

International Conference

**Epidemiology and Transmission of  
VTEC and other Pathogenic  
*Escherichia coli***



**Stockholm, Sweden  
September 25<sup>th</sup> and 26<sup>th</sup>, 2008**



## Epidemiology and Transmission of VTEC and Other Pathogenic *Escherichia coli*

The Pathogenic *Escherichia coli* Network (PEN) aims to bring together key researchers from universities and institutions, medical specialists, veterinary specialists, environmental health professionals, food testing specialists and regulatory specialists at bi-annual conferences to exchange their experiences and opinions on pathogenic *E. coli*.

Pathogenic forms of *E. coli* cause a variety of diseases in humans and animals that affect millions world wide such as dysentery, traveller's diarrhoea, haemorrhagic colitis and hemolytic uraemic syndrome. New modes of transmission and virulence coupled with a very low infectious dosage make pathogenic *E. coli* a hugely important public health issue. There is little doubt that more pathogenic *E. coli* strains will evolve and be recognised in the future. Current groups include:

Verocytogenic *E. coli* (VTEC) (including EHEC)  
Enteropathogenic *E. coli* (EPEC)  
Enterotoxigenic *E. coli* (ETEC)  
Enteroinvasive *E. coli* (EIEC)  
Enteraggregative *E. coli* (EAaggEC)  
Diffusely Adherent *E. coli* (DAEC)

This PEN conference aims to increase our understanding of the epidemiology and transmission of pathogenic *E. coli*. The conference will address:

- transmission routes of pathogenic *E. coli*
- surveillance of pathogenic *E. coli* outbreaks
- epidemiological methods and models in examining pathogenic *E. coli* outbreaks

It will provide a forum for coordination action members, epidemiologists, medical professionals, environmental health professionals, research scientists, veterinarians and others to learn about and discuss the current state of pathogenic *E. coli* epidemiology and transmission.

The conference is organised by Teagasc–Ashtown Food Research Centre and Swedish Institute for Infectious Disease Control (SMI) as part of the Pathogenic *Escherichia coli* Network (PEN) co-ordination action project ([www.pen-europe.eu](http://www.pen-europe.eu)). PEN is funded by the European Commission under the Sixth Framework Programme – Food Quality and Safety (Project Number: FOOD-CT-2006-036256).

# Conference Programme

## Thursday 25th September

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9:00	10:00	Registration
10:00	10:20	Welcome and Introduction Dr. Declan Bolton, Ashtown Food Research Centre, Teagasc Dr. Sven Lofdahl, Swedish Institute for Infectious Disease Control

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### Session 1: Public Health Surveillance I

Chair	Stefano Morabito, Istituto Supiore di Sanità	
10:20	11:10	Keynote address Escherichia coli O157:H7: A Malevolent Mosaic Phil Tarr Washington University School of Medicine, St. Louis, MO, USA
11:10	11:50	Surveillance of foodborne diseases at EU-level Andrea Ammon European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden Surveillance and Outbreak Investigations of VTEC in Sweden; a Challenge with
11:50	12:10	Many Involved Yvonne Andersson Swedish Institute for Infectious Disease Control (SMI), Stockholm, Sweden Evidence-Based Guidance on Health Protection Management of Verocytotoxin-
12:10	12:30	Producing E. coli (VTEC) Kevin Pollack Health Protection Scotland, Glasgow, UK
12:30	2:00	Lunch

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**Session 2: Public Health Surveillance II**

Chair Rosangela Tozzoli, Istituto Supiore di Sanità

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2:00 2:40 Epidemiology and Molecular Surveillance of Shiga Toxin (Verocytotoxin) producing  
Escherichia coli Infections

Marta Rivas

INEI-ANLIS "Dr. Carlos G. Malbrán", Buenos Aires, Argentina

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2:40 2:55 Enterotoxigenic E. coli (ETEC): Epidemiology, Pathogenic Characteristics and  
Clonal Relatedness in Bolivian Strains

Claudia Rodas

Gottenberg University Vaccine Research Institute (GUVAX), Gottenberg, Sweden.

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2:55 3:10 Shiga Toxin-Producing E. coli (STEC) in Peruvian Children with Bloody Diarrhea  
and Children with Hemolytic Uremic Syndrome

Theresa J. Ochoa

Universidad Peruana Cayetano Heredia, Lima, Peru

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3:10 3:25 Virulence Factors of Verocytotoxin-Producing E. coli O145:H28 and O26:H11  
Isolated During a HUS Outbreak in Belgium

Glenn Buvens

UZ Brussel, Brussels, Belgium

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3:25 3:55 Tea/Coffee and Poster Session

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3:55 4:10 Enteroggregative E. coli associated with a Foodborne Outbreak of Gastroenteritis

Gaia Scavia

Istituto Superiore di Sanità, Rome, Italy

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4:10 4:30 How Global is VTEC?

Sven Lofdahl

Swedish Institute for Infectious Disease Control (SMI), Stockholm, Sweden

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4:30 4:50 The Epidemiology of Non-VTEC E. coli

Flemming Scheutz

The International *Escherichia* and *Klebsiella* Centre (WHO), Copenhagen,  
Denmark

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4:50 5:00 Update on EFSA Scientific Opinion and Task Force on VTEC in Animals and Food

Geraldine Duffy

Ashtown Food Research Centre, Teagasc, Dublin, Ireland

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5:00 Close of Day 1

## Friday 26th September

### Session 3: Molecular Epidemiology

Chair Yngvild Wasteson, Norwegian School of Veterinary Science

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9:00	09:40	Keynote Address Molecular Surveillance of Shiga Toxin Producing <i>E. coli</i> - the American Experience Peter Gerner-Smidt Centres for Disease Control and Prevention, Atlanta, GA, USA
9:40	10:00	Vero Cytotoxin-Producing <i>E. coli</i> O157 (VTEC O157) Outbreak Linked to School Meals: Contribution of Molecular Typing to Epidemiological Investigation Geraldine Smith Health Protection Agency Centre for Infections, London, UK
10:00	10:20	Characterisation of <i>E. coli</i> O157 Isolates from Farm Animals, Wild Animals and Foods, Collected During 2002 Till 2007 Annet E. Heuvelink Food and Consumer Product Safety Authority (VWA), Zutphen, The Netherlands
10:20	11:00	Tea/Coffee and Poster Session
11:00	11:40	VTEC: Risk Factors and Epidemiology in Humans Sarah O'Brien University of Manchester, UK
11:40	12:00	Risk Maps and MLVA Typing Elucidate the Epidemiology of VTEC Infection in NE Scotland Iain Ogden and Norval Strachan University of Aberdeen, UK
12:00	12:15	Spatial Aspects of Enterohaemorrhagic <i>E. coli</i> (EHEC) O157 in Sweden Gustaf Rydevik Swedish Institute for Infectious Disease Control, Stockholm, Sweden
12:15	12:30	MedVetNet – Update on Work-package 6 Speaker to be confirmed
12:30	1:30	Lunch

#### Session 4: Risk Factors

Chair	Declan Bolton, Ashtown Food Research Centre, Dublin, Ireland	
1:30	1:45	PEN Update, Including Information on Oslo Meeting, PEN Travel Fellowships Declan Bolton Ashtown Food Research Centre, Teagasc, Dublin, Ireland
1:45	2:00	Prevalence of <i>E. coli</i> O157 on Different Cattle Farm Types and Identification of Risk Factors Katrijn Cobbaut Ghent University, Belgium
2:00	2:15	An STEC Perspective in Australia – Humans, Animals and Food Narelle Fegan Food Science Australia, Queensland, Australia
2:15	2:30	Prevalence of Enteropathogenic (EPEC), Enterohaemorrhagic (EHEC) and Verocytotoxigenic (VTEC) <i>E. Coli</i> Strains in Veal Calves in Belgium Adeline Muylaert University of Liège, Liège, Belgium
2:30	2:45	Tracking Verocytotoxigenic <i>Escherichia coli</i> (O157, O111, O26, O103 and O145) in Cattle at an Irish Abattoir Mairead McCann Ashtown Food Research Centre, Teagasc, Dublin, Ireland
2:45	3:00	A Survey of <i>E. Coli</i> O157 Detection and Enumeration in Slurries of Italian Cattle Farms Gabriella Conedera Istituto Zooprofilattico Sperimentale delle Venezie, Padova, Italy
3:00	3:10	“Update on Norm Method for VTEC” Stefano Morabito Istituto Superiore di Sanità, Rome, Italy
3:10	3:20	VTEC 2009, Argentina Marta Rivas INEI-ANLIS "Dr. Carlos G. Malbrán", Buenos Aires, Argentina
3:20		Close of Conference Declan Bolton, Ashtown Food Research Centre, Teagasc Sven Lofdahl, Swedish Institute for infectious Disease Control

## Registration

### **REGISTRATION** (including conference dinner)

Registrations are now being accepted. Those wishing to participate may do so by using the attached form or the form on line at [www.pen-europe.eu](http://www.pen-europe.eu).

Participant registration fee: € 200

Student registration fee: € 100

The conference fee includes lunch, refreshments, conference materials and conference dinner. Hotel accommodation is not included in the registration fee.

For a list of suggested hotels and travel information, please consult the PEN website ([www.pen-europe.eu](http://www.pen-europe.eu))

**Deadline for registration is 29<sup>th</sup> August, 2008.**

## Date and Venue

### ***Stockholm, Sweden, 25<sup>th</sup> and 26<sup>th</sup> of September 2008***

The conference will take place at the Näringslivets Hus conference centre at 19 Storgatan in the centre of Stockholm. Please consult the PEN website [www.pen-europe.eu](http://www.pen-europe.eu) for more details.

### **ORGANISING COMMITTEE**

This conference has been organised by organised by Teagasc – Ashtown Food Research Centre, Swedish Institute for Infectious Disease Control (SMI) and the PEN Management Committee:

**Dr. Declan Bolton** (Co-ordinator), Teagasc-Ashtown Food Research Centre

**Dr. Geraldine Duffy** (Chair), Teagasc-Ashtown Food Research Centre

**Dr. Sven Lofdahl**, Swedish Institute for Infectious Disease Control

**Dr. Chris Baylis**, Campden & Chorleywood Food Research Association

**Dr. Rosangela Tozzoli**, Istituto Superiore di Sanità

**Prof. Yngvild Wasteson**, Norwegian School of Veterinary Science.

### **LANGUAGE**

All conference proceedings will be in English and translations will not be provided.

# REGISTRATION FORM

Please photocopy this form and fill in using BLOCK CAPITALS

TITLE: Prof.  Dr.  Mr.  Ms.

FIRST NAME: \_\_\_\_\_

LAST NAME: \_\_\_\_\_

ORGANISATION: \_\_\_\_\_

DEPARTMENT: \_\_\_\_\_

FULL CONTACT ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

FAX: \_\_\_\_\_

EMAIL: \_\_\_\_\_

STUDENT\*: Yes  No

SPECIAL DIETARY REQUIREMENTS:

\_\_\_\_\_

## CONTACTS

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Sweden

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## PAYMENT

PARTICIPANT FEE  €200

STUDENT FEE  €100

*Option 1: I enclose a cheque/bank draft payable to Teagasc-Ashtown Food Research Centre*

*Option 2: I wish to pay by bank transfer. Our bank details will be forwarded to you*

**Please return completed registration to:**

**Dr. Declan J. Bolton, Teagasc – Ashtown Food Research Centre, Ashtown, Dublin 15, Ireland.**

**\*Students must include a letter from their supervisor confirming full time student status**

*PEN partners do not need to pay registration (one partner per institution).*



the 1990s, the number of people in the world who are undernourished has increased from 600 million to 800 million.

There are a number of reasons for this. One is that the population of the world has increased by 1.5 billion since 1980. Another is that the number of people who are undernourished has increased in almost every country in the world.

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