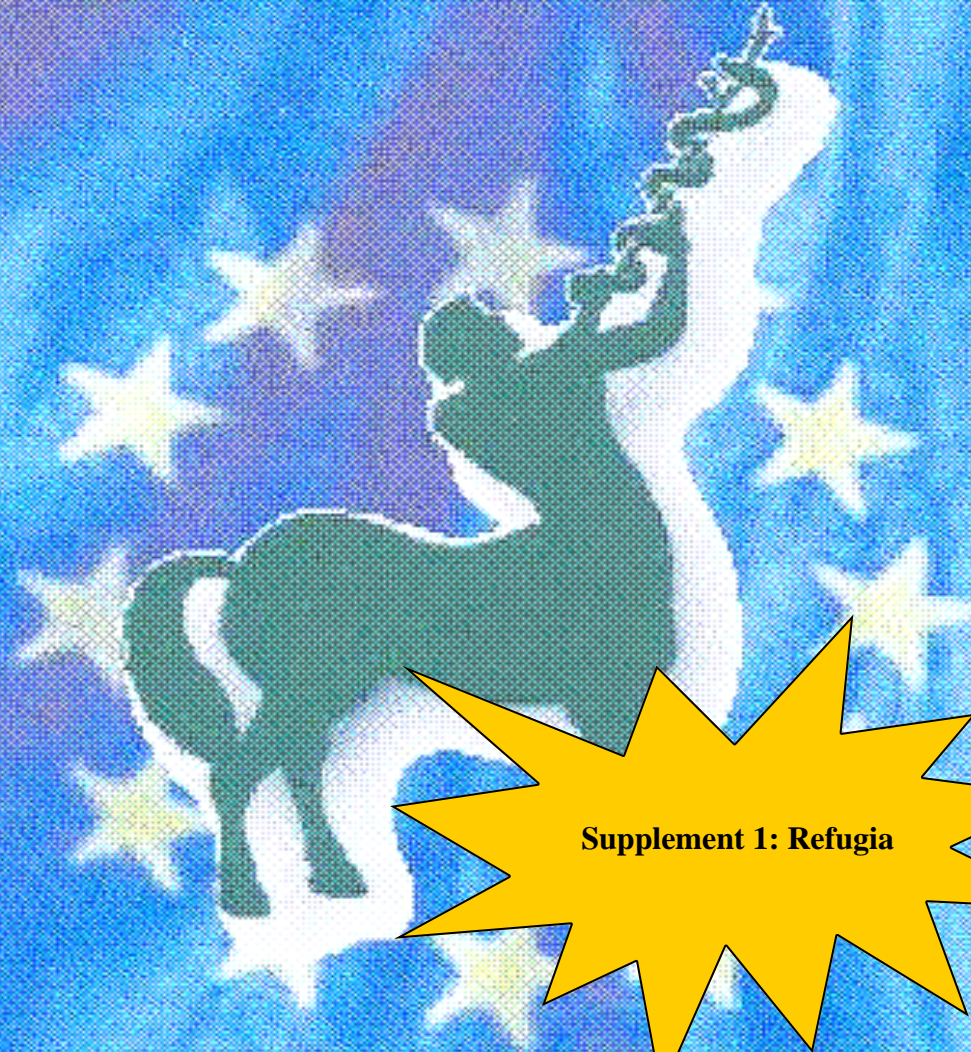


# EVPC Newsletter

## August 2009

European Veterinary Parasitology College



Supplement 1: Refugia

EVPC

Number 15

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**EVPC Website: [www.eurovetpar.org](http://www.eurovetpar.org)**

## The New EVPC Board

At the last EVPC *General Business Meeting*, held in Toulouse June 3<sup>rd</sup>, college members elected seven new Board members to replace the out-going Board, elected in Parma in 2003.

Thomas Schnieder, Chairperson of the EVPC Nominations Committee, counted up the ballots and announced the names of those colleagues who will be guiding the college toward definitive recognition. The new Board takes over on September 27<sup>th</sup>, 2009.



Anja Joachim, President   Kurt Pfister, Vice-President



Laura Kramer, Secretary   Edwin Claerebout, Treasurer



Guadalupe Mirò, member   Domenico Otranto, member   Michel Franc, member

**GOOD LUCK TO THE NEW BOARD!**

## Highlights of the EVPC GBM in Toulouse

The General Business of a college can be the "same old routine", but not at the EVPC meetings! There's always something to grab the members' attention and this year was no exception. Reports from EVPC President Claudio Genchi and Secretary Dennis Jacobs assured the assembly that the college is healthy, but also emphasized the urgent need for more residency programmes. Claudio Genchi reminded members that each and every diplomate has the duty to train new diplomates and that both Standard programmes and Alternative residencies are important for the growth of college membership. Dennis Jacobs reviewed the news from the European Board for Veterinary Specialization, including those changes to our constitution that put us in line with the EBVS policies and procedures. Dennis and new EVPC Secretary Laura Kramer will be preparing a detailed five-year report on the college and its activities, to be submitted to the EBVS this year.



EVPC President Claudio Genchi at the GBM in Toulouse

Following reports from Committee chairpersons J. Vercruysse, B. Losson, K. Pfister and S. Sotiraki, EVPC diplomate Susan Little outlined current progress towards an American College of Veterinary Parasitology. Indeed, inspired by the success of the EVPC, American colleagues are

submitting a petition to ABVS for the establishment of Veterinary Parasitology as a specialty within the American College of Veterinary Microbiology. It was clear that there are still many challenges ahead and that the input from EVPC members is essential for the success of this endeavour.

After a well-deserved coffee-break, it was time for the first "Meet the EVPC Residents" session. College members Thomas Geurden and Johannes Charlier organized the event and invited all current EVPC Residents to participate. Two colleagues took to the stage to present themselves and their activities.



EVPC Residents Giulio Grandi and Cristina Strube

Dr. Giulio Grandi, EVPC Resident from the University of Parma, presented a clinical case of canine heartworm disease and the results of an experimental treatment protocol targeting the bacterial endosymbiont *Wolbachia*. Next up was Dr. Christina Strube from the University of Hannover, who reported results of her research on transcriptional changes during transition from free-living to parasitic stages of the bovine lungworm *Dictyocaulus viviparus*. There is no doubt that the future of the EVPC, in the hands of these bright and determined colleagues, is guaranteed. Edwin Claerebout finished up the session with an extremely interesting talk on SRTPs.

## Highlights of the EVPC GBM in Toulouse (cont...)

The current programme at Ghent University was outlined and a lively discussion followed on the difficulties that many colleagues foresee in obtaining funding for training residents. Susan Little reported that in USA the Companion Animal Parasite Council has expressed interest in funding a training programme for the American college and that the EVPC could explore that route in Europe as well.

The meeting recessed for a wonderful sit-down luncheon where discussion flowed together with the wine.

Watch out for the GBM minutes which are available in the members only section of the EVPC website ([www.eurovetpar.org](http://www.eurovetpar.org)).



Philippe Dorchies and Michel Franc host EVPC Board members at the Veterinary School in Toulouse

**Once again a warm thank-you to our wonderful hosts Michel Franc and Philippe Dorchies for the extraordinary organization and hospitality.**

EVPC members at the coffee break



**See Domenico Otranto's summary of the Scientific Symposium on the following page!**

# VII EVPC Scientific Symposium Summary

## VETERINARY PARASITOSEs IN THE MEDITERRANEAN AREA

June 3<sup>rd</sup> 2009

Toulouse

By Domenico Otranto



The annual EVPC Scientific symposium was held this year on June 3<sup>rd</sup> during the 2009 ISEP Meeting in Toulouse, France. EVPC member Michel Franc invited several colleagues to discuss on the Emergent and Endemic Veterinary Parasitoses in Mediterranean area. The same geographical area was defined by the French historian Fernard Braudel as "a world by itself" or a "theatre representing the whole world" (Braudel, F. (1986) *Une leçon d'histoire*, Arthaud - Flammarion). Accordingly, the scientific speeches have focussed on very different important parasitic infections threatening human and animal health worldwide which are also typical for this area.

**Allal Dakkak** (University of Rabat Morocco) presented data related to the epidemiology, diagnosis of the echinococcosis, focussing on relevance of strain characterization and vaccination trials. The analysis of data suggested that echinococcosis still has a wide geographical distribution in the Mediterranean area and remains a public health and economic concern for most countries in this area. The main factors influencing the existence, the transmission and dissemination of the infection are represented by the existence of infected dogs (mainly stray dogs), the illegal slaughtering and, most importantly, the absence of national control plans. **Philippe Dorchies** (University of Toulouse, France)

enthusiastically discussed studies on *Oestrus ovis* and other nasal botflies and also summarised the great amount of original studies carried out by his scientific team. He suggested that nasal botflies have different modalities of adaptation to their host which evolved, at the mean time, defence mechanisms to prevent larvae deposition and limit their development. **Smaro Sotiraki** (University of Tessoniki, Greece) presented an interesting study on the genetic analysis on *Wohlfahrtia magnifica* (larvae and adult) populations recently isolated from Create and from Morocco. By examining some cytochrome b target regions researchers detected twelve haplotypes whose analysis suggested a relative lack of genetic diversity in specimens from eastern Europe, contrasting to those collected in Morocco.

Some emergent parasitoses were discussed in the second part of the symposium. Indeed, **Carlos Guitierrez** (University of Las Palmas, Canary Island, Spain) presented two recent outbreaks of *Trypanosome evansi* infection in France and Spain due to importation of dromedary camels from the Canary islands. The causes of edemicity of *T. evansi* in Canary islands as well the needing to establish diagnosis procedure, curative or preventive treatment and quarantine system in animals moving from a country to another have been discussed. Finally, **Philippe Jacquet** (Ecole Nationale Vétérinaire Toulouse, France) presented an update about a little known protozoa *Besnoitia besnoiti*. He described recent advances into the taxonomy of this protozoa, the current expansion of cattle besnoitiosis worldwide, its epidemiology, the clinical signs, the diagnosis and the control. Although new

## VII EVPC Scientific Symposium Summary (cont...)

studies were conducted recently, Jacquet emphasized the great need for further basic research in order to answer many questions still unanswered about this protozoa. This was the nice picture for the parasites of the Mediterranean area!



EVPC members enjoying the science in Toulouse

**Official  
Journal  
of the  
EVPC**



*'Veterinary Parasitology'*

# Goats and Parasites

## The New Cost Action Kicks Off in Greece!!

In the frame of the COST Action FA0805

Goat-parasite interactions: from knowledge to control (CAPARA)

We are pleased to announce the:

### 1st WGs Workshop & MC Meeting

That will be held from the 7th to the 9th of October 2009 in Thessaloniki, Greece



Goat production is an example of a sustainable production system fully integrated within the local rural development. One of the most frequent problems of goat breeding, associated with the outdoor based husbandry system, is parasitism. For years, it has been considered that data obtained on parasite infections in sheep may be directly transferred to goats. Recent studies have underlined the existence of significant caprine specificities in the host-parasite interactions.

CAPARA is a recently launched COST Action under the frame of Food & Agriculture and its main objective is to form a network in order to provide scientific grounds for the development of adapted strategies to control parasitism in goats and to improve sustainable goat rearing.

The Network is covering 4 scientific fields organised in Working Groups:

- a) WG1: epidemiology of parasitic infections in goats.
- b) WG2: goat immune response to helminths.
- c) WG3: pharmacokinetics of antiparasitic drugs in goats.
- d) WG4: alternatives to chemical drugs.



## Goats and Parasites (cont...)

### Outline of the program

**October 7:** Oral communications, poster session. MC meeting

**October 8:** Oral communications, poster session.

**October 9:** Field trip

### Communications and Poster session

Participants willing to communicate should send a title and an abstract of their communication to [capara@vri.gr](mailto:capara@vri.gr) by **September 7, 2009**. Decision will be taken by September 18, 2009.

### Location and access

The workshop will be held in Thessaloniki. Thessaloniki is the capital of Macedonia and second largest city of Greece at about a million inhabitants. More importantly, it is a city with a continuous 3000-year history. It was first established in 316 B.C. by Kassandros and named after his wife, Thessaloniki, half sister of Alexander the Great. Thessaloniki can be easily reached by plane ([www.thessalonikiairport.gr](http://www.thessalonikiairport.gr)) from most European cities, and by train ([www.ose.gr](http://www.ose.gr)) and car from many Balkan countries.

Information about Workshop venue and accommodation will be provided shortly.

### Registration

The Conference Registration Form (see following page) should be completed and emailed to [capara@vri.gr](mailto:capara@vri.gr) by **September 21, 2009**. The cost for registration is 100 Euros. Participants will pay the fees on site in cash.

Looking forward to seeing you in Thessaloniki!

### The Organizing Committee

- Smaro Sotiraki, VRI-NAGREF, Greece (COST Action Chair and local organizer)
- Elias Papadopoulos, Aristotle University, Greece (local organizer)
- Herve Hoste, INRA-ENVT, France (COST Action Vice Chair)
- Kurt Pfister, LMU Munich, Germany (Conference Moderator)
- Laura Rinaldi, University of Naples Federico II, Italy (Working Group Leader)
- John Huntley, Moredun Research Institute, UK (Working Group Leader)
- Marian Varady, Parasitological Institute Slovak Republic (Working Group Leader)
- Ignacio Ferre, Complutense University of Madrid, Spain (Working Group Leader)

**REGISTRATION FORM**

Name:

Institution:

Postal Address:

Tel:

Fax:

E-mail:

Please give specific dates: arrival: \_\_\_\_\_ departure: \_\_\_\_\_

**ABSTRACTS AND PRESENTATIONS**

Presentation will be in oral or poster format. The Organizing Committee does encourage poster presentations. The abstracts should be as informative as possible. After a review of the abstracts, the organizing committee will decide on the final scientific program.

=====

**ABSTRACT FORM**

I would like to make an o Oral  or o Poster presentation  (Please mark).

Title:

Author(s), affiliation(s) and email of corresponding author:

Abstract (approximately 250 words)

=====

# New Honorary Members

## THE EVPC CONGRATULATES NEW HONORARY MEMBERS

At this years' meeting in Toulouse, Philippe Dorchies and Dennis Jacobs were elected by an overwhelming majority as Honorary members of the EVPC. Our College's Constitution defines an Honorary Member as "*a person who has contributed in an extraordinary manner to the advancement of Veterinary Parasitology*" and there is no doubt that both these esteemed colleagues not only have contributed to our discipline, but also to the founding and development of the College.

## CONGRATULATIONS PHILIPPE AND DENNIS!



## REMINDER!!

For all those EVPC members who applied for re-accreditation and did not satisfy the 1-in 3 attendance rule for EVPC meetings.

If you attended the General Business Meeting in Toulouse, please contact EVPC Credential Committee chairperson Kurt Pfister at:

[Kurt.Pfister@tropa.vetmed.unimuenchen.de](mailto:Kurt.Pfister@tropa.vetmed.unimuenchen.de)

# EMEA Seeks Input From EVPC Members

There have been several new developments at the European Medicines Agency (EMA) and Iskren Todorov is asking the European Colleges of Veterinary Specialization to give their opinion and suggestions.

1. Following changes to the European legislation EMA is now able to make public some of the information on clinical trials in Europe. EMA is interested in knowing which aspects of this information are of most interest, how people might use this information and how they will want to access it.

A very short web survey is available under the following web page:

[http://www.surveymonkey.com/s.aspx?sm=EjMAd5n47EcrXy7leGgSMw\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=EjMAd5n47EcrXy7leGgSMw_3d_3d)

2. EMA has published a draft proposal on the EMA Transparency Policy (EMA/232037/2009) for consultation, following the endorsement by the EMA Management Board. The aim of the Policy is to set out how the Agency intends to provide for greater clarity and openness in all areas of its operations.

Please take the time to look the document over\* and provide any comments you may have to [transparency@ema.europa.eu](mailto:transparency@ema.europa.eu)\*\*

\*available at <http://www.ema.europa.eu/pdfs/human/transparency/23203709en.pdf>

\*\*using the following template: [http://www.ema.europa.eu/pdfs/human/transparency/Template\\_Comments.doc](http://www.ema.europa.eu/pdfs/human/transparency/Template_Comments.doc)

**For further information, please contact:**

Iskren Kirilov Todorov

e-mail: [iskren.todorov@ema.europa.eu](mailto:iskren.todorov@ema.europa.eu)

**Please note that the deadline for submitting comments is 25 September 2009.**

For further information on the EMA Transparency policy, please visit the following web site:

<http://www.ema.europa.eu/htms/human/transparency/transparency.htm>

We would be grateful if you could disseminate these details to anyone else who might be interested in this topic.

## EVPC 2010

EVPC 2010 will be hosted by Kurt Pfister in Munich on 29<sup>th</sup>/30<sup>th</sup> April, 2010 with the theme 'Advances in Tropical Veterinary Parasitology'



The EVPC Board (here with their hosts at the Toulouse Veterinary School) wish you all a happy and healthy summer and hope to see you in Munich, 2010.

## THE EVPC HAS A NEW EMAIL ADDRESS

As of September 1<sup>st</sup>, 2009  
all correspondence to the EVPC must be sent to

[evpc@unipr.it](mailto:evpc@unipr.it)

**MARK THIS IN YOUR ADDRESS BOOK NOW!!**

# WAAVP 2009 in Calgary

The 22nd WAAVP conference was held in Calgary from the 9<sup>th</sup>-13<sup>th</sup> of August. The meeting highlighted the best research in the many and varied areas of expertise that make up the discipline of Veterinary Parasitology. The 2009 meeting was also unique in that two additional international groups, the American Association of Veterinary Parasitologists (AAVP) and the International Commission on Trichinellosis (ITC), held joint meetings in Calgary.

The Opening Ceremony got the meeting off to a great start, with bison and bagpipes! Tom Kennedy and Douglas Colwell took to the stage and presented the theme for the conference, **"One World One Health: Parasites in a Changing Environment"**. The plenary sessions included talks on parasites in a changing landscape, the Arctic as a model for climate change, the history of veterinary parasitology in Canada and the need for

new approaches to control in the age of drug resistance. Indeed, the plenary speakers focused attention on the dynamic and interactive world in which we find ourselves immersed.



A warm welcome to all the delegates was assured by this kindly bison who stopped by at the Opening Ceremony!

The meeting truly exemplified the integrated nature of the interactions

between humans, their domestic animals, wildlife and the environment. The number of topics covered in the concurrent sessions was vast and included epidemiology, pathogenesis and immunology, wild life parasitology, drug resistance, etc. Many sessions also concentrated on integrated



WAAVP delegates are accompanied to the coffee break by the stirring sound of bagpipes.

approaches and alternative strategies for the control and treatment of parasitic infections, particularly in farm animals.

No meeting would ever be possible if not for corporate sponsorship and the corporate symposiums were an occasion to see what's new in the research and development of new antiparasitic drugs and the current state of efficacy of the more widely-used compounds.



EVPC members Maggie Fisher and Thomas Schnieder chat in the commercial exhibit area.

Of course, as is tradition at any meeting full of parasitologists, there was no lack of fun and laughter: starting with the Sunday evening reception, continuing at the Heritage Park "open buffet and bar" on Monday, right through to the Thursday evening gala, a great party was had by all.

**The WAAVP Scientific Committee and the Local Organising Committee are to be congratulated for an excellent conference in Calgary, the heart of the Canadian prairies.**

## WAAVP 2009 (cont...)

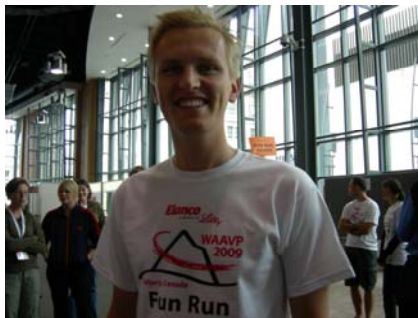
### WAAVP FUN RUN

#### EVPC DELEGATES SHOW THEIR MUSCLES AT THE WAAVP FUN RUN

The WAAVP Fun Run is now a tradition. The event is aimed at raising funds to ensure that the Peter Nansen Young Scientist Award continues to be available to young parasitologists. The five-mile track around the lake in Calgary was a great opportunity to witness what our EVPC members are made of!



George von Samson-Himmelstjern and Stig Thamsborg gear up for the run.



One of EVPC's newest diplomates, Johannes Charlier, is happy to support the Peter Nansen fund.



Go for it, Dennis!!!

### WAAVP-Bayer Award

#### CONGRATULATIONS ROBIN GASSER!

At this year's WAAVP meeting in Calgary, EVPC Diplomat Robbin Gasser was chosen as the winner of the 2009 WAAVP-Bayer award for Excellence in Research in Veterinary Parasitology.



#### THE EVPC WEBSITE: GO THERE



<http://www.eurovetpar.org>

# Bristol Proceedings

The proceedings of the 2008 EVPC Scientific Symposium 'Veterinary Parasitology and Climate Change' held in Bristol are now available in **Veterinary Parasitology 163 (4) pp 1 - 40**



## Articles Include:

- Santiago Mas-Coma  
"Climate change effects on trematodiasis, with emphasis on zoonotic fascioliasis and schistosomiasis"
- Susan E. Shaw  
"Canine leishmaniasis in the United Kingdom: a zoonotic disease waiting for a vector?"
- Claudio Genchi  
"Climate and *Dirafilaria* infection in Europe"
- F. Kenyon  
"Sheep helminth parasitic disease in south eastern Scotland arising as a possible consequence of climate change"
- Frederic Beugnet  
"Emerging arthropod-borne diseases of companion animals in Europe"

## EXECUTIVE COMMITTEE

**President:** Anja Joachim  
anja.joachim@vu-wien.ac.at

**Vice President:** Kurt Pfister  
kurt.pfister@tropa.vetmed.uni-muenchen.de

**Secretary:** Laura Kramer  
laurahelen.kramer@unipr.it

**Treasurer:** Edwin Claerebout  
edwin.claerebout@ugent.be

**Board Members:** Guadalupe Mirò  
gmiro@vet.ucm.es

Domenico Otranto  
d.otranto@veterinaria.uniba.it

Michel Franc  
m.franc@envt.fr

**Past President:** Claudio Genchi  
claudio.genchi@unimi.it

## COMMITTEE CHAIRS

**Education:** Stig Thamsborg  
smt@life.ku.dk

**Examination:** Bertrand Losson  
blosson@ulg.ac.be

**Credentials:** Kurt Pfister  
kurt.pfister@tropa.vetmed.uni-muenchen.de

**Nominations:** Thomas Schnieder  
thomas.schnieder@tiho-hannover.de

## NEWSLETTER TEAM

**Editors:** Laura Kramer  
laurahelen.kramer@unipr.it

Maggie Fisher  
mfisher@globalnet.co.uk

**Editorial:** Dennis Jacobs  
evpc@rvc.ac.uk

**Design:** Laura Yeadon  
l.yeadon@googlemail.com

The European Veterinary Parasitology College (EVPC) Newsletter is published three times a year with issues in April, August and December. Contributions to the Newsletter are welcome and should be submitted by the 15th day of the month prior to issue.

### SUBMISSIONS DEADLINES:

<u>Newsletter Date</u>	<u>Deadline Date</u>
1st December 2009	15th November 2009

1st April 2010	15th March 2010
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Please contact the editors with any queries regarding these dates

### SUBMISSIONS TO:

Laura Kramer (Editor)

Tel: 0039 0521 032715

Fax: 0039 0521 032770

[laurahelen.kramer@unipr.it](mailto:laurahelen.kramer@unipr.it)

*European Veterinary Parasitology College*

# Refugia

\*For EVPC residents and their supervisors

European Veterinary Parasitology College



EVPC

Supplement 1

## ATTENTION EVPC RESIDENTS: IMPORTANT CHANGES TO THE EVPC CONSTITUTION

The EBVS call for all provisionally recognised Colleges to produce a detailed 5-year report necessitated an update of the constitution and associated documents to ensure that these reflected current EBVS and EVPC policies and procedures. Some of these changes have a direct effect on Residency programmes and credentials for sitting the EVPC exam. At the General Business Meeting in Toulouse on June 3<sup>rd</sup>, EVPC members approved the following modifications (in blue):

To the EVPC Constitution:

### **Article 5: General requirements for College Examination**

5.2 The candidate will normally complete at least **36 months** of advanced post-graduate training and appropriate experience in Veterinary Parasitology that is acceptable to the Board. Acceptable means "a training programme that is directed by a Diplomat of the EVPC and approved by the EVPC."

The candidate must have been the first author of at least **one** original article **and the first or prominent\* author of a further two original articles all of which demonstrate application of scientific methods on subjects that are relevant to Veterinary Parasitology. The articles should have been published or accepted for publication in international peer-reviewed journals. Literature reviews are excluded.**

**\*i.e. the candidate must have played a major role in the planning and execution of the study.**

To the EVPC Information Brochure.

### **Article 4.0 General requirements for College Examination**

4-2- **Have received their veterinary qualification from an EAEVE-approved establishment unless relieved of this obligation by the Board\*.**

**\*Applications to the Board should be made BEFORE starting a training programme. Such decisions are made at the discretion of the EVPC Board on the basis of the applicant's education and post-graduate experience.**

4-2 **4-3- Be licensed to practice veterinary medicine in Europe, or present evidence, which in the judgement of the Board of the European Veterinary Parasitology College, of an equivalent qualification. in the countries of the European Union unless relieved of this obligation by the Board\*.**

**\*Applications to the Board should be made BEFORE starting a training programme. Such decisions are made at the discretion of the EVPC Board on the basis of the applicant's education, experience and commitment to contributing to Veterinary Parasitology in a European context. The EVPC Diploma does NOT entitle the holder to practise veterinary medicine in countries of the European Union.**

4-4 **4.5.-** Be the first author of three *at least one* original articles *and the first or prominent\* author of a further two original articles* all of which demonstrate application of scientific methods on subjects that are relevant to Veterinary Parasitology. The articles must be original, and have been published or accepted for publication in an internationally peer-reviewed journal. Literature reviews are excluded.

*\*i.e. the candidate must have played a major role in the planning and execution of the study. If not first author, a candidate applying to sit the examination must state the nature and extent of their involvement in the reported work.*

#### **Article 6 The Examination**

##### 6-3-2- Clinical Parasitology *(including oral examination)*

This part of the Examination will evaluate the candidate's clinical expertise in Veterinary Parasitology *and communication skills*. It will be based on the preparation of 12 case reports...

*The full dossier (12 case reports) must be provided on a specified date prior to the Examination in the form of reflective texts. Candidates will be informed one month before the examination which clinical cases have chosen by the Examination Committee for oral presentation (with PowerPoint or similar illustrations).*

#### **Article 6.7 Results of the Examination**

*Candidates may retake the examination no more than three times. This must be done within 8 years of completion of the residency programme.*

PLEASE LOOK OVER THE REVISED DOCUMENTS  
AVAILABLE ON THE EVPC WEBSITE  
[www.eurovetpar.org](http://www.eurovetpar.org)

**ABSTRACTS FROM THE I° "MEET THE EVPC RESIDENTS" FORUM  
TOULOUSE, JUNE 3<sup>rd</sup>, 2009**

'A case report on *Dirofilaria immitis* in a 2 year-old Irish setter'

**Giulio Grandi**

The present case describes a dog infected by *Dirofilaria immitis*, the canine heartworm. The dog was referred to the Teaching Hospital of the Parma Veterinary Faculty for a routine checkup. The dog, a 2 year-old Irish setter hunting dog did not show clinical signs of canine heartworm disease, but the previous season did not follow any preventive program. Infection was diagnosed by Petcheck Antigen test. Knott test revealed the presence of 10350 microfilariae/ml. Following this diagnosis the dog was abandoned by its original owner and was adopted by a student of the Veterinary Faculty. Despite the relatively high microfilarial load, no adult parasites were observed at echocardiographic examination, while radiographic examination showed typical heartworm alterations. Based on radiographic and echocardiographic examination, the dog was classified as low risk for thromboembolism. In order to evaluate an innovative therapy aimed at further reducing the risk of thromboembolism, the owner consented (Day 0) to the oral administration of doxycycline (10mg/kg, Ronaxan®) daily for one month and ivermectin (6mcg/kg, Cardotek®) every second week for 6 months. Every month the dog returned to the Veterinary Hospital for radiographic, echocardiographic and parasitological examinations. Clinical parameters (echocardiographic parameters, pulmonary vascular, bronchial and interstitial pattern as observed by radiography) began to stabilize and were almost constant at the end of the study (Day 180). The antigen test became negative after 3 months (Day 90) and at the end of the 6 months period the dog was considered cured.

---

'Transcriptional changes during transition from free-living to parasitic stages of the bovine lungworm *Dictyocaulus viviparus*'

**Christina Strube, S. BUSCHBAUM, T. SCHNIEDER.**

INSTITUTE FOR PARASITOLOGY, UNIVERSITY OF VETERINARY MEDICINE HANNOVER,  
GERMANY

The bovine lungworm *Dictyocaulus viviparus* is one of the most important parasites in cattle farming in temperate areas. This parasite causes high economic losses due to parasitic bronchopneumonia or even death of susceptible cattle. The free-living L3 lungworm larvae become parasitic ones after ingestion by a host or penetrating the gut mucosa, respectively. This fundamental change in the parasite's way of life necessitates transcriptional changes.

To identify transcripts specific for either free-living L3 or parasitic preadult L5 stage, Suppression Subtractive Hybridization (SSH) was performed to create subtracted libraries. 2000 clones of each library were spotted on High density arrays to verify stage-specific transcription via differential screening using subtracted and unsubtracted probes. Clones identified to be differentially transcribed were sequenced, processed, aligned, and clustered. Transcripts were analyzed and annotated by gene ontology search, domain/motif search, and mapping to respective biological pathways. Whereas specific L3 transcription seems to be low and focussed on mRNA processing, the L5 specific transcripts reflect changes in metabolism, the need for locomotion and tissue migration, ongoing development and regulation of the host's immune response.

**COURSE IN CLINICAL EPIDEMIOLOGY AT THE UNIVERSITY OF GLASGOW FACULTY  
OF VETERINARY MEDICINE  
SEPT. 14-18, 2009**

Tim Parkin has organized a course in Clinical Epidemiology designed as an essential generic element of the training needs of residents of all 24 European Colleges. At the end of the course, participants will have learned to apply the principles of epidemiology, such as study design and data analysis, to a clinical setting, most often by defining the study population as a group of patients.

**FOR INFORMATION AND APPLICATION FORMS, SEE THE FOLLOWING 2 PAGES!**





## Tutors

### Dr. Tim Parkin BSc, BVSc, PhD, DipECVPH, MRCVS (course leader)

Tim Parkin is a veterinary epidemiologist with more than 10 years experience. He provides study design and analytical services for clinical members of staff and residents working at the Faculty of Veterinary Medicine, University of Glasgow. Tim is interested in promoting the principles of evidence based veterinary medicine throughout the profession.

### Professor Dominic Mellor BVMS, PhD, DipECVPH, MRCVS

Dominic Mellor is head of the comparative epidemiology and informatics group at the Faculty of Veterinary Medicine, University of Glasgow. He is particularly interested in applied epidemiology of human and animal diseases and in epidemiological approaches to veterinary public health.

### Dr. Lisa Boden BA, BVSc, PhD, MACVSc (Epidemiology) MRCVS

Lisa Boden is a veterinary epidemiologist who joined the Faculty of Veterinary Medicine, University of Glasgow in 2008 as a research associate. She is interested in identifying how different types and rates of contact within and between populations affect the likelihood of disease transmission.

**Date** - Monday 14th - Friday 18th September '09

**Venue** - Faculty of Veterinary Medicine, Garscube Estate, University of Glasgow

**Price** - £800 (VAT exempt)

Includes - tuition in clinical epidemiology, course notes, refreshments, lunches.

## Course Outline

- Data collection, handling and manipulation
- Hypothesis creation and testing
- Power and sample size calculations
- Study design
- Diagnostic tests
- Best practice in clinical epidemiology
- Critical appraisal of the scientific literature

## What is clinical epidemiology?

Epidemiology is the study of the distribution and determinants of disease in a population and is often aimed at the formulation of measures of risk. Clinical epidemiology applies the principles of epidemiology, such as study design and data analysis, to a clinical setting, most often by defining the study population as a group of patients.

# Clinical Epidemiology

## About this 5 day course

“Clinical Epidemiology”

“Evidence Based Veterinary Medicine”

- What do these phrases mean?
- How do we implement best practice in these areas when conducting clinical studies?
- How do we ensure that when we submit papers they get published?

If these are the types of questions you ask yourself you will benefit from a better understanding of clinical epidemiology.

At the end of the course you will be able to:

- collect, manipulate and summarise data without “messaging it up”
- formulate concise and meaningful clinical questions
- find, appraise and interpret current evidence based research
- know which study designs are best suited to particular clinical questions
- estimate how many cases you will need for different study designs
- understand how to identify and mitigate bias during study design
- correctly interpret measures such as: p-values, confidence intervals, odds ratios, relative risks
- understand “cause and effect” and be aware of the strength of evidence from different study designs
- calculate and interpret properties of diagnostic tests for use in clinical practice
- know how to access current best practice guidelines in clinical epidemiology

## Who is this course for?

This course has been designed as an essential generic element of the training needs of residents of all 24 European Colleges. The subject matter is considered essential to the informed practice of evidence based clinical science. Future diplomates of the European Colleges will be the CPD providers for each of their specialities in years to come and an understanding of the material covered in this course will add an important population dimension to their future teaching.

The course is also open to delegates from practice and more senior clinicians who are regularly involved in clinic-based studies.

