

**European Association
of Establishments for Veterinary Education**

**Association Européenne
des Etablissements d'Enseignement
Vétérinaire**



**REPORT ON THE RE-VISITATION TO THE FACULTY OF VETERINARY
MEDICINE OF THE TRAKIA UNIVERSITY IN STARA ZAGORA, BULGARIA**

16-17th April, 2015

EXPERT GROUP

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1. Background

The Faculty of Veterinary Medicine of the Trakia University, Stara Zagora, Bulgaria was evaluated between the 26th and 30th October 23, 2009. The Report on the visit was discussed by the European Committee of Veterinary Education (ECOVE) at its meeting on the 2nd and 3rd February, 2010. ECOVE established four major (category 1) deficiencies:

- 1. Insufficient case load in pig and horse patients.**
- 2. Hygienic conditions and student security.**
- 3. Animal welfare – inadequate housing of animals, also experimental animals.**
- 4. Requirements with respect to basic equipment are not met, since for adequate training you need adequate equipment (ultrasound, equipment for ophthalmology).**

The school made considerable efforts to rectify the deficiencies, sent interim reports to ECOVE, and ECOVE nominated Prof. Jean-Louis Pellerin and Prof. László Fodor to revisit the faculty. The revisit took place on the 16th and the 17th April, 2015.

2. Program of the revisit:

1. Meeting and discussion with the Rector, Dean and Vice Deans.
2. Meeting with the heads of departments.
3. Visiting laboratories (Anatomy, Biochemistry, Medical chemistry, Physiology, Virology, Parasitology, Pathology, Microbiology).
4. Visiting the Small Animal Clinic, the Equine Clinic, the Farm Animal Clinic, the Laboratory Diagnostic Centre, the Centre for Reproduction and the Physical Therapy Unit
5. Visiting animal housing facilities, animal hospitals and Biobase.
6. Visiting the Department of Food Hygiene, the Molecular Biology Unit, the Department of Pathology and discussion on the Herd health management course.
7. Discussion with students, PhD students and assistant professors.
8. Conclusive meeting with the staff.
9. Conclusive meeting with the Dean and the Vice Deans.

3. Academic staff involved in the discussions

1. Prof. Mihni Lyutskanov Stoyanov, Dean
2. Prof. Ivan Dinev Ivanov, Vice Dean for Academic Affairs
3. Prof. Mihail Dimitrov Paskalev, Vice Dean for Clinical Training
4. Assoc. Prof. Plamen Ivanchev Georgiev, Vice Dean for Research
5. Prof. Iliya Tsachev
6. Assist. Prof. Dr. Rumen Roydev

4. General findings:

- 4.1. The school regarded the report of the full visit on a very positive way, they took it as a to-do-list and they started to rectify the deficiencies immediately.
- 4.2. In spite of the financial crisis, which had a detrimental effect on the higher education in Bulgaria, when the faculty had to survive great budget cuts (by about 20% in 2010), the school made considerable efforts and reached a clear development since the recent visitation.
- 4.3. The school increased its own income by 31.5% between 2010 and 2013, which made possible to cover the costs of the development of the faculty. No financial support was received from the Ministry of Education.
- 4.3. The Rector and the university management supported very much the rectification of the deficiencies; some projects were paid by the university.
- 4.4. Several renovation works were done, the facade of the buildings was changed, windows, doors were modernised and several laboratories, clinics, animal houses were renovated. The cost of these works was about 2.5 million Euros.
- 4.5. Some new units were built and equipped (Physical Therapy Unit, Centre for Reproduction of Productive Animals and Pets).

5. Findings, comments and suggestions regarding the major deficiencies

5.1. Insufficient case load in pig and horse patients

5.1.1. Findings

- 5.1.1.1. The caseload of pigs at the faculty nearly doubled (from 44 to 82 cases) between 2012 and 2014 and the cases seen in the framework of the mobile clinic practice also increased from 282 to 457 cases (62%). The school signed contracts with pig producing farms in order to increase the mobile clinic activity. The number of food producing animals including pigs is well above the minimum recommended values of ESEVT (Table 1, 2 and 3).
- 5.1.1.2. The school has 50 sows and altogether 123 pigs at the faculty farm to teaching purposes.
- 5.1.1.3. The number of equine cases seen at the faculty increased from 32 to 93 (by 190%) thanks to the contacts signed with equine farm owners and advertisements in equine journals but it is below the recommended values of ESEVT (Table 1, 2 and 3).
- 5.1.1.4. There are 21 horses at the faculty farm and they are used to practical teaching of the students.
- 5.1.1.5. The faculty has 355 ruminants and 15 companion animals for teaching purposes.

5.1.2. Comments:

- 5.1.2.1. The school has made great efforts to increase the number of porcine cases, which is not easy because of the wide movement restriction of pigs due to classical swine fever and African

swine fever. The number of backyard pigs is very low, and high standard large scale farms do not receive students. The stock owned by the school provides appropriate number of pigs to clinical training of students.

- 5.1.2.2. A considerable increase of the equine cases was reached in the recent 5 years; however the absolute number of horse cases is limited. The low horse population in the country and in the area, the dramatic reduction of the donkey population, the limited number of sport horses, and the poverty of the horse owners can explain the shortage of equine cases. The school is going to bridge this problem by owning horses, which are used in practical training for the students.
- 5.1.2.3. The large caseload of food producing animals serve as a basis of good clinical training and compensate to a certain level the lower porcine and equine case load.
- 5.1.2.4. The students, PhD students and young assistants confirmed the beneficial effects of the increased clinical case load. The students have more hands-on clinical work.

5.1.3. Suggestions:

- 5.1.3.1. The school is suggested to continue its efforts in increasing the case load.
- 5.1.3.2. By breeding own horses the number of horses used in teaching can be increased.

5.2. Hygienic conditions and student security

5.2.1. Findings

- 5.2.1.1. A great development could be observed in the field of the hygienic conditions and student security, the principle of hygiene and student safety was evident everywhere at the faculty.
- 5.2.1.2. Soap dispensers, paper towels and disinfectant were present everywhere.
- 5.2.1.3. Protective disposable rubber gloves, masks, glasses, eye-washers were everywhere available.
- 5.2.1.4. Near the student laboratories changing rooms with lockers were formed, special clothing is provided in laboratories, clinics and in the mobile clinic service.
- 5.2.1.5. Old glass pipettes were replaced by automatic ones.
- 5.2.1.6. The floor tiles were changed in several laboratories and proper disinfection can be made now.
- 5.2.1.7. Regular safety instructions are provided to the students at the beginning of each course and they have to sign in a logbook showing their attendance.
- 5.2.1.8. Live animal demonstrations were replaced by non-animal alternative methods.
- 5.2.1.9. Regular disinfection was introduced in the clinics and hospitals.

5.2.2. Comments

- 5.2.2.1. The level of overall hygiene and the student safety is appropriate at the faculty.

5.2.3. Suggestions

- 5.2.3.1. None.

5.3. Animal welfare – inadequate housing of animals, also experimental animals

5.3.1. Findings

- 5.3.1.1. The animal houses, the hospitals have thoroughly been renovated; they are all adequate for housing of animals. The different species are isolated from each other.
- 5.3.1.2. The Biobase, an animal house of healthy animals to teaching and experimental animals was created, and it also meets the criteria.
- 5.3.1.3. Closing the street between the clinics and the hospitals and the new pavement created a good common area and it is much better from animal welfare point of view, too.
- 5.3.1.4. Teaching animal welfare in the framework of the subject “Animal hygiene and welfare” was strengthened by modification of the program of the course.
- 5.3.1.5. The faculty organised continuing professional development courses on animal welfare for practitioners.

5.3.2. Comments

- 5.3.2.1. The housing of animals meets the animal welfare requirements..

5.3.3. Suggestions

- 5.3.3.1. None.

5.4. Requirements with respect to basic equipment are not met, since for adequate training you need adequate equipment (ultrasound, equipment for ophthalmology)

5.4.1. Findings

- 5.4.1.1. The school made great investments, different equipments were bought for the clinics (Fluoroscopy system, Digital X-ray system for small animals and horses, Four-channel ultrasound (cardiography and Doppler), Draminski portable ultrasound – probe 7.5 MHz, Surgical microscope, Electroretinograph, Slit lamp, Direct ophthalmoscope, Indirect ophthalmoscope with video camera, Electrocardiograph, Anesthetic machine for small animals, Patient monitoring equipment with invasive and gas measurement, Endoscope for small animals, Automated dental medicine table, Defibrillator, Computer tomograph, Pneumatic fixing device for cattle, etc.). The cost of buying equipment was 680 000 € between 2010 and 2013.
- 5.4.1.2. Modern equipments were bought for the clinical and research laboratories (Automated biochemical analyzer, Blood gas and electrolyte analyzer, Biolog Gen III Microbial Identification System).

5.4.1.3. A molecular genetic laboratory was equipped for training students and diagnostic work (PCR device, Real-time PCR, Nucleic acid extraction device, Laminar box, High revolution centrifuge, Horizontal electrophoresis system, etc.).

5.4.2. Comments

5.4.2.1. The faculty made a great progress in the field of equipment; the present equipment makes appropriate veterinary training possible.

5.4.3. Suggestions

5.4.3.1. None.

6. Findings, comments and suggestions regarding the minor deficiencies

ECOVE identified three minor (category 2) deficiencies

1. The curriculum of the FVM Stara Zagora does not offer tuition in the subjects Herd Health Management and Molecular Biology.
2. The training laboratories of Food Hygiene and Control do not meet safety standards.
3. Insufficient number of necropsied dead pets, swine and birds at the morgue for student-performed autopsies.

6.1. Findings

- 6.1.1. The subject of Herd health management has been introduced in 2010. Training Molecular biology has also been implemented in the same year and an appropriate laboratory for practical teaching of students has been created. An elective subject of Laboratory food quality control has been offered.
- 6.1.2. The laboratory of the Food Hygiene and Control Unit was renovated; the new floor can be better disinfected.
- 6.1.3. Necropsy cases have been increased. New agreements of the school help to get more carcasses. The number of post mortem cases of food producing animals + horses and poultry is above the recommended values of ESEVT, while the companion animal cases do not reach it.

6.2. Comments

- 6.2.1. The recent curriculum changes improve veterinary training at the faculty.
- 6.2.2. The detailed analysis of the figures of necropsy cases was not the scope of the present visit.

6.3. Suggestions

- 6.3.1. Further efforts are needed to increase the number of post mortem cases of companion animals.

7. Summary

- 7.1. The school made a huge progress since the previous visitation and it should be especially commended, when the budget of the faculty was cut, it received no extra external financial support from the Ministry of Education, it had to cover the cost from its increased own income and the aid of the university.
- 7.2. A considerable increase of porcine and equine cases is evident; however the recommended ratio regarding equine cases has not been reached. The ratio of food animals is well exceeded. The large number of farm animal cases provide the basis of good clinical training, while the practicals using own pigs and horses help the students to get the necessary practical skills.
- 7.3. The overall hygienic measures and student safety meets the current requirements.
- 7.4. Animal welfare standard of the clinics, hospitals and animal house of the experimental animals are appropriate.
- 7.5. Equipment of the clinics and laboratories make good veterinary training possible.

Acknowledgements

We would like to thank for the kind hospitality and the open discussions during the visit. Our thanks are due to Prof. Mihni Lyutskanov Dean, the Vice Deans, Prof. Tsachev and Assist. Prof. Dr. Rumens Roydev for the excellent preparation of the visit.

Recommendation

We recommend approval of the faculty by ECOVE.

Budapest – Nantes, 29th April, 2015

Prof. László Fodor

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Prof. Dr. Jean-Louis Pellerin

Nantes, France

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Table 1

Number of cases: a) received for consultation, and b) hospitalised in the Faculty clinics in the past three years

Species		Number of cases					
		2014		2013		2012	
		a	b	a	b	a	b
Food producing animals	Bovine	183	51	73	46	80	57
	Ovine, caprine	33	27	80	23	68	43
	Porcine	46	36	38	31	28	16
Poultry		0	38	0	7	6	6
Rabbits		0	11	0	8	21	0
Equidae		57	36	24	6	23	9
Companion animals/exotics	Canine	3849	209	2518	155	2555	161
	Feline	518	43	390	30	298	48

Table 2

Number of cases: mobile clinic

Species		Number of cases		
		2014	2013	2012
Food producing animals	Bovine	1762	1826	2687
	Ovine, caprine	3726	1538	2504
	Porcine	457	348	282
Poultry		1505	1008	914
Rabbits		16	9	7
Equine		0	0	0
Companion animals/exotics	Canine	28	31	0
	Feline	0	0	0
Herd health visits		34	21	0
Poultry flocks + rabbit units		6	4	4

Table 3

Ratios in connection with the major and minor deficiencies

	Indicators	FVM Stara Zagora		Recommended value
R11	<u>no. of food-producing animals seen at Faculty</u> no. of students graduating annually	<u>320</u> 106	3.02 above	Minimum 0.758
R12	no. of individual food-animals consultations <u>outside the Faculty</u> no. of students graduating annually	<u>5043</u> 106	47.57 above	Minimum 8.325
R14	<u>no. of equine cases</u> no. of students graduating annually	<u>52</u> 106	0.49 below	Minimum 2.700
R18	no. necropsies food producing animals + <u>equines</u> no. of students graduating annually	<u>180</u> 106	1.70 above	Minimum 1.036
R19	<u>no. poultry/rabbits necropsies</u> no. of students graduating annually	<u>148</u> 106	1.40 above	Minimum 0.601
R20	<u>Necropsies companion animals</u> no. of students graduating annually	<u>191</u> 106	1.80 above	Minimum 1.589

Remarks:

R18-R20 are based on the data of the year 2014

R20: includes dogs, cats and “other animals”

ANNEX 1 Decision of ECOVE

The Committee concluded that the Major Deficiencies identified in 2009 has been rectified.

The Faculty of Veterinary Medicine, Stara Zagora is classified after the Re-visitation as holding the status of: **APPROVAL**.