



EVPC NEWSLETTER

AUGUST 2010

Inside:

the Munich Meeting
Resident's Corner
the New Editorial Team
and other news!

Number 18

CONTENTS

	PAGE
Editorial: Report on the Scientific Symposium of the EVPC in Munich	1
The American Heartworm Society meets in Memphis	2
Resident's Corner	4
A New Resident	5
Clinical Case Reports	6
The new Committees	11
Call for material for the 2010 examination	12
ESCCAP	13
Announcement of the 2011 meeting	14
The new Editorial Team	15
Did you know...	16

Editorial from the President

The EVPC Annual Congress 2010 in Munich: „Advances in Tropical Veterinary Parasitology“

This year's EVPC annual meeting took place in Munich from April 29 to 30, 2010 as a joint meeting with the German Veterinary Tropical Parasitology. The scientific sessions of the symposium included plenary presentations on tick vaccines, host-parasite interactions and diagnostic advances in bovine theileriosis, the ecology of Crimean-Congo Fever vectors, an overview on the state of knowledge on babesiosis and hepatozoonosis of pets, trichinellosis diagnosis, emerging zoonotic infections in wildlife in Australia and South-East Asia, and echinococcosis in Africa. Several plenary talks on the genetics and control of African trypanosomiasis were also presented.



About 150 people attended this conference and were hosted and fed by Kurt Pfister and his team at the perfect venue in the city of Munich close to the English Garden. In the second half of the first day of the conference the annual General Business Meeting of the EVPC took place (for details of the meeting, see the EVPC Website's Members Section: www.eurovetpar.org) with a large audience, despite the toll that the previous flight delays due to the volcano outbreak in Iceland had taken.

The GBM was followed by the announcement of the 2011 Congress in Zagreb, Croatia, and the Residents' Forum where 4 of our current residents presented cases they had encountered and analysed during their training. The Forum supports my view that the training programmes are well under way and that the Residents are doing well. It was an excellent meeting with many opportunities to learn more about the recent advances in the field of Tropical Veterinary Parasitology which many of us, especially the younger ones, have no direct research relation to, but which is still one of the most challenging and fascinating parts of our field. The Conference was also an opportunity to get together with colleagues and friends and exchange ideas and views on the subject we all like the most – parasites, parasites, parasites....

Hopefully the EVPC's Annual Conference now is a fixum in everyone's agendas, and every College member will take the opportunity to attend frequently for their pleasure (and not only for the duty of regular GBM attendance...).

I would like to thank Kurt Pfister and his team for organising and hosting this meeting and hope to see you all next time in 2011 in Croatia!

Anja Joachim, EVPC President



Giant nematodes at the Faculty of Veterinary Medicine in Munich!

The American Heartworm Society meets in Memphis (and Eyjafjallajkull wakes up!)

The triannual “State of the Heartworm” Symposium was held this year in Memphis Tennessee from April 15th-18th. The Scientific programme provided an interesting blend of practical clinical information and cutting-edge research on heartworm diagnosis, prevention and treatment, pathophysiology, clinical disease and epidemiology in dogs, cats, and other species.

Topics included emerging issues in heartworm and associated diseases (like *Angiostrongylus vasorum*), continuing spread around the world of both *D. immitis* and *D. repens*, new strategies for prevention and compliance, and the very timely issue of ML resistance. Among the speakers were many leading experts on *Dirofilaria* spp., including several EVPC Diplomates.



EVPC diplomats Prof. Jorge Guerrero and Dr. Giulio Grandi during the session on new treatment and management options for canine and feline heartworm disease.



A full house at the Peabody Hotel Conference room. The American Heartworm Society meeting was attended by over 250 veterinarians and scientists.

The symposium was an excellent educational and research meeting on heartworm and offered a great opportunity to learn and discuss practical clinical information and the latest research findings from experts.

When the meeting was over, however, for a lot of European colleagues (including EVPC diplomats and Residents!) it was impossible to leave: the eruption of Iceland’s Eyjafjallajkull eliminated any hope of returning home. So, Claudio Genchi, Albert Marinculic, Laura Rinaldi, Giulio Grandi and myself thought we would give our fellow EVPC members some advice on what to do if ever stranded in Memphis for 5 days following a scientific meeting:

The American Heartworm Society meets in Memphis

- cont. -



Take a walk on famous Beale street, but leave your gun and your snakes at home!



A ride up the Mississippi River on the "Island Queen"



The Memphis zoo is home to 2 pandas, Ya Ya and Le Le and an amazing assortment of other animals. A good way to pass yet another day in Memphis

Other good ideas: eat a lot (ribs, ribs, ribs), drink a lot (beer, beer, beer) and don't watch too much CNN!

***Thanks to all the great meeting organizers and friends
and to the very hospitable people of Memphis***

Laura Kramer

Residents' Corner

Dear EVPC residents,

it is very important that you visit the EVPC - Website for updates, because all important information, including events and job offers in veterinary parasitology are regularly available together with all EVPC official documents. Reading carefully these documents will allow you to understand and/or have a better idea of how such a complex organisation works (this will also prepare you to be an active diplomate!); of course, you will find also many replies to many of your questions.

Another important issue I would like to underline is your contribution to the Website: you should feel free to come up with suggestions for further documents that could be put onto the Website (of course no copyrighted material without permissions), or links to e.g. good information on other websites, regional events etc.

Giulio Grandi



A New Resident

Manuela Schnyder

Resident at the Institute of Parasitology, Vetsuisse Faculty, Zürich

My name is Manuela Schnyder and since 2003 I'm assistant at the Institute of Parasitology at the University of Zurich (IPZ), led by Prof. Peter Deplazes, my supervisor for the EVPC residency, together with the diplomates Hubertus Hertzberg and Paul Torgerson.

I grew up in the southern Italian speaking part of Switzerland (Ticino, close to Locarno, lake Maggiore) and started to travel regularly through the long (17 km) Gotthard tunnel below the Alps by train during my veterinary studies at the actually called Vetsuisse Faculty in Zurich. After the veterinary degree, wild boars and classical swine fever were the topic of my dissertation. This excursus in wild biology and virology was followed by employments in mixed clinical practices in Ticino, France and in the German speaking part of Switzerland for two years. During this time adventurous trips visiting alpine goat and sheep settlements were accompanied by the routine bovine health management as well as basic treatments and surgery of cats, dogs and some further small animals. This variety of topics was also a constant during my time at the IPZ: control strategies for sheep scab, anthelmintic resistances in small ruminants, *Babesia* in ticks and ruminants, treatment of Cryptosporidiosis in calves, epidemiology of *Thelazia callipaeda* in dogs, cats and foxes and, actually, approaching different aspects of the heart and lung worm *Angiostrongylus vasorum*. In München at the EVPC-meeting 2010 I presented a pug affected by angiostrongylosis (see below).

Besides all these parasites, I really enjoy movement: travelling in far countries, orienteering (a sport where you mainly run in forests while searching orienteering points) in spring and autumn, ski touring in winter and, whenever possible, long trekkings in the Ticino mountains. Nevertheless I also appreciate relaxing while reading a nice book!



Clinical Case Reports

(presented at the 2010 EVPC Meeting in Munich)

Fatal acute *Sarcocystis miescheriana* infection in a boar

Walter Basso¹, Nicolas Kühn³, Peter Deplazes¹, Nancy Claire Caspari³,
Felix Grimm¹, Kai Caspari²

¹ Institute of Parasitology, University of Zurich, Winterthurerstrasse 266a, CH-8057 Zürich, Switzerland

² SUI SAG, Allmend CH-6204 Sempach, Switzerland

³ IDEXX Diavet, CH-8806 Bäch, Switzerland

Tel: +41-44-6358525, E-Mail: Walter.Basso@access.uzh.ch

A boar presented anorexia, reduced general condition and fever. Following penicillin and dexamethason administration, a transient clinical improvement was observed, but after 4 days the boar showed severe dyspnea, cyanosis and fever and died within one day. The blood picture revealed thrombocytopenia and reactive lymphocytes. A necropsy was performed and samples for histopathological, bacteriological and virological studies were collected. No macroscopic changes were noticed. The boar tested negative for Aujeszky disease, swine pest virus, PRRS and SIV (H1N1, H1N2 and H3N2), *Leptospira* spp. and *Mycoplasma suis*. Histopathologically, degeneration and necrosis of myocardium fibers and severe multifocal non-suppurative myocarditis, hepatitis and nephritis were observed. In heart samples, organisms resembling Apicomplexa tachyzoites were observed associated with the lesions. A PCR for *Toxoplasma gondii* DNA targeting the highly repetitive RE sequence was performed with DNA from heart tissue, but no amplification was detected. Subsequently, a PCR using the primers COC1-COC2 that target a conserved region of the small-subunit rRNA gene sequence of Apicomplexa was performed. An amplification product of about 350 pb was obtained and sequenced, showing 100% identity with GenBank sequences reported for *Sarcocystis miescheriana*. This parasite has an obligate indirect cycle with pigs as intermediate hosts and dogs as definitive hosts. While infections with a low number of sporocysts generally are asymptomatic, the ingestion of great numbers of *S. miescheriana* sporocysts (>1x10⁶) was reported to be lethal for pigs. In the present case, the histopathological and molecular findings indicate an acute infection with *S. miescheriana*. The clinical signs in absence of other pathological agents and the extent of lesions suggest that this was the most probable cause of death. The way of infection involves the ingestion of sporocysts from canine feces contaminating the pig's environment, feed or water.

Walter Basso is a Postdoc at the Institute of Parasitology, Vetsuisse Faculty, University of Zürich, Switzerland

Clinical Case Presentations

(presented at the 2010 EVPC Meeting in Munich)

Scabies in a llama (*Lama glama*): control with moxidectin long acting (Cydectin[®] LA)

Y. Caron, B. Losson

Faculty of Veterinary Medicine, Department of Infectious and Parasitic Diseases,
University of Liège, 20 Boulevard de Colonster, B43a, 4000 Liège, Belgium.

Email: ycaron@ulg.ac.be

An adult neutered male llama (*Lama glama*) was presented for examination with a history of a severe long lasting (3 years) and recurrent itch and crust formation. Three years ago, scabies had been diagnosed by a local vet on the basis of clinical signs; the animal was treated several times with ivermectin (Ivomec[®]) injectable and phoxim (Sarnacuran[®]). After each treatment there was a marked clinical improvement but relapse was the rule. During the two years preceding our first visit the animal had received local applications of Sarnacuran every two to three weeks which resulted in incomplete control. On February 27th 2009 the animal showed a marked pruritus accompanied by very thick scabs and alopecia on the face, shoulders, forelegs, hindlegs, abdomen, flanks and the tail. Clinical examination revealed that abnormalities were limited to the skin. Skin scrapings were taken and numerous *Sarcoptes scabiei* mites were subsequently detected microscopically. The scabs were humidified and a maximum of material was removed and destroyed. Then the llama was treated with 10% moxidectin (Cydectin LA[®]) at 1 mg/kg by subcutaneous injection. On April 6th, a very marked clinical improvement was observed: most of the scabs had disappeared and hair regrowth was observed. Skin scrapings were negative. However, some pruritus was still observed and a second treatment with Cydectin LA was given. On May 29th, the clinical improvement is almost complete and a third treatment was given to jugulate the pruritus and persistent lesions (tail). According to the owner who was contacted by phone in July and August the clinical condition of the animal has further improved. A final visit was planned on September 15th that confirmed the clinical and parasitological cure. At our knowledge, this is the first time Cydectin LA is used in llama for the treatment of scabies.

Yannick Caron is a Resident at the Department of Infectious and Parasitic Disease,
Faculty of Veterinary Medicine, University of Liège, Belgium

Clinical Case Presentations

(presented at the 2010 EVPC Meeting in Munich)

Disseminated hydatidosis in a captive red-tailed guenon (*Cercopithecus ascanius* Audebert, 1799) due to *Echinococcus granulosus* infection in the United Kingdom

Resident: Hany Elsheikha

Supervisor: Maggie Fisher

A case of hydatidosis was diagnosed in 14-year-old female red-tailed guenon (*Cercopithecus ascanius*) from Twycross Zoo, England. The animal was presented with one-year history of large distended abdomen. Ultrasound examination revealed numerous cystic mass lesions in the abdominal cavity, which grossly distend the abdomen causing distress. Fine-needle aspirates of two cysts failed to reveal any parasite materials. Haematology and blood chemistry showed an inflammatory leukogram, mild electrolyte abnormalities and elevated liver enzyme activities. A diagnosis of hydatidosis was made on the basis of MRI scan of the abdomen. Western immunoblot using the recombinant antigens of Em18, AgB and AgB8/1 supported the MRI diagnosis. PCR-sequencing of the NADH dehydrogenase subunit 1 confirmed the genotype parasite to be *E. granulosus*. Despite the treatment with mebendazole for 3 months clinical signs progressed. Treatment was switched to albendazole, but the animal fails to achieve complete remission. The source of infection remains unknown. However, the mode of infection is faecal-oral, which raises the possibility of environmental source of infection. The reason of disseminated infection couldn't be determined but the distribution pattern of the hydatid lesions indicate that some underlying immunosuppressive disease exist to allow for this degree of parasite infestation. To the authors' knowledge, this is the first report of a naturally occurring hydatidosis in red-tailed guenon imported into the UK from an endemic region in Congo. This report has public health implications in that guenon-to-carnivore and, possibly, carnivore-to-human transmission of hydatidosis could create a perpetual reservoir of complicated infection. Subsequent introductions into the established collection should undergo quarantine and screening for *Echinococcus* exposure.

Hany Elsheika is a Postdoc at Nottingham, UK

Clinical Case Presentations

(presented at the 2010 EVPC Meeting in Munich)

Angiostrongylus vasorum (french heartworm) infection in a dog

M. Schnyder¹, A. Kranjc², M. Dennler³, T. Glaus², P. Deplazes¹

¹Institute of Parasitology, ²Division of Cardiology, ³Division of Diagnostic Imaging, Vetsuisse Faculty, University of Zurich, Switzerland

In December 2009, an eleven months old male non-neutered dog (pug) with a history of tachypnoe and coughing since 3 weeks was presented at the Clinic for Small Internal Medicine of the Vetsuisse Faculty in Zurich. The animal had been pretreated with cough syrup and antibiotics by the attending private small animal practitioner because of suspected canine infectious tracheobronchitis. Further anamnesis revealed that the coughing bouts had worn off, while tachypnoe as well as stress induced dyspnoe were still present in the dog. The family dog with free roaming space had occasionally been to Germany. During the clinical examination, the dog had a body temperature of 39.0° C, a respiratory frequency of 80/min and a heart rate of 140/min. Respiration was superficial and inspiratory sounds were increased. Haematological parameters were unremarkable, while blood-gas analysis showed reduced oxygen partial pressure and saturation. Hypokalaemia and hyperphosphataemia were detected. Thoracic radiography revealed an interstitial and alveolar pattern of the lungs, particularly pronounced at the border, and mild pleural effusion. Peripheral bronchi showed mild collapse during bronchial endoscopy, but neither pathological secret nor foreign bodies were present. Bronchoalveolar lavage was performed, revealing neutrophilic leucocytes with hyperplasia of macrophages and nematode larvae. Larvae were isolated by the Baermann-Wetzel technique and morphologically identified as first stage larvae of *Angiostrongylus vasorum*. Newly developed ELISAs based on excretory/secretory adult antigens and polyclonal and monoclonal antibodies against *A. vasorum* confirmed the presence of antigen and antibodies in the serum of the patient. Although we recommended the use of a spot-on combination of moxidectin/imidacloprid, the dog was orally treated with 50mg/kg fenbendazole for 20 days. Clinical symptoms resolved and therefore no follow-up examination was done. The persistence of a certain degree of lung fibrosis and thrombosis has to be expected.

Manuela Schnyder is a Resident at the Institute of Parasitology, Vetsuisse Faculty, University of Zürich, Switzerland

Clinical Case Presentations

(presented at the 2010 EVPC Meeting in Munich)

Spargana in a green tree frog (*Litoria caerulea*)

S. Wolken¹, D. Fischer², W. Heuser², D. Neumann², M. Lierz², N. Pantchev³, T. Schnieder¹

¹Institute for Parasitology, University of Veterinary Medicine Hannover, Germany

²Clinic for birds, reptiles, amphibians and fish of the Justus Liebig University Giessen, Germany

³Vet Med Labor GmbH, Division of IDEXX Laboratories, Ludwigsburg, Germany

A green tree frog was presented to the Clinic for birds, reptiles, amphibians and fish of the Justus Liebig University Giessen. The owner reported inappetence of the animal and noticed a swelling of the leg. The frog was purchased from a pet shop.

In the clinical examination the general appearance of the frog was undisturbed. The coproscopic examination of a pooled faecal sample was negative. Several lumps were present on the right hind leg, the sole and the abdominal wall. The lumps were opened and about 50 irregular shaped whitish structures were isolated. Most of these were 0.1 – 0.8 cm in size, some reaching a length of up to 3 cm and showing peristaltic movement under the microscope. These structures were sent to the Institute for Parasitology in Hannover and identified as metacestodes via microscopic examination. To identify the cestode species, genomic DNA was isolated and a PCR was performed according to Zhu et al. (2002) in which a ~450 bp portion of the cytochrome c oxidase subunit 1 gene was amplified. The obtained sequence showed 97% identity to *Spirometra erinaceieuropaei* plerocercoids from green tree frogs in Australia and 100% identity to isolates from dog, cat, fox and snake. The identity to *Sparganum proliferum* a morphological similar larval cestode for which the adult stage is still unknown was 90%.

Spirometra erinaceieuropaei belongs to the order Pseudophyllidea and has a wide distribution, mainly in eastern Asia but also in Europe and South America. Canids, felids and rarely humans act as definitive hosts. Invertebrates, often copepods, are the first intermediate host. Of greater importance is the plerocercoid stage in the second intermediate or paratenic host. Except fish, all vertebrate groups are parasitized by plerocercoids, the so-called spargana, that proliferate in many tissues and cause serious clinical disease.

Sonja Wolken is a Resident at the Institute of Parasitology,
Stiftung Tierärztliche Hochschule Hannover, Germany

The New Committees

The new Committees were established and have taken up their work:

- **Education Committee:** Chair: Prof. Thomas Schnieder (DE); Dr. Smaro Sotiraki (GR), Prof. Carlos Herмосilla (UK)
contact: thomas.schnieder@tiho-hannover.de
- **Examination Committee:** Chair: Prof. Albert Marinculic (CR); Prof. Bertrand Losson (BE), Prof. Mark Fox (UK)
contact: albert.marinculic@gmail.com
- **Credentials Committee:** Chair: Dr. Steffen Rehbein (DE), Prof. Robert Farkas (HU), Dr. Christian Bauer (DE)
contact: steffen.rehbein@Merial.com

Thank you to members of the former Board and Committees who have put in so much work and supported us in the transition, in particular Dennis Jacobs!

Call for Material for the 2010 Examination

The next EVPC Examination for potential diplomats will be held on 26th – 27th of November 2010 at the Faculty of Veterinary Medicine in Zagreb, Croatia.

Several members already have donated their time by formulating and submitting questions, essay, material, scenarios, and short-answer questions. Nevertheless, there is still time to submit questions for the 2010 examination, with a particular focus on clinical scenarios and diagnostic material (blood smears, full mounts, histopathology, etc.). Members who will devote their time in selecting and submitting this material for the 2010 Examination are invited to contact Albert Marinculic at albert.marinculic@gmail.com.

Please remember: submission of material for the EVPC examination is worth points towards re-accreditation!

Instructions on how to formulate questions are reported in the EVPC website (www.eurovetpar.org > Members' section > Guidelines for question-writers for the EVPC exam).

THE EVPC WEBSITE: GO THERE



<http://www.eurovetpar.org>

ESCCAP



On behalf of ESCCAP, I'd like to thank the EVPC board for agreeing upon a statement of support for the aims and objectives of ESCCAP. This is a significant step for ESCCAP. With luck and work it has the potential to lead to cooperation in the development and provision of post graduate veterinary parasitology education in its widest sense. The first opportunity for the two organisations to work together is a proposed ESCCAP workshop to be held in conjunction with the EVPC meeting in Zagreb to identify the most critical small animal parasitic disease issues in Europe, and to assess whether current measures to address these issues are adequate. More details will appear in the EVPC newsletter in due course. For more information about ESCCAP and its activities please visit www.esccap.org.

Maggie Fisher

Announcement of the 2011 Meeting

The 2011 EVPC Annual Congress will be held in Zagreb, Croatia, from 16-18th June 2011 at the Faculty of Veterinary Medicine University of Zagreb.

In order to follow the excellent tradition, the next Annual Congress will be again an important forum for the dissemination and discussion of new data in the very important field of veterinary parasitology. I am sure that as in previous Congresses you will enjoy a friendly atmosphere full of opportunities to discuss the „evergreen“ as well as updated topics on parasites of veterinary importance. The conference will provide up dated scientific knowledge that will be offered by a nice variety of plenary lectures, oral and poster presentations. Interesting social program will certainly show you the hospitality of Zagreb, the city of million hearts.

Albert Marinculić, Chair EVPC 2011



The new Editorial Team for the Newsletter!!

...by August 2010 the Newsletter has the following Editorial Team:

Eric Morgan

Eric Morgan graduated from Cambridge in 1997 and went into general practice before pursuing a PhD on the ecology and epidemiology of parasites in ruminants on the rangelands of Central Asia. He then joined the University of Bristol, where he is now Senior Lecturer in Veterinary Parasitology, and a *de facto* Diplome of the EVPC. Eric's research interests focus on the epidemiology of parasites and associated disease in several livestock, wildlife and companion animal systems. He has published widely in veterinary and ecological journals, and enjoys collaborating within the strengthening network of veterinary parasitology specialists in Europe (and rugby!).



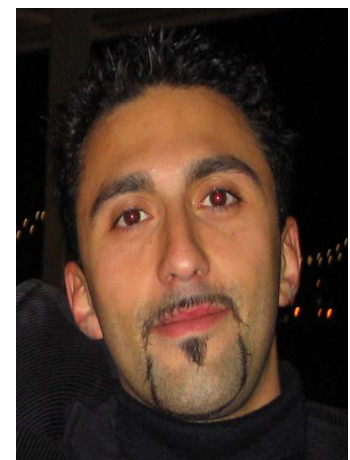
Christina Strube

Christina Strube graduated in 2000 with a Degree in Veterinary Medicine at the University of Veterinary Medicine Hannover (Germany). From 2001-2003 she received a PhD Grant by the Karl-Enigk-Foundation. In 2004 she graduated with a PhD and received the Advancement Award Veterinary Medicine by the Kurt-Alten-Foundation for her excellent PhD research work. In 2008, she became a Specialist Veterinary Surgeon in Parasitology (Fachtierarzt für Parasitologie) and a Resident of the European Veterinary Parasitology College. From 2003 – 2010 she worked on a PostDoc position at the Institute for Parasitology of the University of Veterinary Medicine Hannover and since 2010 she holds a Junior Professorship there. Her main research topics are helminth infections in cattle (especially lungworms and flukes) and, but with recessing intense, the hookworm *Ancylostoma caninum* in favour of arthropods as vectors and their transmitted infectious agents. Her research focuses on transcriptional analyses, molecular and functional characterisation of candidate genes and corresponding recombinantly expressed proteins, recombinant vaccine development, molecular diagnosis, *in vitro* cultivation and epidemiological aspects. When Christina is not working she enjoys reading a book, walking and is very interested in botany. So if parasitologist's work is done and all parasites are eradicated or under safe control, she may become a landscape gardener.



Donato Traversa

Donato Traversa graduated with a DVM in 1999 and a PhD in 2002 at the University of Bari, (Italy). In 2004 he received a European Young Scientist Award from the European Federation of Parasitologists and in 2006 the *de facto* Diploma from the European College of Veterinary Parasitology (DipEVPC). As an Assistant Professor of Parasitology and Animal Parasitic Diseases at the Faculty of Veterinary Medicine of the University of Teramo (Italy), since 2002, has supervised about 40 among intramural and extramural undergraduate and postgraduate students and researchers. The main thrust of his research has been on myiasis causing larvae, water- borne zoonotic protozoa, emerging nematodes of dogs, cats and horses, focusing on taxonomy, epidemiology, treatment and molecular diagnosis. Donato Traversa is peer reviewer for about 30 International Scientific Journals on Medical Sciences, Parasitology and Molecular Biology, and he has published about 250 scientific contributes, 90 of which in international peer reviewed journals, and has given about 50 presentations at conferences.



Sincerest thanks the previous editors, Laura Kramer and Maggie Fisher, for their great input and especially Maggie's team for their support with the editing work of the previous Newsletters!

Did you know....

- ... that Elsevier's Veterinary Parasitology is the official journal of our College?



- ...that the EVPC Website (www.eurovetpar.org) has been renewed and should be visited regularly by all Diplomates for the latest updates and news?



- ...that you can send any items you wish to appear in the next Newsletter or on the College Website to the President Anja Joachim (Anja.Joachim@vetmeduni.ac.at)?