 Chain organization and value creation in poultry meat and eggs industries. E. Defrancesco and A. Bertazzoli (Italy)

11:35 - 11:45 Discussion.

“Salieri” Room - Chairpersons: P. Van Horne (The Netherlands) and E. Defrancesco (Italy)

11:45 - 13:00 Simulation of vegetal raw materials utilization in poultry production chains: a multi-agent modelling approach. P. Lescoat (France)

- Comparative advantage of Iranian hen egg export in the Middle East. F. Mirzaei (Iran)

- Competitiveness of organic egg production in the Netherlands. I. Vermeij (The Netherlands)

- Future(s) for poultry meat production: interaction between industry and research towards appreciated poultry meat production, description of a field experiment. F. Leenstra (The Netherlands)

- The evaluation of the Turkish broiler industry: the degree of market power. S. Turhan (Turkey)

- Alternatives for the battery cage system: a comparison of economic, environmental and societal performance. A. Van Der Zijpp (The Netherlands)

13:00 - 14:30 Lunch

A. Avian Pathology

“Salieri” Room - Chairperson: A. Lavazza (Italy)

14:30 - 14:55 Diseases of turkey poults. H.M. Hafez (Germany)

14:55 - 15:20 Control of zoonoses in accordance with E.U. directives and regulations, a scientific perspective. R. Ducatelle (Belgium)

15:20 - 15:30 Discussion

15:30 - 15:50 Coffe break and viewing of posters.

“Salieri” Room - Chairpersons: H. M. Hafez (Germany) and R. Ducatelle (Belgium)

15:50 - 17:00 The benefit of cloned Histomonas meleagriGis administered via the cloaca to reproduce histomoniasis (blackhead) in poultry. M. Hess (Austria)

- An experimental approach to determine a putative pathogen of turkey hen non specific enteritis associate pathology. B. Massias (France)

- Maternal immunization against clinical and subclinical necrotic enteritis in broiler chickens. L. Gobbi (Italy)

- Efficacy of a necrotic enteritis toxoid vaccine in protecting broiler progeny from vaccinated breeders when artificially challenged with Cl. S. Davis (USA)

- The use of a vaccine to control necrotic enteritis in broilers in Western Canada. N. Ambrose (Canada)
PLENARY SESSIONS - Auditorium Verdi

Chairpersons: M. Tixier-Boichard (France) and A. Franchini (Italy)

9:00 - 9:30 Molecular control of disease resistance. J. Kaufman (UK)
9:30 - 10:00 Avian influenza: a global threat. I. Capua (Italy)
10:00 - 10:45 Coffee break and viewing of posters.

SESSIONS

N. Nutrition

Auditorium Verdi - Chairperson: C. Whitehead (UK)

10:45 - 11:10 Breeder nutrition and offspring performance. F. Calini and F. Sirri (Italy)
11:10 - 11:35 In ovo feeding enhances of early gut development and digestive capacity of poultry. P. Ferket (USA)
11:35 - 11:45 Discussion.

Auditorium Verdi - Chairpersons: P. Ferket (USA) and F. Calini (Italy)

11:45 - 13:00 - Modulation of post-hatch growth and immunocompetence through in ovo injection of vitamin E and linoleic acid. S. Bhanja (India)
- Administration of nucleotides in poultry’s diet: Effect on the lipid composition of the Pectoralis major muscle. B. Chiofalo (Italy)
- The impact of dietary calcium, phosphorus and phytase on zootechnical performance, skeleton mineralization with a focus on P-utilisation in broiler chickens. G. Huyghebaert (Belgium)
- The effect of lipase, amylase and protease addition on growth performance and nutrient digestion in young broiler chickens fed corn-soybean meal diet. B. Slominski (Canada)
- Examination of potential interactions between methods of coccidiosis control and nutrition in broilers. S. Rennie (UK)

13:00 - 14:30 Lunch

NR. Nutrition/ Reproduction

Auditorium Verdi - Chairperson: S. Cerolini (Italy)

14:30 - 14:55 The role of antioxidants in reproduction and fertility of poultry. P. Surai (UK)
14:55 - 15:20 The role of selenium in poultry reproduction. F. Edens, (USA)
15:20 - 15:30 Discussion

15:30 - 15:50 Coffee break and viewing of posters.

Auditorium Verdi - Chairpersons: P. Surai (UK) and F. Edens (USA)

15:50 - 17:00 - Accounting for genotype – nutrition interactions when optimising the composition of feeds for commercial broilers. R. Gous (South Africa)
- Effect of n-3 enriched eggs production on ovarian follicles’ growth and immune response in laying hens. T. Ebeid (Egypt)
- Soy phytoestrogen effects on progesterone receptor and ovalbumin synthesis in chick oviduct. L. Stevenson (USA)
- The effects of nonphenol on growth, egg production and hatching results in the quail. I. Bayram (Turkey)
- Effect of six dietary lysine concentrations on the reproductive physiology of caged broiler breeders kept at two different temperatures. A. Al-Saffar (Kuwait)
M. Meat Quality

“Vivaldi” Room - Chairperson: M. Grashorn (Germany)

10:45 - 11:10 Genetic aspects of poultry meat quality. E. Le Bihan Duval (France)
11:10 - 11:35 Muscle development. O. Halevy (Israel)
11:35 - 11:45 Discussion.

“Vivaldi” Room - Chairpersons: E. Le Bihan Duval (France) and O. Halevy (Israel)

11:45 - 13:00 Effects of a semiochemical analogue on meat quality of twelve weeks old Label broilers (preliminary results). I. Madec (France)
- Arachidonic acid and long-chain n-3 polyunsaturated fatty acids in chicken and turkey meat in relation to dietary fat sources. T. Komprda (Czech. Rep.)
- Effect of dietary rosemary leaves on the oxidative stability of muscle tissues of broiler chickens. E. Botsoglou (Greece)
- Evaluation of alternative genotypes and production systems for natural and organic poultry markets in the USA. C. M. Owens (USA)
- Fattening performance, carcass and meat quality of slow and fast growing broiler strains under intensive and extensive feeding conditions. M. Grashorn (Germany)

13:00 - 14:30 Lunch

Ph.2. Epigenetic Adaptation in Poultry

“Vivaldi” Room - Chairperson: B. Tzschentke (Germany)

14:30 - 14:45 Effect of reduced environmental oxygen content on the development of the myocardium in chick embryos. H. Tönhardt (Germany)
14:45 - 15:00 Hypoxia and hypercapnia during incubation of chicken eggs on development and subsequent performance. E. Decuypere (Belgium)
15:00 - 15:15 Perinatal thermal manipulations in poultry, does it cause long-lasting thermoregulatory memory? S. Yahav (Israel) and B. Tzschentke (Germany)
15:15 - 15:30 Discussion
15:30 - 15:50 Coffee break and viewing of posters.

“Vivaldi” Room - Chairpersons: B. Tzschentke (Germany) and I. Romboli (Italy)

15:50 - 17:00 Heat acclimation during incubation and breeder age influences on hatching performance of broilers. S. Yalcin (Turkey)
- The effect of repetitive cold exposure of broiler embryos during the late phase of embryogenesis on cold resistance at 3 days post-hatch. D. Shinder (Israel)
- 2D-DIGE analysis of differential protein expression in the chick embryo chorioallantoic membrane as a consequence of increased carbon dioxide in the incubator during the first 10 days. L. De Smit (Belgium)
- Changes in albumen pH due to higher CO₂ concentrations during the first ten days of incubation. V. Bruggeman (Belgium)
SCIENTIFIC PROGRAM - Tuesday, 12th September

G. Genetics

“Argento” Room - Chairperson: S. Weigend (Germany)
10:45 - 11:10 Functional biodiversity in chickens. P. Mariani (Italy)
11:10 - 11:35 The future of molecular genetics in poultry breeding. G. Albers (The Netherlands)
11:35 - 11:45 Discussion

“Argento” Room - Chairpersons: P. Mariani (Italy) and G. Albers (The Netherlands)
11:45 - 13:00 - The effect of frizzle gene and dwarf gene on reproductive performances of broiler breeder dams under high and normal ambient temperature. A. R. Sharifi (Germany)
- Genetic polymorphism of wide spectrum chicken populations. S. Weigend (Germany)
- Avian TAP1 and TAP2 genes: polymorphisms and haplotypes. L. Sironi (Italy)
- Response to divergent selection for eight week body weight in chickens. D. Tercic (Slovenia)
- Biodiversity within and between chicken populations. T. Pinent (Germany)

13:00 - 14:30 Lunch

“Argento” Room - Chairperson: G. B. Havenstein (USA)
14:30 - 15:30 - Cloning and characterisation of the chicken IL-10 family members and their role in disease. U. Pathania (UK)
- Genotyping tests for feather colour genes in chickens. M. Tixier-Boichard (France)
- The reaction of different genotypes of slow growing broilers to short term heat stress. R. Afnan (Germany)
- Funnel nest box: a system for automatic recording of individual performance and behaviour of laying hens in floor management. S. Thurner (Germany)

15:30 - 15:45 Coffee break and viewing of posters.

Edu. Education and Technology Transfer

“Argento” Room - Chairpersons: S. Yalcin (Turkey) and D. Flock (Germany)
15:45 - 16:00 Applied research: university perspective. P. Lescoat and J.P. Brillard (France)
16:00 - 16:15 The role of contract research in educating poultry science students. R. Preisinger (Germany)
16:15 - 16:30 Re-allocation of educational resources in Europe: example of international cooperation. R. Kwakkel (The Netherlands)
16:30 - 16:45 Changing role of agriculture in Europe and how it affects poultry education and technology transfer. F. Werrij (The Netherlands)
16:45 - 17:00 Establishing a poultry extension/ out reach program. S.F. Bilgili (USA)
17:00 - 17:10 Discussion.
**SCIENTIFIC PROGRAM - Tuesday, 12th September**

**W. Welfare**  
“Salieri” Room - Chairperson: L. G. Cavalchini (Italy)

10:45 - 11:15  
Welfare in meat type poultry. *M. Gerken and W. Bessei (Germany)*

11:15 - 11:45  
- Sequential feeding with low- and high-lysine diets increases activity and improves gait score in broiler chickens. *C. Leterrier (France)*
- Effect of light programmes, bird densities and litter types on broilers welfare. *V. Ferrante (Italy)*

11:45 - 13:00  
- Effects of feed restriction on production and welfare of a slow-growing chicken breed: a behavioural approach. *J.-M. Larivière (Belgium)*
- Preference for feathers or wood shavings in high and low feather pecking birds. *A. Harlander-Matauschek (Germany)*
- Impact of open water systems on behaviour and health of Peking ducks during fattening. *E. Heyn (Germany)*

13:00 - 14:30  
Lunch

**A. Avian Pathology**  
“Salieri” Room - Chairpersons: I. Capua (Italy) and H. M. Hafez (Germany)

14:30 - 15:30  
- Oral treatment with the probiotic Escherichia coli Nissle 1917 improves body weight and modulates the stress response of poultry in respiratory challenges with avian pathogenic E. coli. *G. Huff (USA)*
- Establishing a ringtest to evaluate PCRs used to detect the nucleic acid of Mycoplasma gallisepticum and Mycoplasma synoviae in swab samples. *M. Hess (Austria)*
- Detection of Shiga toxin-producing Escherichia coli O157 in living layer hens. *A. Fioretti (Italy)*
- Avian Hepatitis E virus: Identification of infected broiler breeder. *C. Morrow (UK)*

15:30 - 15:45  
Coffee break and viewing of posters.

**A. Avian Pathology**  
“Salieri” Room - Chairpersons: I. Capua (Italy) and H. M. Hafez (Germany)

15:45 - 17:00  
- Effects of two strains of infectious bronchitis virus on unvaccinated laying hens. *J. Roberts (Australia)*
- Experimental infections of broilers with Avian Metapneumovirus Subtype A and B. *Y. H. Aung (Germany)*
- Use of Multiplex RT-PCR assay for typing and sub typing of Influenza A (H5 & H9) virus in clinical samples in Iran. *E. Saberfar (Iran)*
- Molecular analysis of Haemagglutinin-neuraminidase gene and phylogeny study of Newcastle disease virus isolated from Iran. *M. Esmaelizad (Iran)*
- Molecular epidemiology of avian Pneumovirus strains in Italy. *M. Cecchinato (Italy)*
- Multiple virus infection of chickens with Marek’s disease and chicken infectious anemia: Mutual influence on pathogenicity. *I. Davidson (Israel)*
PLENARY SESSION - Auditorium Verdi

9:00 - 9:30 Reproductive efficiency in meat type selected breeders: current and future strategies. J. McAdam (UK)
9:30 - 10:00 Defining and predicting changes in nutrient requirements of poultry. S. Leeson (Canada)
10:00 - 10:20 A look at the poultry-related EU projects. C. Burel, Y. Nys (France) and F. Van Immerseel (Belgium)
10:20 - 10:45 Coffee break and viewing of posters.

SESSIONS

M. Meat Processing
Auditorium Verdi - Chairperson: S. F. Bilgili (USA)

10:45 - 11:00 Influence of pre slaughter stress on animal welfare and processing efficiency. M. Mitchell (UK)
11:00 - 11:15 On-line control in poultry processing. A. R. Sams (USA)
11:15 - 11:30 The relationship between breast muscle colour variation and meat functionality. D. P. Smith (USA)
11:30 - 11:45 Discussion

A3. Avian Influenza
Auditorium Verdi - Chairpersons: H. Saatkamp (The Netherlands) and S. Marangon (Italy)

14:30 - 14:40 Integrated study of prevention, monitoring and control of avian influenza – The healthy poultry project. H. Saatkamp (The Netherlands)
14:40 - 15:00 Base risks and organisational and economic factors affecting the introduction and spread of avian influenza. B. Grabkowsky(Germany) and P. Van Home (The Netherlands)
15:00 - 15:20 Ecology of avian influenza in migratory birds in Italy. V. Guberti (Italy)
15:20 - 15:30 Discussion
15:30 - 15:50 Coffee break and viewing of posters.
15:50 - 16:10 The impact on poultry production of control measures against avian influenza. L. Busani (Italy)
16:10 - 16:30 Using field mortality data to estimate transmission parameters for HPAI H7N7. M. Bos (The Netherlands)
16:30 - 16:50 A conceptual framework for analysing strategies for prevention, monitoring and control of Avian Influenza. H. Saatkamp (The Netherlands)
16:50 - 17:00 Integrated summary and discussion.
SCIENTIFIC PROGRAM - Wednesday, 13th September

W. Welfare
“Argento” Room - Chairperson: A. Elson (UK)
10:45 - 11:10 Welfare in laying hens.  
   I. de Jong and H. Blokhuis (The Netherlands)
11:10 - 11:45 - Modelling behaviour in order to design housing systems for laying hens.  
   E. Mollenhorst (The Netherlands)
   - The transition from battery cages to loose housing systems and furnished cages for Swedish laying hens. J. Yngvesson (Sweden)
   - Effects of two diets on welfare, performance and egg quality of hens in a barn system. R. A. Perez-Maldonado (Australia)

“Argento” Room - Chairpersons: I. De Jong (The Netherlands) and A. Elson (UK)
11:45 - 13:00 - Evaluation of plumage condition and foot pad health of laying hens housed in small group housing systems, furnished cages and an aviary system.  
   S. Roenchen (Germany)
   - Mortality rates and causes of death in laying hens kept in cage and alternative housing systems. S. Shini (Australia)
   - Evaluation of bone strength, keel bone deformity and egg quality of laying hens housed in small group housing systems and furnished cages in comparison to an aviary housing system. B. Scholz (Germany)
   - Acceptance of nest box in furnished cage, litter system and IBMER alternative system for laying hens. A. Nowak (Poland)

13:00 - 14:30 Lunch

“Argento” Room - Chairpersons: M. Tixier-Boichard (France) and S. Weigend (Germany)
14:30 – 14:46 Criteria for welfare assessment. W. Bessei (Germany)
14:46 – 15:02 Genetic variability of welfare traits. S. Mignon-Grasteau (France)
15:02 – 15:18 Code of good practice for farm animal breeding and reproduction organisations. B. Besbes (France)
15:18 - 15:30 - Improving welfare by using genetic selection while accounting for social interaction among individuals. P. Bijma (The Netherlands)
   - Evidence of genetic variability for floor and nest egg laying behaviour in floor pens. P. Settar (USA)
   - Plumage condition, fearfulness and their relation in 4 commercial lines of adult laying hens. K. Uitdehaag (The Netherlands)
   - Genetic parameters for egg production and nesting behaviour in a non-cage environment. W. Icken (Germany)

15:50 – 17:00 Genetics and Welfare Interaction in Poultry: General discussion
E. Novel Egg Components

“Salieri” Room - Chairperson: Y. Nys (France)

10:45 - 11:10  Molecular approach for the identification of novel egg components.  
   J. Gautron (France)

11:10 - 11:35  Igy technology: application and trends. R. Schade (Germany)

11:35 - 11:45  Discussion.

“Salieri” Room - Chairpersons: S. E. Solomon (UK) and J. Gautron (France)

11:45 - 13:00  - Proteomic analysis: An efficient tool to reveal and identify. C. Guérin-Dubiard (France)
   - Proteinases activity inhibitors in the egg white depending on various housing systems of egg layers. T. Trziszka (Poland)
   - Effect of dietary supplementation of sunflower and fish oil with additive vitamin E or C on fatty acid compositions of egg yolks and malondialdehyde levels in layer hens. H. Eseceli (Turkey)
   - Egg white lysozyme activity in carbon dioxide solutions. K. M. Keener (USA)
   - Coloured carrot varieties as forage material for egg layers. M. Hammershøj (Denmark)

13:00 - 14:30  Lunch

E. Egg Quality

“Salieri” Room - Chairperson: S. E. Solomon (UK)

14:30 - 14:55  Non invasive methods for the egg quality evaluation.  
   F. Bamelis and J. De Baerdemaeker (Belgium)

14:55 - 15:20  Enhanced nutritional value of egg. N. Sparks (Scotland)

15:20 - 15:30  Discussion.

15:30 - 15:50  Coffee break and viewing of posters.

“Salieri” Room - Chairpersons: M. Rossi (Italy) and F. Bamelis (Belgium)

15:50 - 17:00  - Improving the production process of consumption eggs by means of quality control charts. K. Mertens (Belgium)
   - Consumption of Se-enriched eggs improved Se status of human volunteers. J. Dvorska (Ukraine)
   - Carotenoid contents of polar and non-polar lipid fractions of egg yolk produced by supercritical fluid technologies. H. Aro (Finland)
   - Correlation of egg physical quality measurements and functional determinations. D. Jones (USA)
   - Polymorphisms in eggshell organic matrix genes are associated with eggshell quality measurements in pedigree Rhode Island Red hens. I. Dunn (UK)
O. Other Species
“Vivaldi” Room - Chairperson: S. Wezyk (Poland)
10:45 - 11:10 Management problems in turkey breeding. J. Bentley (UK)
11:10 - 11:35 Major trends in research into domestic ducks and recent results concerning meat quality. E. Baeza (France)
11:35 - 11:45 Discussion
“Vivaldi” Room - Chairpersons: E. Baez (France) and J. Bentley (UK)
11:45 - 13:00 Effects of a turkey house with veranda on behaviour, performance, carcass quality, and health of male turkeys. T. Veldkamp (The Netherlands)
- Technological properties and proteomic analysis of meat in two genetic lines of turkey. C. Molette (France)
- Changes in protein level for bobwhite quail (Colinus virginianus). J. P. Blake (USA)
- The response of Japanese quails (heavy body weight line) to dietary energy levels and graded ideal essential amino acid profiles on growth and immuno-competence. S. Kaur (India)
- Characterisation of quail CRF, AVT and ACTH cDNA and effects of the corresponding peptides on corticosterone levels in Japanese quail divergently selected for tonic immobility. D. Guémené (France)
13:00 - 14:30 Lunch
N. Nutrition
“Vivaldi” Room - Chairpersons: L. G. Cavalchini and A. Meluzzi (Italy)
14:30 - 15:30 Role of starch and its gelatinisation degree on pellet quality. H. Hetland (Norway)
- Role of carvacrol and cinnamaldehyde in broiler cecal fermentations. A. Piva (Italy)
- Effect of previous exposure to dietary phytase on endogenous energy and amino acid losses from turkeys. V. Pirgozliev (UK)
- Differences between the faecal and ileal amino acid digestibility values of soybean meal, determined with broiler chicks at different ages. K. Dublecz (Hungary)
15:30 - 15:50 Coffee break and viewing of posters.
Ph.3. Topics in fundamental physiology
“Vivaldi” Room - Chairpersons: E. Decuypère (Belgium) and H. Tönhardt (Germany)
15:50 - 17:00 Holo-analysis of the efficacy of exogenous phytases in laying hens. G. Rosen (UK)
- Inulins (Chicory fructans) improve recovery of broilers after a challenge with Eimeria acervulina and Clostridium perfringens. P. Van Leeuwen (The Netherlands)
- Intestinal microbiota and feed design. J. Vaahhtovuo (Finland)
- Estimating optimum thermal conditions for a broiler: a simulation model. O. A. Blanco (South Africa)
- Heat stress stimulates mitochondrial superoxide production possibly via down-regulation of UCP in skeletal muscle of cockerels. A. Mujahid (Japan)

Symposium Alltech - Respighi Room
14:30 - 17:00 Symposium Alltech: “Delivering the Selenium Promise”
INSTRUCTION TO PRESENTERS

SPEAKERS

The following equipment will be available:

- video projector
- PC running MS Windows and MS Office, with CD/DVD drive and USB port.

If you have any additional requirements, please refer to monica.bellavite@multiservice.vr.it no later than 4th September.

Please arrive at the slide centre in room “A” of Veronafiere Congress Centre at least 4 hours before the start of the session in which you are presenting. If your presentation is scheduled in the morning, please arrive at the slide centre the day before (from 15.00 to 17.00).

Speeches will take 20-30 minutes, whereas short oral presentations will generally take 10 minutes. At the end of each session, time for discussion will be available. For the detailed timetable, please refer to the Scientific Program.

If you intend to use your own laptop for your presentation please inform the technicians of the slide centre. We recommend to bring a second copy of your presentation materials, on USB key or CD/DVD ROM, as backup.

Speakers should be in the session room 10 minutes prior to the start of the session. Sessions are tightly scheduled and it is important that the allotted time be respected.

POSTER PRESENTERS

Posters have to be hung up at the beginning of the Conference and taken off at the end. A display board, 100 cm wide and 200 cm high, will be available for each poster. Please be careful, to have your ID number and poster category with you to find your board. Technicians in the exhibit hall will assist you in locating your posters.
**LIST OF TOPICS**

### Avian Pathology
- **A.1.** Diseases of turkey poults.
- **A.2.** Control of zoonoses in accordance with EU directives and regulations, a scientific perspective.
- **A.3.** Avian influenza.
- **A.4.** Other

### Egg
- **E.1.** Molecular approach for the identification of novel egg components.
- **E.2.** IgY technology: application and trends.
- **E.3.** Non invasive methods for the egg quality evaluation.
- **E.4.** Enhanced nutritional value of egg.
- **E.5.** Other.

### Economics
- **Ec.1.** Production cost in EU and non EU countries and impact on international trade.
- **Ec.2.** Industry competition and trends in firm strategy.
- **Ec.3.** Other.

### Education and Technology Transfer
- **Edu.1.** Applied research: university perspective.
- **Edu.2.** The role of contract research in educating poultry science students.
- **Edu.3.** Re-allocation of educational resources in Europe: example of international cooperation.
- **Edu.4.** Changing role of agriculture in Europe and how it affects poultry education and technology transfer.
- **Edu.5.** Establishing a poultry extension / out reach program.
- **Edu.6.** Other.

### Genetics
- **G.1.** Functional biodiversity in chickens.
- **G.2.** The future of molecular genetics in poultry breeding.
- **G.3.** Other.

### Meat Quality and Processing and Muscle Development
- **M.1.** Nutritive value of poultry meat.
- **M.2.** Optimised feeding systems for improving meat quality.
- **M.3.** Genetic aspects of poultry meat quality.
- **M.4.** Muscle development.
- **M.5.** Influence of pre-slaughter stress on animal welfare and processing efficiency.
- **M.6.** On-line control in poultry processing.
- **M.7.** Other.
# LIST OF TOPICS

## Nutrition
- **N.1.** The wheat value: improvements by feed technology, plant breeding and animal genetics.
- **N.2.** Standardised ileal digestibility of amino acids in poultry.
- **N.3.** Breeder nutrition and offspring performance.
- **N.4.** Early feeding - *in ovo* feeding.
- **N.5.** Other.

## Nutrition / Reproduction
- **NR.1.** The role of antioxidants in reproduction and fertility of poultry.
- **NR.2.** The role of selenium in poultry reproduction.
- **NR.3.** Other.

## Other Species
- **O.1.** Turkey.
- **O.2.** Major trends of research in domestic duck and recent results on meat quality.
- **O.3.** Other.

## Physiology
- **Ph.1.** Nutritional and microbial interactions in the digestive tract.
- **Ph.2.** Epigenetic adaptation in poultry.
- **Ph.3.** Other.

## Reproduction / Incubation
- **R.1.** Advances in semen cryopreservation.
- **R.2.** Changes of reference parameters in avian incubation.
- **R.3.** Other.

## Poultry Product Safety
- **S.1.** Microbiological challenges of poultry meat production.
- **S.2.** Microbiological challenges of poultry egg production.
- **S.3.** Other.

## Welfare
- **W.1.** Welfare in meat type poultry.
- **W.2.** Welfare in laying hens.
- **W.3.** Genetics / management and welfare interaction in poultry.
- **W.4.** Welfare in other species.
GENERAL INFORMATION

Verona
Verona, located in the North-East of Italy, is famous all over the world because it owns a perfectly preserved monumental Roman circus, the Arena built in Piazza Brà. Verona was supposedly founded by Etruscans, but the first historical records are from the 4th century BC. It became a notable political and commercial centre during Roman times. Verona was flooded in 1239 and largely rebuilt. The city reached the top of its political influence during the 14th century as the seat of power of the Della Scala family (also known as Scaligeri). The town centre lies between two intercommunicating squares, Piazza delle Erbe and Piazza dei Signori. Verona was chosen as the setting of one of the most famous works of the English playwright, William Shakespeare, “Romeo and Juliet”

Conference venue
The VeronaFiere Centre is 3 km far from the centre of Verona, only few minutes from the Verona Porta Nuova railway station and close to “Verona Sud” exit on the A4 motorway Milan-Venice.

Shopping
Shopping malls generally open from 8:30 to 21:00 Monday through Saturday. Shops and offices open from 9:00 to 12:30 and 15:30 to 19:30.

Credit cards
All major credit cards are accepted in most hotels, restaurants and shops. Commonly accepted credit cards are Visa, MasterCard, EuroCard, AmericanExpress.

Time zone
The standard time zone of Italy is 1 hour ahead of Greenwich Mean Time (GMT). In September due to the daylight saving time (+1 hour), the current time zone offset is 2 hours ahead of GMT.

Climate
The weather in Verona is usually sunny, warm and pleasant in September; the average night/day temperature is around +14°C/+25°C, respectively. The Conference sites and hotels rooms are well air conditioned.

Electricity
The standard voltage in Italy is 220 Volts, with a frequency of 50 Hertz.

City Bus service
The orange city buses (AMT buses) depart in front of the railway station from bus-track “A”. Bus lines to the centre are: 11, 12, 13. A 5 minutes trip by bus allows to reach the historic centre of Verona as the Piazza Bra where there is the monumental Roman circus, the Arena. Bus lines to the VeronaFiere Centre are 21 (stop at Via Agricoltura), 61 and 83 (stop at Viale del Lavoro). The trip lasts two-four minutes. See www.amt.it/linee_orari/index_lineeOrari.asp for timetables. Urban tickets (cost 1,00 euro and validity 1 hour from validation), 10 travels ticket (costs 9,00 euro and allows ten 1-hour travels) and daily ticket (costs 3,50 euro and is a whole-day ticket from validation) must be purchased beforehand at bus tickets office, at news-stands’ or tobacconists’.
Art Exhibitions

Palazzo della Gran Guardia, 16th September - 14th January 2007
“Mantegna and the Arts in Verona 1450 - 1500”
Mon - Thu 9.30 - 19.30 - Fri - Sun 9.30 - 21.30 Tickets 10,00 euros

More than 200 works on display, from paintings, drawings and engravings to miniatures, sculpture, medallions and cassone panels, loaned by some 100 museums and collections from all over the world.

Modern Art Gallery Palazzo Forti:
“The Never ending inside the eye” - A permanent Collection
Vicolo Volto due Mori, 4 - tel. +39 045 8001903
Tue-Sun: 9.00 - 19.00 Tickets: 4,00 - 5,00 euros

Archaeological Museum Teatro Romano:
“Ancient Ceramics”
Regaste Redentore, 2- tel. +39 045 8000360
Tue-Sun 8.30 - 19.30, Mon 13.45 - 19.30 Tickets 2,00 – 3,00 euros

Museums / Monuments

Museo di Castelvecchio,
C.so Castelvecchio, 2 - tel. +39 045 8062611
Tue - Sun 8.30 - 19.30, Mon Mon 13.45 - 19.30 Tickets 4,00 euros

Amphitheatre Arena:
Piazza Bra, tel. +39 045 8003204
Tue-Sun 8.30 - 19.30, Mon 13.45 - 19.30 Tickets 3,00 – 4,00 euros

Juliet’s house
Via Cappello, 23, tel. +39 045 8034303
Tue-Sun 8.30 - 19.30, Mon 13.30 - 19.30 Tickets 4,00 – 5,00 euros

Giardino di Palazzo Giusti
Via Giardino Giusti 2, tel. +39 045 8034029
Mon - Sun 9.00 - 20.00

Amusement Parks

Gardaland
Castelnuovo del Garda, tel: +39 045 6449777
Mon - Sun 10.00 - 18.30, Tickets 21,50 - 25,00 euros

Canevaworld
via Fossalta, 1 - Lazise sul Garda (VR) tel. +39 045 6969900
Mon - Sun 10.00 - 18.00, Tickets 16,00 - 19,00 euros
CONGRESS INFORMATION

Abstract and proceedings on CD-ROM
A CD-ROM version of the Book of Abstracts and Proceedings is included in your delegate bag.

Business Centre
A Business Centre will allow delegates access to fax machines and photocopiers. The Business Centre is located in the Exhibit Hall.

Internet Point
Several Internet points will be available for all delegates. They are located in the Exhibit Hall.

Certificate of Attendance
A personalized certificate of attendance is included in your delegate registration envelope.

Exhibition
The XII European Poultry Conference host an exhibition. The Exhibition Hall is located on the same floor of the Scientific Sessions.

Exhibit hours are as follows:
9.00-18.00

Lost and Found
The Veronafiere Congress Centre lost and found office is located at the reception desk of the main lobby. Any items found by Congress staff will be promptly handed over to this location.

Badges
At the registration desk, delegates, accompanying person and exhibitors will be provided with a name badge that they must wear at all time throughout the Conference. Only badge holders will be admitted to Conference site, meeting rooms, sessions and social events.

Security
Full security staffing has been implemented for the safety of participants. In accordance with the Italian Law, the Security Service of Veronafiere Congress Centre would like to draw your attention to the emergency evacuation procedures for this hall. In the event of emergency, please use the staircases. Under no circumstances should elevators be used in an emergency.
CONGRESS INFORMATION

Smoking
Veronafiere Congress Centre is a NO smoking area.

Currency and exchange
The currency unit is the Euro. Convertible foreign currency may be exchanged at airport, in banks, foreign exchange offices at the current daily exchange rates.

Banking hours
In Italy banks generally open from 8:30 to 13:30 and 14:30 to 16:40 Monday through Friday. All banks are closed during the weekends and on public holidays. 3 Banks are located on the ground floor of Veronafiere Congress Centre.

Language
The official language of the Conference is English.

Press Room
A fully equipped press centre at the VeronaFiere Congress Centre will be available to accredited journalists throughout the Conference.

Insurance
In registering for the EPC 2006, participants will not be insured for any risks. Participants are advised to make their own arrangements in respect of short-term health and travel insurance. The organizing committee and the Conference secretariat do not assume any liability what so ever.

Exhibition – “Quoi de n’oeuf”
The exhibition entitled "Quoi de n'oeuf" features images of the patterns of eggshell formation in birds and reptiles printed on a variety of fabrics including silk and cotton. A number of external and internal factors conspire to alter shell deposition and frequently the egg thus formed is incapable of carrying out its duty as an embryonic chamber or a consumer commodity. In this functional failure however lies beauty and these variations from the norm captured as electron micrographs have, with the use of computer aided colour enhancement taken on a life of their own. This exhibition is borne out of one first shown in the Hunterian Museum of Glasgow University in 2003. Two exhibitions followed in France and the award of a Scholarship from the Leverhulme Trust funded the employment of a postgraduate student from the Glasgow School of Art to develop the images as inspiration for textile design. Nathalie McLeod's work was first shown at the Lighthouse Gallery in Glasgow and her Trust funded work was exhibited in November 2005 in the Atrium Gallery Glasgow.
CONGRESS INFORMATION

Important Telephone numbers (international prefix +39)

Veronafiere Congress Centre
045 8297009

Taxi service
045 532666

Police
112 / 113

Medical Emergency
118

Verona “Catullo” airport
045 8095666

Hotels
Due Torri Hotel Baglioni 045 595044
Hotel Antica Porta Leona 045 595499
Hotel Giberti 045 8006900
Hotel Ibis 045 8203720
Hotel Leon d’Oro 045 8049049
Hotel Leopardi 045 8101444
Hotel Ramada Fiera 045 8204485
Hotel Elena 045 8200920
Hotel Firenze 045 8011510
Hotel Italia 045 918088
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Hotel Milano 045 596011
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The Organising Committee of the EPC 2006 has invited undergraduate and graduate students to attend the Conference and the post-conference Youth Program. The program includes, in addition to the Conference in Verona, a 3-day post-conference tour. The post-conference tour will provide visits to some of the main poultry and food industries, research Institutes located in the North East of Italy as well as a guided visit of Venice.

The Youth Program has been sponsored by Foundation for Promoting Poultry Science, European Federation of WPSA, Italian branch of WPSA and British Poultry Science Ltd.

List of Youth Program attendants

Akinde          Olayinka          Nigeria
Babacanoglu     Elif              Turkey
Bhattacharyya   Amitav            India
Bobak           Lukasz            Poland
Clerici         Federica          Italy
Faroog          Umar              Pakistan
Folegatti       Elisa             Italy
Gomes           Gilson            Brazil
Gummi           Mohammed Bawa       Nigeria
Hayat           Zafar             Pakistan
Hyang Sook      Seol              Japan
Jönsson         Lotta             Sweden
Kadam           Mukund            India
Kalina          Jiri              Czech Republic
Karkulin        David             Slovak Republic
Kono            Tatsuyoshi        Japan
Kószó           Tibor             Hungary
Kozanoglu       Hacer             Turkey
Mujahid         Ahmad             Pakistan
Nasir           Zahid             Pakistan
Nishiki         Yurika            Japan
Pinent          Tamina            Germany
Podmaniczky     Béla              Hungary
Rosato          Maria Pina        Italy
Stevenson       Lindsay           U.S.A.
Szoke           Zsuzsanna         Hungary
Vegi            Barbara           Hungary
Venturi         Luca              Italy
Wawrzynska      Magdalena         Poland
Wolc            Anna              Poland
Yilmaz Dikmen   Bilgehan          Turkey
Shanmugam       Yuvaraj           India
Zahoor          Imran             Pakistan
Please note that the technical visits program may be subjected to changes (e.g.: if the minimum number of 20 people/visit is not reached the visit can be suppressed and the participants shifted in other visit).

**Visit 1 – Feed mill**
Visit to the AIA group feed mill (www.aia-spa.it) located at Acquanegra (CR) 1:30 h from the Conference Centre. In this plant feed for poultry (broiler, turkeys, hens), swine and cattle are produced. A specific line produces premixes for all the feed mills belonging to the Company.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 3.00 p.m. to Veronafiere Congress Centre

**Visit 2 – Broiler and turkey slaughterhouse and processing plant**
Visit to the poultry slaughterhouse and processing plant of the AIA group (www.aia-spa.it) located at Nogarole Rocca (VR) 30’ from the Conference Centre. Slaughtering and cut up lines for broiler chicken and turkey will be shown.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 2.00 p.m. to Veronafiere Congress Centre

**Visit 3 – Egg processing plant**
Visit to the integrated group EUROVO (www.eurovo.com) located at Occhiobello (RO) 1:30 h from the Conference Centre, where liquid egg and egg powder are produced. Feed mill, hen houses and egg processing plant are located in the same area and eggs are collected from the poultry house and delivered directly to the processing plant.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 2.00 p.m. to Veronafiere Congress Centre

**Visit 4 – Pasta production plant**
Visit to the pasta production plant of the Giovanni Rana Company (www.rana.it) located 15’ from the Conference centre. Typical Italian egg pasta, filled pasta and gnocchi are produced. Eggs used in the pasta production plant are obtained by dedicated farms where hens follow a specific feed regimen.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 2.00 p.m. to Veronafiere Congress Centre

**Visit 5 – Bakery production plant**
Visit to the largest production facility of baked goods (biscuit and snack) in Europe belonging to the Barilla group (www.barillagroup.it). The plant is located at Castiglione delle Stiviere (MN) 40’ from Verona.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 2.00 p.m. to Veronafiere Congress Centre

**Visit 6 – Poultry equipment manufacturer**
Visit to the SKA Company, specialist in the production of floor systems for poultry and pig equipment (www.ska.it) located 45’ from the Conference centre. SKA has achieved a position of leader in the market, being the only manufacturer producing such a large range of high quality technological products for the poultry and pig industry.

**DEPARTURE:** 9.00 a.m. from Veronafiere Congress Centre
**ARRIVAL:** about 2.00 p.m. to Veronafiere Congress Centre
SOCIAL AND TRAVEL PROGRAM

VICENZA and VENETIAN VILLAS
13th September
Full-day excursion

Full day excursion to discover Vicenza and Venetian Villas by private bus. Upon arrival in Vicenza, a guided sightseeing tour of the town will be organised to visit the Olympic Theatre (work of Andrea Palladio begun in 1580 and finished in 1583 from his son), and the Church of “Santa Corona”, where a lot of paintings of Veronese and Bellini can be admired, and “Contrà Porti” (Palladian Palace). Lunch will be held in a restaurant. In the afternoon, transfer by bus for the visit of two Venetian Villas near Vicenza: “Villa La Rotonda” (outside visit) that is the most important creation of Andrea Palladio during the period 1550/1580, and “Villa Valmarana ai Nani” (full visit) where famous Tiepolo’s wall paintings can be admired as well as the famous statues. At the end of the visit, return by private bus to Verona.

DEPARTURE: 8.45 a.m. from Veronafiere Congress Centre
ARRIVAL: about 5.30 p.m. to Veronafiere Congress Centre

VERONA
10th September / 11th September
Half-day excursion (morning)

Half day excursion to discover this beautiful town by private bus and on foot. This marvellous town is located between the plain and the first pre-alpine slopes and it is the second town of Veneto Region. First you will have a panoramic tour through the town by bus up to the Sanctuary of Santa Maria of Lourdes located on the hills surrounding town. On the way back some of the most beautiful monuments of Verona as well as “Porte Rinascimentali” (Renaissance Gates), “Castelvecchio” and “Ponte Scaligero”, “Arco dei Gavi”, “Porte Romane”, “Teatro Romano” and the facades of beautiful churches will be admired. Then, different squares such as “Piazza delle Erbe”, “Piazza del Mercato”, “Corte di Giulietta”, “Piazza dei Signori”, and finally “Piazza Bra”, featuring the famous “Arena” will be visited by walking

DEPARTURE: 8.45 a.m. from Veronafiere Congress Centre
ARRIVAL: about 12.30 to Veronafiere Congress Centre
SOCIAL AND TRAVEL PROGRAM

Visit to FRATELLI BOLLA Wine Cellar
11th September / 12th September
Half-day excursion (afternoon)

Half day excursion by private bus to discover “Wine world”. Firstly, a visit to historical “Villa Bresarola”, official institutional centre of “Bolla Wines”, will be organised. The President of this very important wine cellar will briefly welcome all visitors and show them the Villa frescoes and its historical Wine Cellar. Afterwards, departure by private bus for a “Valpolicella” tour up to Pedemonte, where the participant will have the opportunity to visit the historical Wine Cellar and to taste typical wines. This excursion crosses the soft undulating hills covered in vineyards, olive and cherry trees and enchanting villages. At the end of the visit, return by bus to Verona.

DEPARTURE: 14.00 a.m. from Veronafiere Congress Centre
ARRIVAL: about 6.00 p.m. to Veronafiere Congress Centre

Visit to GARDA LAKE
12th September
Full-day excursion

Full day excursion by private bus to discover the wonderful “Garda Lake”. Upon arrival, meeting with a local authorized guide and guided visit of Sirmione named “the Pearl of Garda Lake”. Sirmione is both simple and complex, young and old, full of life but also silent and contemplative. It is also considered as the “Eldorado” of water sports. The Romans built here two castles, two harbours and the huge famous villa that rises on rocks. On the foundations of the ancient Eastern harbour, the Scaligers later built their famous fortress, a charming, both graceful and imposing bulwark which represents one of the most beautiful buildings all over the world. The numerous villas, churches such as “Santa Maria Maggiore” and “San Pietro in Mavino”, wonderful frescoes, unique portals, belfries, battlements, arches and columns, the hamlets of Lugana and Colombari (wonderful gardens leading to the town centre) are all worth seen. After lunch, guided visit of “Grotte di Catullo”, considered as one of the most important archaeological resorts of the Roman Period in Northern Italy. At the end of the visit, return by bus to Verona.

DEPARTURE: 8.45 a.m. from Veronafiere Congress Centre
ARRIVAL: about 5.30 p.m. to Veronafiere Congress Centre
**SOCIAL AND TRAVEL PROGRAM**

**Visit to MANTUA / VALEGGIO / SIGURTA’ GARDENS**

- **12th September**
- **Full-day excursion**

Full day excursion by private bus. Upon arrival in Mantua, meeting with a local authorized guide and visit of Palazzo Tè so named for the place in which it is located (entrance included in the rate; the visit takes about one hour and half). The building was originally on an island and was separated from the town by the waters of the “Fossa Magistrale”. Over there boat-races and parties on water were organized. Palazzo Tè is composed of a large square with the courtyard and gardens, fountains, statues, avenues and marvellous buildings. At the end of the visit, transfer by bus to Valeggio sul Mincio, a Medieval village, and lunch in a typical restaurant. In the afternoon, guided visit to “Sigurtà Gardens”. The “Sigurtà Gardens” extend over 125 acres at the edge of the morainic hills that form the Southern border of Garda Lake, just 8 kms far from the town of Peschiera. They were settled as fortified garden (1617) surrounding Villa Maffei. In 1859 these gardens became the headquarters of Napoleon III for a brief period. The park and its gardens were opened to public in 1978. The “Sigurtà Gardens” Park is now considered as one of the most beautiful gardens all over the world. At the end of the visit, return by bus to Verona.

**DEPARTURE:** 8.45 a.m. from Veronafiere Congress Centre  
**ARRIVAL:** about 5.30 p.m. to Veronafiere Congress Centre

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**Visit to VENICE**

- **14th September**
- **Full-day excursion**

Full day excursion to discover this wonderful town. Upon arrival in Venice, transfer by ferry from the bus parking to the city centre and meeting with a local authorized guide. Guided visit of the city centre including “Piazza San Marco”, Basilica di San Marco and its wonderful mosaics. Afterwards, visit of “Palazzo Ducale”, one of the most important and famous resort in Venice; visit of “Ponte dei Sospiri”, featuring a short walk on it. Lunch during the excursion in a small typical restaurant. In the afternoon, free individual visits or shopping. At the end, transfer by ferry to the bus parking and return to Verona.

**DEPARTURE:** 8.45 a.m. from Veronafiere Congress Centre  
**ARRIVAL:** about 6.30 p.m. to Veronafiere Congress Centre
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