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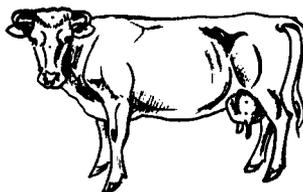
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COLLEGE OF
**VETERINARY
MEDICINE**

SEOUL NATIONAL UNIVERSITY

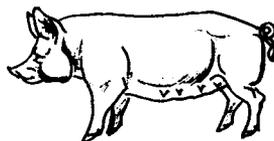
SEOUL, KOREA



FINAL REPORT AND RECOMMENDATIONS

of

JOHN P. ARNOLD, D. V. M., Ph. D.
College of Veterinary Medicine
University of Minnesota



Seoul National University Cooperative Project
(ICA-University of Minnesota Contract)

July, 1961

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SEOUL NATIONAL UNIVERSITY
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It would be impossible to name all of the people who assisted me during this past year and give them the recognition they so justly deserve. Their combined efforts have made my stay and work in Korea both pleasant and interesting. These people include the faculty of the College of Veterinary Medicine at Seoul National University and the University of Minnesota, staff members of the Department of Veterinary Medicine in Korea, the Veterinary Research Laboratories, Livestock Breeding Stations, and Livestock Bureau in the Ministry of Agriculture and Forestry.

My sincere thanks and appreciation are expressed to the people who acted as interpreters and so graciously contributed their time. Dr. Kim Sang Nam bore the brunt of this work but was ably assisted by Dr. Sung Jai Kee, Dr. Choi Hee In, and Miss Kim Young Hi.

Dr. Kim Sang Nam and Miss Kim Young Hi have spent many hours translating this report into Hangukmal for which I am grateful.

Finally I would be amiss if I did not express appreciation for the advice and counsel received from Dr. Arthur E. Schneider, Chief Adviser of the Seoul National University Cooperative Project.

PREFACE

I arrived with my family in Seoul, Korea on July 31, 1960. The Government of Syngman Rhee had been toppled the previous April by the Student Revolution and had been replaced by an interim government. A few days before our arrival general elections had been held to choose men for a new government.

At the College of Veterinary Medicine the students were on summer vacation. This gave me an opportunity to meet all of the regular staff members and discuss the courses. It also gave me a chance to see the facilities and equipment. Classes were scheduled to start on the 5th of September but due to the April Revolution the students had not taken the final examinations for the Spring Semester. This, with the time required for registration for the Fall Semester, resulted in classes not actually starting until the 19th of September.

In the meantime a new government had been formed to rule the Republic of Korea. There still was unrest among the students and at times they would remain away from classes during the Fall Semester to take part in or to watch demonstrations. On May 16, 1961 the coup d'etat by the Armed Forces again interrupted classes but for a much shorter period of time.

Not only did the interruption of classes affect the College of Veterinary Medicine as part of a National University but the changes in government and personnel in the ministries also had their effect. They always were accompanied by the possibility of changes in policy and the possibility that commitments made by a former official would not be honored.

Nevertheless, the College of Veterinary Medicine continued to grow in stature during these troubled times. This continued growth shows the ability of the Korean people and more specifically the Staff of the College of Veterinary Medicine to progress in the face of uncertain and changing conditions.

It is to the indomitable spirit of the Koreans that this report is directed in the hope that it will be of some assistance to the College of Veterinary Medicine in Korea. This report is not a resume of adviser's activities. If the reader is interested in that, he is referred to the 12th and 13th Semi-Annual Progress Reports of the ICA-University of Minnesota contract involving Seoul National University.

PART I

A. INTRODUCTION

1. My Mission in Korea

I came to Korea under the ICA-University of Minnesota contract involving technical assistance for Seoul National University. The College of Veterinary Medicine of Seoul National University had requested an overall adviser with experience in the clinical fields. The scope of the aid that I was to offer included assisting the Dean of the College wherever possible in the problems of the administration of the College. It also included assistance to the Dean and faculty in the planning and use of facilities, the purchase and use of equipment, and the study of the curriculum and teaching methods. In the Veterinary Clinic I was to offer assistance in the operation of the clinic, to demonstrate some of the techniques used in America with emphasis on surgery, and to be available for consultation. In summary, I was to assist, within the limits of my ability, in the development of the College of Veterinary Medicine in order that veterinary medicine could better fulfill its role in the economic growth of the Republic of Korea.

2. The Role of Veterinarians in Society

Veterinary medicine is the branch of medical science dealing with the health and reproduction of farm animals. Veterinary practice is concerned with the recognition, treatment, prevention, and eradication of animal diseases. Veterinary public health includes food inspection and participation in the detection and control of animal diseases which are transmissible to man.

General practitioners are the only group of veterinarians who carry work in all of the areas mentioned above. Even then they tend to concentrate on certain aspects of veterinary medicine so that they can provide better service.

Veterinarians employed by the National and State or Provincial Governments are engaged in a wide variety of activities. Some of their responsibilities are the supervision of quarantine regulations to prevent the entry of diseased animals from foreign countries, the examination of animals leaving the country to certify that they are free of disease, the identification and eradication of diseases such as Brucellosis, tuberculosis, hog cholera, swine erysipelas, and Newcastle disease, or any other disease that threatens the health of the livestock population. They also carry on research pertaining to animal diseases.

Veterinarians engaged in public health work inspect animals before and after slaughter at abattoirs to make certain that the meat is fit for human consumption. They also inspect dairies, the milk from them, and milk products. In some countries veterinarians also inspect eggs and food in restaurants. Public health veterinarians also are concerned with the detection and control of diseases transmissible from animals to man.

In the Armed Forces veterinarians are responsible for the wholesomeness of food supplies, and for defenses against biological warfare. They also are part of the research team in determining the effects of gravity as in diving airplanes on blood pressure and tissue metabolism using animals in the experiments. They also are part of the team measuring the effect of irradiation on animals.

3. Function of a Veterinary College

The function of a college of veterinary medicine is to provide teaching, research, and service in the area of veterinary medicine.

To successfully teach, a veterinary college must give its students a thorough knowledge of the fundamental biological sciences dealing with animal anatomy, functions, and disease. They also must learn to integrate this knowledge and properly utilize it in their professional activities. The student must receive a well balanced education which will enable him to enter any of the four categories of work mentioned above.

Veterinary teaching also includes the training of graduate students in specialized fields. This has an added feature in that graduate students stimulate the staff. The holding of post-doctoral conferences or short courses to disseminate new knowledge and review old knowledge is also included under teaching.

The staff members of a college of veterinary medicine are specialists in their teaching areas. They are well qualified to do or lead research in their specialties. A veterinary college also presents the opportunity for staff members in more than one area to combine their talents on a research problem. Research aids in the development of young staff members and stimulates the older ones to keep abreast of new developments in their area.

Research in veterinary colleges is both fundamental and applied. The research may be the investigation of new or unusual diseases. Some of these may be sporadic in nature but others may have the potential of destroying a whole segment of the livestock industry and cause great economic loss.

A veterinary college offers several types of service. It can take cases which are diagnostic problems and the general practitioner does not have the facilities or means to arrive at a correct diagnosis. Cases which the practitioner does not have the facilities or perhaps the skill to treat properly can be referred to a veterinary college. Dead animals can be sent to the college for autopsy and a diagnosis.

4. Methods of Obtaining Information

The problems of veterinary medical education at Seoul National University are closely associated with the problems of veterinary medicine as a whole in Korea. One cannot be separated from the other. This made it necessary to learn as much as possible about the role of veterinarians in the economy of Korea, Korean veterinary medical problems, and veterinary medical education in Korea.

In an effort to know and understand the problems of veterinary medicine in Korea many sources of information were used. The report of Dr. Boyd, the former adviser from the University of Minnesota was carefully studied and much valuable information was gained from it. Later it was evident that many changes had occurred since 1957 when Dr. Boyd was in Korea. Conferences were held with the Dean and staff members of the College of Veterinary Medicine and with staff members of other Colleges of Seoul National University. All of the Departments of Veterinary Medicine in Colleges which grant D.V.M. degrees in the Republic of Korea were visited. During these visits the buildings and equipment were inspected and views exchanged with as many staff members as possible. Information also was gathered from officials in the Ministry of Agriculture and Forestry, individuals in other fields, and from other USOM personnel. Official

publications and reports were studied. Visits were made to the offices of veterinary practitioners, veterinarians were accompanied to livestock farms on calls to see sick animals, and a part was taken in workshops for practitioners to learn more of their problems. The Veterinary Research Laboratories at Anyang and Pusan; Livestock Experiment Stations, including the Chejudo Ranch, and other establishments which employ or use veterinarians such as the milk plant in Seoul; abattoirs; and the Armed Forces, were visited.

During my stay in Korea I taught part of a course to veterinary students each semester. One was a course for senior students and included a laboratory while the other was for junior students. These courses were taught to demonstrate teaching methods but in conducting these courses much was learned about the training veterinary students receive in Korea.

B. VETERINARY MEDICINE IN KOREA

1. Livestock Industry and Disease Problems

The livestock population in Korea suffered severe losses during World War II and again during the communist invasion. In the past two years the livestock population has reached pre-war levels. Rabbits are an exception in that they have doubled in number since the pre-war era. The restoration of the livestock population is a monument to the efforts of the livestock raisers and to the veterinarians who protected the health of these animals.

The latest (1960) animal population is given below:

Korean Native Yellow Cattle	1,010,235
Dairy Cattle	866

Beef Cattle	656
Swine	1,397,139
Horses	20,162
Native Goats	149,762
Milk Goats	5,731
Sheep	960
Rabbits	791,567
Chickens	12,030,411
Ducks	196,831
Geese	23,647
Turkeys	1,819
Dogs	751,042

Although the livestock population has increased to reach the pre-war level the increase has not kept pace with the rise in the human population. Many farmers who formerly had two or three head of cattle now have only one and others who previously had one or more now have none. They were forced to sell their animals to pay debts and were unable to buy more animals or to increase their herd. This has resulted in the farm families who were unable to buy or rent an ox doing all of the field work themselves.

The small number of cattle found on each farm is illustrated by the fact that the 1,011,257 head of cattle in Korea are found in 893,465 households. It is listed this way because Korean farmers tend to live in villages where their house is in a compound in which the animals are also housed. The farm family then goes from the village to the farm land. Each farm family that has swine usually has only one pig. There are 1,397,139 pigs in 1,096,730 households.

Now pigs are being exported to Hong Kong and it is expected that the number would reach 60,000 for 1961. It also is hoped that arrangements to export other animals will be made in the near future. Prior to 1941 Korea exported 30,000 to 40,000 cattle per year. The export of animals will not only increase the demand for livestock and make the raising of animals more profitable but will bring money into the country.

The Korean farms are mainly small farms because of the many mountains and the type of farming that is adapted to the land in Korea. Thus the number of livestock on the majority of farms will remain small. However it will increase as soon as the economic condition of the farmers improves so they are not required to sell their animals to satisfy debts. This is shown by the Hodgdon report entitled "Community Development in Korea." In this study 75 villages were polled as to their most pressing need. Cattle were listed next to water as the greatest need of the villages.

The demand for animals and animal products also will increase when the economy of the country improves and the people can use more meat and animal products in their diet.

Korea has much roughage from growing the cereal crops such as rice, barley, soybeans, wheat, and corn which could profitably be fed to livestock. The forages now are used for fertilizer in the fields but they are much more effective if fed to an animal and the manure used for organic fertilizer. This is in addition to the gain from the growth, products from, or work performed by the animal. Some of the low quality grain which is produced could be more profitably marketed by feeding it to animals.

Korea has the food to grow more livestock.

Artificial insemination to improve livestock has aroused much interest in Korea. It has been used in poultry, swine, and more recently in cattle. There also is the possibility of using artificial insemination in horses.

Artificial insemination is widely used in other countries to improve the quality of livestock. By its use more females can be mated to an outstanding male. This lessens the expense and it becomes possible for the owner of a small flock or herd of livestock to rapidly improve his stock. Now cattle semen can be frozen and stored for long periods of time. Thus it can be shipped by air from one country to another. This is especially useful in Korea because expensive bulls will not need to be imported.

In cattle the use of artificial insemination in Korea has been almost entirely limited to dairy cattle or to produce cows which give more milk. There is the possibility that an effort will be made to increase the milk and/or meat producing ability of the native Korean yellow cattle. They are very efficient work animals and could not be improved in that respect. However, in many areas they work in the fields only about 30 days per year. The remainder of the year they do light work and convert forage into meat with fertilizer as a valuable by-product. Many of these could become more profitable to the farmer if they gave more milk or produced meat more efficiently. This would mean giving up some of the capacity for work to gain other qualities. It could be that crossing the Brown Swiss breed with the native Korean yellow cattle would give good results. The Brown Swiss breed originally was developed for milk, meat, and work.

I look for artificial insemination in cattle and swine to increase and if experiments show that native horses can be improved by crossing with

horses from foreign countries, artificial insemination could also become important in that species.

It is my opinion that the livestock population will increase and is far from realizing its potential in economic value to the country.

The animal diseases which are most prevalent in Korea are similar to those found in America. The contagious diseases include blackleg, anthrax, hog cholera, swine seysipelas, rabies, Newcastle disease, fowl coryza, and influenza. Vaccination programs are used to control blackleg, anthrax, rabies, Newcastle disease, fowl pox, and to set up a buffer zone against rinderpest. How well these vaccination programs have been carried out is shown by the latest records available. They show no cases of fowl pox, and only 3 for hog cholera and anthrax. The vaccines are made in the National Veterinary Research Laboratories at Pusan and Anyang.

The sporadic diseases also resemble those found in America. The digestive diseases are not entirely the same. This is because the diets are different. The poisonous plants very likely are also different in Korea. Parasitism is a prevalent problem and they have trouble with pancreatic flukes which are not found in America.

Statistics show that 53% of the animal diseases reported in Korea involve the digestive system, 18% the respiratory system, 10% the musculoskeletal system, 5% the nervous system, 4% the reproductive system, 4% the circulatory system, and 1% the urinary system. The remainder were unclassified.

Experience in other countries has shown that when the animal population increases and becomes more concentrated the incidence of disease tends to increase. This means that veterinarians in Korea must continue to carefully

watch the health of animals in Korea. It also means that research on diseases peculiar to Korea and on other diseases under Korean conditions must continue.

2. Veterinary Education

One of the functions of a veterinary college is to give its graduating seniors the knowledge and training which will prepare them to enter any field of veterinary practice or service. There should be no need for the graduate to spend a period of time learning such fundamental things as the principles of how to diagnose and treat patients at the expense of the livestock industry. Often the man who must obtain basic knowledge in this manner never learns and may be forced to change his vocation. In the meantime the cost of convincing him that he does not belong in veterinary medicine has been great, both in animals lost and the time and money spent on the graduate's education.

Fifty-nine per cent of the people holding Doctor of Veterinary Medicine degrees in the Republic of Korea did not receive college-level training. Forty-nine per cent are graduates of what are actually agricultural high schools and at the time of graduation could be considered no more than technicians. Ten per cent did not even attend these middle schools and qualified for a license through examination. A few of those who did not receive college training have become good veterinarians by continued study and practice. Much of the practice would fall in the realm of experimentation. This has cost Korea many animals which it could ill afford to lose.

At the present time there are seven institutions in the Republic of Korea which grant Doctor of Veterinary Medicine degrees. Most of these

schools formerly were agricultural high schools. Then during the great expansion in the number of colleges and universities after the liberation they became colleges or universities almost overnight. Many times this was with no increase in number or quality of staff, equipment, or facilities. Some have improved since that time but the improvement in most cases is not sufficient to give the school the right to grant D.V.M. degrees. The lack of a sufficient number of qualified instructors, plus the lack of equipment and facilities including a good library has resulted in sub-standard instruction in many areas. Few laboratories are held and then they are mostly in the form of demonstrations. Clinics are not developed and little material is available for training students. In other words most of the instruction is in the form of lectures which cannot be kept up to date because of the lack of library facilities. A few instructors have risen above these obstacles and do a good job of teaching their courses but the over-all level of training received by most graduates makes them no more than technicians with about the same level of training as graduates of agricultural high schools formerly received.

3. Number of Veterinarians and Type of Service Performed

There are 1264 licensed veterinarians in Korea and there are approximately 1050 veterinary students in the six Departments of Veterinary Medicine and the one College of Veterinary Medicine in Korea. This means that in about 5 years, if the present rate is maintained, the number of veterinarians in Korea will be doubled.

The work performed by veterinarians and the number engaged in each activity is given in the following table.

Practitioners		328	26%
Private practitioners	150	12%	
Public practitioners	178	14%	
Disease control work		212	18%
Food Inspectors		183	14%
Laboratories		90	7%
Teaching		151	12%
Other Areas of Service		300	24%

The private practitioners are located mainly in the larger cities. This has resulted in these cities having too many veterinarians for the services demanded. Veterinarians hesitate to locate in the smaller cities and villages because they are not accustomed to qualified veterinary service. This means that the veterinarian must be prepared to spend 2 or 3 years convincing the livestock owners that they can profit by calling him. Few graduates can secure the capital necessary to support themselves for this period of time. Another reason veterinarians hesitate to locate in rural areas is the poor financial condition of the farmers. They have had poor crops in some areas and the price received for their products has been low when compared with expenses. Many have little or no money to pay for veterinary services. The Ministry of Agriculture and Forestry has recognized this and given support to some public practitioners in these areas.

Public practitioners obtain some support from the Government and in return are responsible for collecting statistics on animal diseases in their district and aiding in disease control programs. They receive

support from the National Government according to the classification of the district that has been assigned to them. The first classification are those who are located in a large city and their district is within the city limits. They receive 10,000 hwan per month. The next group are located in guns or villages and receive 20,000 hwan per month. The third classification are not in either of the above categories and receive 30,000 hwan per month. The last two classifications are paid more to compensate for less income from private practice. The number of public practitioners in the last two classifications should be increased but the number is limited by the budget.

The veterinarians engaged in food inspection inspect meat, milk, and products made from them. At present outside of the largest cities they are engaged in meat inspection only. They are stationed in the cities, provinces and guns. The National Government pays 80% of their salary and the Provincial Government pays the remainder. The Ministry of Agriculture and Forestry believes that the number of food inspectors should be increased to 400.

The veterinarians working in the control of diseases are employed by and are responsible to the provinces.

At present there are plans to place veterinarians in each of the Gun Agricultural Extension Stations. They would then be engaged in extension work. Whether this is implemented depends on the granting of sufficient budget for that purpose.

The number of veterinarians in the Armed Forces has varied so they are included under "Other Areas of Service." A few are engaged in occupations which have no connection with veterinary medicine.

4. Licensing Procedure

The Ministry of Agriculture and Forestry holds an examination each year for the purpose of examining applicants for a license to practice veterinary medicine. In order to take this examination the applicant must be a graduate of a recognized veterinary college or department of veterinary medicine. There is a provision whereby non-graduates can take the examination. They must pass a special examination to qualify to take the regular licensing examination. During the past few years no individuals without a Doctor of Veterinary Medicine degree have tried to obtain a license.

The examination covers five subjects each year. These are selected from the following list of courses: Internal Medicine, Infectious Diseases, Jurisprudence, Obstetrics, Pharmacology, Public Health, and Surgery. Questions are submitted by members of the staff of each college granting D.V.M. degrees. Then two men are selected to decide which questions are to be used and to give the examination. One of these men teaches in the area covered and the other does not.

There has been dissatisfaction regarding the examination on the part of the men selected to conduct the examination. This year all of them signed a petition requesting that the examination procedure be changed.

5. Veterinary Medical Societies

There are two veterinary medical societies in Korea. One is the Korean Veterinary Academy Association which is mainly composed of veterinary educators and research workers. It has about 100 members and they hold annual meetings. The papers given at these meetings are reports on research completed or in progress.

The other veterinary medical society is the Korean Veterinary

Medical Association and all licensed veterinarians are considered members. The meetings are attended mainly by practitioners. The Korean Veterinary Medical Association also has local units. It is sponsored by the Ministry of Agriculture and Forestry which assists in conducting a two-day workshop or short course. This organization, with the support of the Ministry, publishes the Journal of the Korean Veterinary Medical Association. The business of the Association is conducted at an annual meeting where each province sends a representative.

Both organizations collect dues from their members but like many other professional societies have little money on which to operate. They have exerted little influence on legislation which affects the health of animals or which raises the standards of the profession.

6. Opportunities for Veterinarians

Veterinary Practice -- Many rural areas in Korea are without qualified veterinary service. The lack of veterinarians to properly diagnose, treat, and prevent animal diseases has been costly to the economy of Korea. As many animal diseases are transmissible to humans the lack of veterinarians in rural areas also has an important public health aspect. There is need for more meat inspection and the inspection of animal products in the rural areas. When the livestock population increases the need for veterinarians will be still greater. There are 26,000 villages in Korea and while each village cannot support a veterinarian several villages located in the same valley could keep a veterinarian busy.

Artificial Insemination -- Veterinarians, because of their study of anatomy, physiology, and diseases are best qualified to do artificial

insemination. When veterinarians are not available then technicians are trained to do the service. However, they are only qualified to do the inseminating and not the diagnosis of pregnancy, determining the cause of infertility, or treating reproductive diseases. This is why, if available, veterinarians are preferred to do artificial insemination.

Research -- Veterinarians are needed to do research on diseases peculiar to Korea and on some diseases found in other countries to determine if the same strain of the organism is found in Korea and if the disease process is the same under Korean conditions. They also are needed to develop and produce vaccines against contagious diseases.

Quarantine Stations -- If Korea increases the export of animals, more quarantine stations will need to be established to prepare these animals for export. The present Quarantine Station is much too small and lacks a sufficient number of veterinarians to operate properly under the present work load.

Pharmaceutical Houses -- As more drugs are produced in Korea an increasing number of veterinarians will be employed by the pharmaceutical companies to help develop and test drugs for animal use.

Extension Work -- In extension work more veterinarians could be used to teach disease prevention and help show the livestock owner that veterinarians can help him make more profit. It has been proposed that veterinarians be placed in each extension office.

Number Needed in Korea -- It is difficult to estimate how many veterinarians will be needed in Korea. Now there are too many for the use that is being made of veterinary services. It has been estimated that Korea

needs about 1,000 veterinarians. This I assume was based on the present use of veterinarians. I feel that more can be used to advantage by the country. However, the increase in the number used will be slow and certainly not as fast as veterinarians are being graduated today. In relation to population, when compared with the United States Korea would need 2,300 veterinarians; when compared with Japan Korea would need 4,500 veterinarians. However, Japan has far too many for her needs. My belief is that Korea could use about 1,500 veterinarians to good advantage.

7. Recommendations

1. Consolidate the present seven institutions granting D.V.M. degrees into one veterinary college.

Veterinarians are being graduated faster than they can be utilized under present conditions in Korea. This results in some veterinarians being forced to change to another occupation. When a person educated for one vocation must change it results in a great loss in time and money for himself but also to the nation which must help support the veterinary schools. This is necessary because veterinary education is expensive and the tuition paid by the student does not pay the cost of educating him.

In 1958 the veterinary educators from six of the seven schools recognized the danger of an oversupply of veterinarians and submitted a petition to the Minister of Education. The petition pointed out that too many veterinarians were being graduated and the schools were poorly equipped, and asked that they be combined into one good college of veterinary medicine.

2. Give support to veterinarians locating in rural areas.

This could be accomplished by using one or more of the methods listed below:

- a. More government supported or public veterinarians.
- b. Using veterinarians for artificial insemination work.
- c. More part-time meat and food inspectors.
- d. Extension veterinarians in each extension office.

The use of a large number of extension veterinarians is the least desirable of the methods listed. The public should be educated to pay for veterinary services. The other methods of assisting veterinarians would enable them to live while they were establishing the proper use of veterinary medicine in the area.

3. Increase the scope of the examination for a license to practice and improve the quality of the questions.

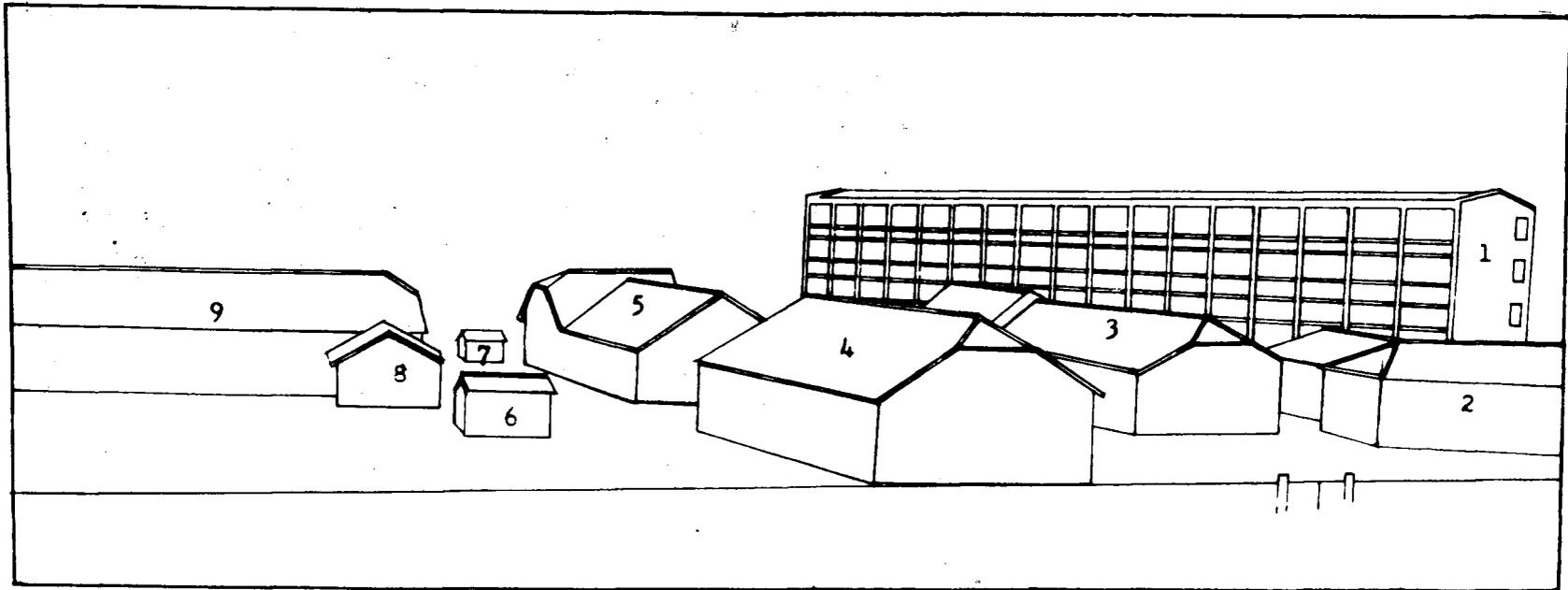
The students now tend to concentrate on the subjects which are covered in the licensing examination. If the examination covered all of the professional subjects, the students would place emphasis on all the subjects and this would result in more well balanced graduates. Improving the quality of the questions would raise the standards for the profession.

4. Conduct post-graduate courses or conferences for the veterinarians which have a license to practice.

This would be a means to convey the latest knowledge to these men and raise the quality of those now engaged in practice.

5. More activity by the veterinary medical societies.

They should do more to promote the profession by working for higher standards in schools which grant D.V.M. degrees, in license examinations, conduct of veterinarians, and to let the public know what veterinarians can do and the value of veterinary medicine. The development of a good set of slides would be useful in informing the public of the work done by veterinarians.



- | | | | |
|-----------------------|---------------------|---------------------------------|------------------|
| 1. Main building | 2. Anatomy building | 3. Storage & Student activities | 4. Student Union |
| 5. Pathology building | 6. Fuel storage | 7. Latrine | 8. Clinical room |
| 9. Animal clinic | | | |

PART II

COLLEGE OF VETERINARY MEDICINE SEOUL NATIONAL UNIVERSITY

A. HISTORY

In 1938 the Department of Veterinary Science and Animal Husbandry was established in the College of Agriculture at Suwon. This was the beginning of what now is the College of Veterinary Medicine. At the time of the liberation from the Japanese in 1945 about 20 Koreans had received a license to practice veterinary medicine. They did not receive the Doctor of Veterinary Medicine degree. This was due to the lack of facilities and staff in the Department of Veterinary Science and Animal Husbandry.

In 1947 Veterinary Science was separated from Animal Husbandry and moved to the buildings formerly occupied by the Seoul Medical College in the City of Seoul. It became the School of Veterinary Medicine and although in Seoul remained a part of the College of Agriculture. This move was made on the recommendations of Col. Benj. Blood and Col. Wm. Dietrich, Army veterinarians, who served with the American Military Government in Korea. They were assigned to assist the Korean Government in reorganizing veterinary medical education after World War II. They and other army veterinarians assisted in organizing the veterinary clinic for the first time.

When the communists invaded the Republic of Korea in 1950 part of the buildings were destroyed and the entire library and most of the equipment were lost. The School of Veterinary Medicine reopened when the United Nations forces drove the communists out of Seoul. Later the Chinese communists intervened and the School moved to Pusan with the other Government

Agencies. Classes were held in various buildings in Pusan and then the School of Veterinary Medicine moved to the Veterinary Research Laboratory at the edge of Pusan. Dr. Christian Beechwood aided in obtaining equipment and quarters for the School while it was in Pusan.

In 1953 the School of Veterinary Medicine was elevated to the status of the College of Veterinary Medicine. In August of that year it returned to its former site in Seoul. A U.S. Army unit had been occupying what was left of the buildings. The College had to begin anew to secure equipment, drugs and books, and to rehabilitate the buildings for student instruction. UNKRA and Army veterinarians assisted the best they could in starting classes again. The next year the Experimental Farm was established in a suburb of the City of Seoul.

In 1955 the College of Veterinary Medicine was included under the ICA Cooperative Contract between Seoul National University and the University of Minnesota. This contract has been continued until the present time.

B. LOCATION OF THE COLLEGE OF VETERINARY MEDICINE

1. Present Location of the College of Veterinary Medicine and the Controversy over the Location

The College of Veterinary Medicine is located on the main campus of Seoul National University. The Administration of the University, the School of Public Administration, the College of Law, the Main University Library, and the College of Medicine with the Schools of Nursing and Public Health and Seoul National University Hospital are located on the same campus. Near the College of Veterinary Medicine is the Cooperative Milk Plant, the City Zoo, and abattoirs. Also near the College of Veterinary Medicine is a market area where specimens can be obtained for some of the laboratories.

More distant but within the City of Seoul are animals used by the Department of Health and Social Affairs for vaccine and antitoxin production, the Mounted Police Station, a riding stable and the race track. In the suburbs of Seoul there are dairy, swine and poultry farms. Oxen are commonly used to haul farm products to the city and to haul freight on the streets of Seoul. Ponies and a few horses are also used but the ox predominates as the work animal.

During the past 4 or 5 years some persons have questioned the advisability of having the College of Veterinary Medicine located in the City of Seoul. This controversy has interfered with the development of the College because neither USOM nor the Republic of Korea Government has been willing to provide the necessary funds for buildings while there is a question about the location.

Dr. W. L. Boyd who was here as an adviser for $3\frac{1}{2}$ months in 1957 recommended that the College of Veterinary Medicine be moved to Suwon. The Survey Team also recommended this move in their report but their recommendation was based mainly on the one by Dr. Boyd. On the other hand the staff of the College of Veterinary Medicine after careful study recommended that the College of Veterinary Medicine remain at its present location.

I have spent much time during my stay in Korea studying the advantages and disadvantages of the present location and the one proposed at Suwon. Not only was much time spent gaining information by trips to the surrounding areas but the problem was discussed with many veterinarians, men in the livestock industry, and officials in the National Provincial Governments. At first I had the same feeling as Dr. Boyd but as I continued the study I came to the conclusion that the College of Veterinary Medicine should

remain at its present location, for in its present location the College of Veterinary Medicine can best fulfill its function of teaching, research, and service to advance the economy of Korea. The basis of my reasoning follows.

2. Why the College of Veterinary Medicine Should Remain at its Present Location

- a. There are more farm animals in the Seoul area than in a similar area at Suwon.

The largest concentration of dairy cattle in Korea is around the edges of Seoul. There also are many swine and poultry farms in the Seoul area. The ox and pony are important sources of power for the hauling of produce and freight into and about the City of Seoul.

There will continue to be more farm animals in the Seoul area for many years to come. The ox and pony while slow provide a cheap and efficient means of transporting goods to the small markets and shops. Until the economic condition of the country greatly improves the ox and the pony will not be replaced on the streets. Korea will not be able to import a sufficient number of trucks and the gasoline they require for operation under present conditions. In the rice paddies and the small fields the Korean ox is the most efficient source of power. It has been developed over the centuries as a work animal and will continue to be used by the farmer for the cultivation of his land.

The livestock farms, truck farms, and rice paddies will continue to concentrate around the edges of Seoul. It provides a good market for their products and because of its nearness transportation need not be expensive. The cost or lack of transportation and proper refrigeration make it impractical to bring many farm products from a distance into Seoul. Thus the livestock will continue to remain concentrated as near the market as possible.

- b. Students of the College of Veterinary Medicine must be taken to the farms for effective teaching whether at Suwon or at Seoul.

In veterinary practice most of the animals are treated on the farm. It is only the unusual cases that present diagnostic problems, need special treatment, or special equipment is required that are taken to veterinary clinics. This is especially true in Korea where the average farmer does not have the means and often the roads to transport a sick animal to a veterinary clinic. Thus it is important that students be taken to farms to learn the diagnosis and treatment of animal diseases under farm conditions.

The College of Veterinary Medicine could have a sufficient number of farm calls for teaching purposes from their present site. The problem is that they need an ambulatory clinic vehicle plus funds to operate it.

The same problem would be present at Suwon. The distance from the present site to farms is not as great as one would imagine because the population of Seoul is more concentrated than in American cities.

- c. There are more and better abattoirs and more livestock is slaughtered in the City of Seoul than in Suwon.

The latest figures available show that for a period of one year 75,130 head of cattle were slaughtered in Seoul while 2,773 were slaughtered in Suwon. The figures for swine show 16,957 for Seoul and 1,014 for Suwon.

Abattoirs are used in Public Health courses to teach meat inspection and are a source of pathological specimens. They also can be used as a source of material for the courses in obstetrics and reproductive diseases.

- d. There are more small animals in Seoul than in the Suwon area.

While dogs have some economic importance in the protection of property and cats in the control of rats and mice it is not the primary function of a veterinary college to train small animal practitioners. However, it is recognized that small animals such as dogs and cats have value in teaching the principles of diagnosis and treatment. These same principles can be applied to animals of more economic importance. They are especially useful in teaching veterinary surgery. Not only is it easier for the owner to bring small animals to the Veterinary Clinic but they require less room when hospitalized, and in Korea their feed and care is less expensive. They cost less to keep for student observation than large animals.

- e. There are more instructional and research relationships with the College of Medicine than with the College of Agriculture.

The ideal situation would be to have the Colleges of Agriculture, Medicine, and Veterinary Medicine located on the same campus or in the same city. This is impossible at Seoul National University because among other reasons both the College of Agriculture and College of Medicine have large physical plants in their present locations. It becomes necessary to choose one of the two campuses for the College of Veterinary Medicine.

One method of comparing instructional and research relationships is to list teaching areas or departments in which there is similarity.

<u>Agriculture</u>	<u>Veterinary Medicine</u>	<u>Human Medicine</u>
----	Gross Anatomy	Gross Anatomy
----	Histology	Histology
Animal Husbandry	Animal Husbandry	----
Agronomy & Plant Genetics	Poisonous Plants, Genetics	Genetics
Biochemistry	Biochemistry	Biochemistry
Dairy Husbandry	Dairy Husbandry	----
Microbiology	Microbiology	Microbiology
----	Pathology	Pathology
Entomology	Parasitology	Parasitology
----	Pharmacology	Pharmacology
----	Physiology	Physiology
----	Public Health	Public Health
----	Surgery	Surgery
----	Radiology	Radiology

The above chart shows that the College of Veterinary Medicine has more teaching areas which are similar to those in the College of Medicine than those in the College of Agriculture. Even where similar course titles are listed for all three colleges those in the College of Medicine and College of Veterinary Medicine have more in common because they both primarily deal with diseases. Human Medicine tends to be more specialized and has advanced more in many areas than Veterinary Medicine. As the result staff members of a College of Veterinary Medicine can learn much from contact with members of the College of Medicine. In recent years Colleges of Veterinary Medicine in America which are not located near Medical Colleges make it possible for staff members to go to them for additional knowledge.

The husbandry courses could be taught more effectively at Suwon where more animals are available. However, the courses in husbandry usually are in the preveterinary curriculum. The establishment of a pre-veterinary curriculum is under study by Seoul National University. In the professional courses the animals at the College of Agriculture have limited value. Experience in America has shown that these animals usually are not available for class instruction. The College of Veterinary Medicine

must maintain its own animals.

The opportunity for cooperative research is largely dependent on the individuals regardless of their interests. In general it can be said that veterinary research is directed toward the recognition, prevention, and control of diseases while agricultural research is concerned with the care, management, and nutrition of animals. Thus the interests tend to be different and it is difficult for members of the two colleges to use the same animals.

- f. The College of Veterinary Medicine has been established in its present location at a great cost.

A large amount of capital has been invested in providing a physical plant for the College in its present location. The building program needed to complete the physical plant is not extensive. The staff also has worked hard and spent much time to develop a teaching program which takes advantage (as much as present conditions permit) of the animals, abattoirs, milk plant, and zoo located in and around the City of Seoul.

To abandon the present site in Seoul and reconstruct the College of Veterinary Medicine at another site at a considerably greater cost can not be justified unless there are great advantages in the new location. This is not the case and therefore from the standpoint of capital investment and scarcity of capital in Korea the College of Veterinary Medicine should remain in Seoul.

C. ORGANIZATION AND ADMINISTRATION

The College of Veterinary Medicine is a member of the group of colleges which form Seoul National University. The administration of Seoul National University is greatly decentralized and it really is a loose federation of colleges rather than a true university.

The Central Administration of the University is composed of the President, Vice President (vacant), Academic Dean, Dean of Students, and the Director of Business Affairs. The Dean of each College is a member of the Committee of Deans which meets each week with the President to discuss matters which affect the whole University. Many of their actions in turn must be approved by the Minister of Education before they can go into effect.

The administrative officials of the College of Veterinary Medicine are:

Dean	Oh Soon Sup
Director of Academic Section	Yun Kwai Byeong
Director of Student Section	Yoon Suk Bong
Director of Clinics	Hong Byung Uk
Business Manager	Im Kee Hyang
In Charge of Library & Foreign Correspondence	Kim Sang Nam

The Curriculum Committee is the only regular committee in the College of Veterinary Medicine. It is composed of the Director of Academic Section as chairman and a representative from the pre-clinical area and one from the clinical area. The present members are Yun Kwai Byeong, Chairman, Hong Byung Uk, and Yoon Suk Bong.

The regular T.O. faculty members with the rank of assistant professor and above meet with the Dean to pass on such matters as promotions, recommendations from the Curriculum Committee, and class schedules. Recommendations for promotion are forwarded to the President for his approval. He then forwards it to the Ministry of Education. They also meet at the beginning of each semester when the Parent Teachers Association (PTA) funds are available to divide the amount allowed for laboratory supplies.

Contact with graduates is maintained by the Alumni Association. Usually one or more members of the staff of the College of Veterinary Medicine serve as officers in this group.

The financial support of the College is derived from two sources. One source of funds is the National Government which appropriates money known

as National Treasury funds. These are in part dependent on the tuition paid by the students. The tuition paid by the students goes into the National Treasury and is not retained by the University. The number of students the College can accept is set by the Ministry of Education and the number of staff members in the Table of Organization must also be approved by the Ministry of Education. National Treasury funds cannot be used to pay any part of the salary of a staff member not holding a T.O. position. The Veterinary Clinic also receives National Treasury funds which are allotted from the amount received by the College. All of the fees collected by the Veterinary Clinic go into the National Treasury which means that the College of Veterinary Medicine can keep none of the fees collected for drugs and other expenses.

The other source of financial support is from P.T.A. funds. These are paid by the student at the time of registration and are supposed to be collected by the Central Administration of the University. A percentage of the amount paid by the students of the College are returned to it. The remainder is kept by the Central Administration for operating expenses and to supplement the incomes of those colleges which are in the greatest need of financial assistance. These are the colleges with a fixed low enrollment and/or those with laboratories which are expensive to equip and operate plus those colleges where the number of students per instructor is low because of the individual attention needed by the students. The College of Veterinary Medicine is one of those colleges which needs additional P.T.A. funds.

The P.T.A. funds are used to supplement those received from the National Treasury. A P.T.A. Committee is consulted on the use of these

funds. They are used to pay the salary of staff members who do not have T.O. positions, for part of the salary of the staff members with T.O. positions, for laboratory supplies, and any thing else which is needed by the College providing it falls within the limit of the funds provided.

A working budget should be made for the College of Veterinary Medicine. There are certain fixed budgets such as salaries which are computed for the year. Reasonably close estimates can be made on the cost of electricity, water, and fuel. Administration costs also can be estimated fairly closely. The maintenance of the physical plant and equipment is more variable but a percentage of its value should be set aside to take care of these costs. If the physical plant and equipment are not maintained the whole institution including the instruction will rapidly deteriorate.

Aside from the above it should be decided what amount is justified for library materials each year. Then each teaching area should submit realistic and well documented lists of needs for teaching in order of priority. This list should be for the entire school year and the documentation should give the reasons for needing each item. This list would then be carefully scrutinized. After the Dean and senior faculty members are satisfied that the requests are proper and realistic they and the library needs could be added together. Then the percentage of the total for each teaching area should be figured. When the funds available for the library and teaching are known each area would get their percentage of the total.

The financial support received by the College of Veterinary Medicine is grossly inadequate. It needs more staff members, laboratory supplies, and research funds. There now is no regular support for the veterinary library or a fund for physical plant maintenance and the replacement or

repair of equipment. The financing of the Veterinary Clinic needs to be changed to provide for an ambulatory clinic and the purchase of drugs. The fiscal needs of the College will be discussed in more detail later in this report.

D. FACULTY

The strength of any school lies within its faculty. It is true that a good school must have buildings and equipment but these are ineffective in the absence of a good faculty. The College of Veterinary Medicine has a young faculty filled with the ambition and enthusiasm of youth. They are determined to build a better College of Veterinary Medicine. As a group they work hard to increase their knowledge and to do a better job of teaching. If it had not been for this spirit, the school could not have survived the trials and tribulations which have marked its development.

The Academic Staff consists of:

Professors	5
Assoc. Professors	4
Assist. Professors	3
Instructors	6
Teaching Assistants	8
Lecturers	21

All part-time instructors are listed as lecturers. These include 13 in veterinary medical professional subjects and 8 in general subjects such as languages, mathematics, and the humanities.

More detail on staff members is given in the appendix.

Thirteen or half of the full-time staff members have Non-Table of Organization positions. This places the College of Veterinary Medicine

in a very precarious position in regard to staff members. They are paid from P.T.A. funds which are not a stable source of income. The situation has been helped by the recent granting of 7 more T.O. positions. This includes 2 professors, 2 assoc. professors, 1 assist. professor, and 2 instructors.

Salary for staff members in the T.O. is based on rank and the number of class hours of teaching per week. The rate of pay is standard throughout Seoul National University. A T.O. staff member must teach a minimum of 10 class hours per week to be regarded as a full time staff member. The class hours are calculated on the basis that one hour of credit is given for each hour of lecture and for every two hours of laboratory taught by the instructor. If a full-time staff member teaches more than 10 class hours per week, he receives extra pay. The Dean of the College, the Directors of the Academic and Student Sections, and the Director of the Veterinary Clinic receive a specified amount of class-hour credit to compensate for the time spent on administrative duties.

Because of the low salaries which teachers have received they have had to take other jobs in order to support their families. Most of these jobs are teaching in another school or college. The other jobs are permitted as long as the instructor is present for his scheduled classes. Class schedules may be arranged to provide a free day for other teaching. Some full-time staff members are very conscientious and are present during school hours. They take jobs outside of school hours or receive extra money from other sources such as private business or from relatives in order to support their families. Others are gone during many of the school hours and thus actually are not full-time staff members. The teaching load is sufficient

to require the use of all of their time not required in the classroom or laboratory in preparation for classes and for research. At times the extra pay for teaching more than 10 class hours per week may create the same condition in regard to quality of instruction as outside jobs. The extra pay for teaching more than the required 10 class hours encourages senior staff members to teach more courses and undertake too heavy a teaching load. This leads to short cuts such as not keeping up with the literature in the field, not revising lecture notes, giving only the required examinations, and turning the laboratories over to teaching assistants and graduate students. The staff member still receives credit for teaching the laboratory because teaching assistants and graduate students cannot receive teaching credit.

To correct the situation salaries of teachers should be raised to the level where they are sufficient to support the teachers and their families. Then full-time staff members should be required to be present during regular school hours. The law should be changed so that the teaching load could be averaged over the two semesters and not a flat minimum requirement of 10 class hours per week each semester. The advantage of this will be discussed more under curriculum. Finally all extra pay for teaching over the 10 class-hour minimum should be discontinued.

I believe that the changes suggested above would raise the level of instruction in any college including the College of Veterinary Medicine because they would allow more staff time to prepare lectures and to do research.

E. PARTICIPANT PROGRAM

A very important part of the ICA/University of Minnesota contract involving technical assistance to Seoul National University has been the attempt to upgrade the faculty by sending staff members abroad for advanced training. The value of this type of training is recognized by colleges and universities throughout the world as a means of bringing in new ideas, developments, and techniques.

Twelve staff members from the College of Veterinary Medicine have been sent abroad for observation and training under the program. Information on these staff members, the area in which they were trained, and the period of training or observation is presented in the table of staff members in the appendix.

Four staff members have returned from periods of observation abroad and training at the University of Minnesota. They have brought back teaching methods used in the United States and have used them as fully as possible under conditions at the College of Veterinary Medicine. Their teaching methods have stimulated other staff members to adopt some of their practices.

When the eight staff members who are now receiving advanced training at the University of Minnesota return they will greatly strengthen the teaching program. These men will add experience and depth to some areas where it has been necessary for teaching assistants to bear the brunt of arranging and teaching laboratories. This has been unavoidable in some areas because of the small number of staff members.

When one refers to the table listing the staff members, position held, and training several things are apparent. First good use has been made of the participants who have returned from their training at the University of Minnesota. All were given responsible positions in the College of

Veterinary Medicine. One was recently dropped from the staff because of a Government ruling on Military Service. It is hoped that a way can be found for him to complete his military obligation and be permitted to teach the courses for which he was trained. His loss is a severe one for the College of Veterinary Medicine. Secondly the eight staff members who will return this year were selected from the younger staff members and have had more intensive training. At least three will have received M.S. degrees and two of these have almost completed the requirements for a Ph.D. degree. One of the men who does not have a T.O. position will be called into Military Service when he returns to Korea. The third fact that can be gathered from the table is that no staff member from the area of Medicine or Biochemistry has received advanced training. To correct this deficiency I recommend that a staff member from the area of Medicine be sent abroad for a training period of at least two years. Experience has shown that one year could do little more than build a good foundation for more advanced study. In Biochemistry training could be obtained in other parts of the University. However, veterinarians have more control over food inspection and processing in Korea than in America and for that reason it would be advisable for somebody with a background in chemistry to study food processing and food testing abroad. A staff member with this training is needed in the Public Health courses where food inspection is taught.

F. ADVISORY ASSISTANCE

The College of Veterinary Medicine needs the service of an adviser for another year. He should be a man with clinical experience who also could act as overall adviser. While clinical teaching has shown improvement during the past year it has not reached the level attained in some of

the other teaching areas. This has in part been due to the lack of a staff member who has been trained abroad and the shortage of staff members. This will be partially corrected when the participant being trained in surgery returns later in the year. The other participant from the clinical area who will return has had only one year of training and will go into the Armed Forces when he returns as mentioned above.

The adviser is also needed to give moral support to the returning participants and to help them adapt the new ideas and methods which they have learned to conditions existing in Korea.

G. PHYSICAL PLANT

As stated above some of the buildings belonging to the College of Veterinary Medicine were destroyed and others badly damaged by the communist invasion and the subsequent liberation of Seoul by troops of the United Nations. Not only was the physical plant in very poor condition but there was little classroom and laboratory space available for the teaching of students.

Some rehabilitation was done by the Koreans and then in December of 1958 they completed a two-story building. This helped alleviate the crowded conditions. Then in May of 1960 the third story was completed with ICA funds. This building now houses most of the preclinical teaching areas, the lecture rooms for the College of Veterinary Medicine, and the administration offices. The wiring, plumbing, and installation of laboratory benches and tables were not completed at the time the building was built. Since then ICA funds have made it possible to let contracts for much of the plumbing, wiring, and installation of laboratory tables and benches. It is

expected that enough ICA funds will soon be released to complete the job and equip the amphitheatre with chairs and curtains for the use of audio-visual aids. A ventilating system for the amphitheatre will be needed if it is to be used effectively during the entire year.

The Veterinary Clinic has had some rehabilitation during the past year. Some of the wiring has been replaced as has some of the plumbing. This was work that was absolutely necessary if the building was to be used for another year. Six dog cages were built which gave the clinic facilities for keeping dogs and other small animals. With ICA funds lead plating was installed in the radiology room for protection against radiation. To rehabilitate the Veterinary Clinic would require about 31 million hwan.

The building which houses the area of Pathology also is badly in need of repair. It too has had some patching to keep it in use. It is estimated that this would cost about 24 million hwan to rehabilitate this building.

The building for Gross Anatomy could be rehabilitated for about 12 million hwan. It again is in a very poor state of repair and is in the poorest condition of the three buildings mentioned above.

Actually it would be more economical to tear down the Veterinary Clinic, Pathology, and Gross Anatomy buildings and build new ones. In this way buildings could be planned which fitted the needs of the teaching areas concerned. The Veterinary Clinic and Pathology could be housed in a single two-story building. A diagnosis Laboratory for the Ministry of Agriculture and Forestry could be attached to the end of the building in which Pathology would be located. Gross Anatomy could be attached to the present building which houses most of the other pre-clinical teaching areas.

The cost of the new buildings has not been estimated but the College

of Veterinary Medicine has line drawings of such buildings. I believe that it would be near the cost of rehabilitating the old buildings and would result in much better and efficient facilities.

A pressing need of the College of Veterinary Medicine in its physical plant is a stable source of electric power. In the fall of the past school year there was no electricity during class hours two days a week and during the winter months no electricity at all during class hours. This means that electrical equipment in the laboratories and refrigerators cannot be used during many of the regular school hours. Some staff members come back at night to use equipment but unfortunately this cannot be done for student instruction. No improvement in the electrical supply can be foreseen in the near future and the only solution appears to be the acquisition of an electric generator and motor as an auxiliary source of electricity. Engineers at USOM have estimated the peak electric need of the College at 44 KW. The estimated cost of such a generator and motor is \$7,800 or 10,140,000 hwan.

Laboratory Facilities

Each class has been divided into two sections for more efficient use of laboratories. This reduces the amount of equipment needed and the size of the laboratory, and increases laboratory use. There are 6 laboratories in the College of Veterinary Medicine. These laboratories are used to store equipment as well as for student instruction. One of the laboratories is used twice a week and the other three times a week. Because of the nature of these laboratory courses it is impossible to remove the specimens and equipment so that the laboratory can be used for other classes. The other 4 laboratories are used an average of 4 half-days per week. This is about as efficient use as can be made of laboratories in veterinary colleges.

When the hours given to professional subjects can be increased more use will be made of these laboratories.

At present tables and drains are being installed in the chemistry laboratory. Counterpart funds for FY 1959 are being used for this purpose.

One laboratory that is being used for microscopic work needs wiring to the tables in the room so that microscope lamps can be used. The estimated cost of this wiring is 150,000 hwan (\$115).

In the laboratory used for physiology and pharmacology new experimental tables with sinks and drains are needed. These are estimated to cost about 2,000,000 hwan or \$1,540 with installation.

H. STATUS OF TEACHING AREAS IN REGARD TO EQUIPMENT

Since the inauguration of the cooperative contract between Seoul National University and the University of Minnesota \$94,000.00 has been spent for laboratory equipment. Much of the laboratory equipment selected for purchase has been for use in more than one teaching area. When feasible this has avoided costly duplication of equipment and thus make it possible to purchase a greater selection with the same amount of money. It also has encouraged cooperation among staff members. Some examples of equipment to be used by more than one area is the photographic equipment for preparing visual aids, the microscopes for use by several areas, and a respirator for small animals in critical laboratory experiments and for surgery. During the past 6 months more of this type of equipment has been ordered as have parts and accessories which will enable full use of equipment on hand in the teaching program.

More specific information as to the current status of each teaching area in regard to teaching and research is given below.

Anatomy

The teaching of gross anatomy in Korea poses a difficult problem because of the difficulty in obtaining animals for dissection. Not only is the budget available small but the price of any animal whether dead or alive is high in Korea. Thus visual aids are especially important in the teaching of gross anatomy. A stereo graphic camera and a stereo projector have been ordered so that three-dimension pictures can be shown to the students. This will help compensate for the lack of specimens for dissection. Equipment which will improve the quality of embalming the large animals available has been ordered. Dissection instruments and models have also been purchased for the teaching of gross anatomy. When the equipment recently ordered arrives the area of gross anatomy will be equipped to handle the animals available for dissection and to produce the visual aids necessary.

In the area of microscopic anatomy or histology and embryology when the oil immersion lenses arrive for the new microscopes they will be similar to those used in most colleges teaching microscopic anatomy. The laboratory has been supplied with equipment for fixing, imbedding, sectioning, and staining tissues for microscopic examination. The area needs more teaching aids in embryology but this is a question of more personnel rather than lack of equipment.

For research a polarizing microscope and accessories would make it possible to study some of the finer structures in cytology. Such equipment would cost an estimated \$2,750.00 or 3,575,000 hwan.

Organic and Biochemistry

This laboratory needs glassware and equipment to hold the glassware while performing experiments. The College will try to raise funds to purchase these in Korea. They need some equipment to supplement what they have and will try to purchase to do a better job of teaching and to be able to perform some research. This equipment includes an organic atom kit, bunsen burners, a shaker and sieves, a barometer, and accessory equipment the cost of which is estimated to be \$1,500.00 or 1,950,000 hwan.

Pathology and Parasitology

Pathology has been supplied with items so that it has the equipment needed to prepare slides for teaching. Instruments for post mortem examination and a refrigerator large enough to keep autopsied small animals fresh so that they can be used for several classes have been purchased. Equipment for Parasitology has been ordered which will facilitate the cultivation of some specimens for class use. Other equipment ordered has been charts and equipment for making drawings for class instruction. The area of Pathology and Parasitology will have the equipment necessary to prepare slides and specimens for student instruction.

Physiology and Pharmacology

It is more expensive to provide proper laboratory equipment for teaching in these areas than in any other. It is helpful that physiology and pharmacology laboratories can both use many instruments. When the last of the equipment ordered arrives to supplement that on hand six teams of students will be able to perform experiments and record results during a single laboratory period. This does not equal the student participation in the laboratories in America but it is as much as facilities and budget will

allow at the College of Veterinary Medicine at Seoul National University. Additional equipment for the demonstration of the physiology of the heart would be a visco-scope. A blood gas apparatus would improve the understanding of the content of gases in the blood and the changes it undergoes. These two instruments would cost an estimated \$1,700 or approximately 2,210,000 hwan.

Much of the research in physiology now is done with isotopes. Modest scaling and counting equipment would cost about \$2,300 or 4,000,000 hwan. In Pharmacology a melting point apparatus and titration equipment plus accessories would cost \$900 or 1,170,000 hwan. This would enable more research to be done on drugs in native plants.

Medicine, Obstetrics, Surgery, Radiology
and Clinical Laboratory

Medicine has been provided with basic instruments for the examination and treatment of medical diseases. Surgery has been provided with surgical instruments and equipment for sterilization. It does not have sufficient instruments for laboratory participation by students to the degree that is followed in America. However, they have enough instruments for the number of experimental animals that can be secured for laboratories. Equipment has been ordered to provide more adequate protection for staff and students against irradiation when X-rays are taken. More X-ray equipment has been ordered which will make the area of radiology adequate for present needs. Instruments have been given to the Area of Obstetrics by the Division of Obstetrics, University of Minnesota and by the adviser to supply basic instruments for manipulative obstetrics. Equipment is needed for the examination of bulls for fertility and the teaching of artificial insemination. The cost of this equipment is estimated at \$1,200 or 1,560,000 hwan.

Basic equipment has been ordered so that a clinical laboratory can be established.

I. VETERINARY LIBRARY

One of the most important parts of any institution is the library. A good college library enables staff members to keep informed on current developments in their field. It also acts as a storehouse of knowledge which has been accumulated in that profession and thus is invaluable in preparing lectures and in research. A good library stimulates students to read literature pertaining to their profession which they must do after graduation if they are to be successful. In Korea the library also serves as a place for students to study.

The Veterinary Library was destroyed during the communist invasion. The rebuilding of the library has been slow because of the lack of funds.

The building program of the library was aided during its beginning by UNKRA which supplied medical books in English. The College of Veterinary Medicine also secured what books it could to improve the library. Later under the ICA program more books were purchased and many were donated by staff members of the College of Veterinary Medicine at the University of Minnesota. At present the library has about 600 reference books in English and about 650 books in Korean. Only about 40 volumes of the later can be classified as medical references.

Under ICA aid subscriptions have been placed for 21 professional periodicals. In addition the Veterinary Library receives two Japanese and one Korean veterinary periodicals. The Veterinary Library and staff members at the University of Minnesota Veterinary College have donated periodicals to complete nearly 100 volumes.

The Veterinary Library at Seoul National University has a full-time librarian. She has received some in-service training in modern library methods. At present the librarian is converting the method of classifying library materials to the Dewey System. Then cross reference cards will be prepared. These reference cards will greatly facilitate and increase the use of the library by staff and students.

The space for the Veterinary Library has become too small to allow proper display of periodicals and reference books. The floor space should be doubled to accommodate present needs and make room for future acquisitions.

Financial support for the Veterinary Library is a problem. At present there is no item in the budget for the library. Each teaching area purchases what books it can from teaching funds. If they are able to purchase books, it means omitting items from an allowance for laboratory supplies and teaching aids which is already too low.

The library needs support to continue the subscriptions to professional periodicals and to buy more reference books. It also needs money to bind the complete volumes of periodicals that it has before individual issues are lost. The library also needs to have files in which to place the reference cards.

It is recommended that the Veterinary Library be given a separate budget for its needs. It also is recommended that a library committee be appointed to pass on requests for magazine subscriptions and book purchases. They also would make recommendations in regard to library policy and rules.

J. CURRICULUM

A Doctor of Veterinary Medicine degree at Seoul National University is granted after the student successfully completes 4 years of prescribed course work in the College of Veterinary Medicine. Students are selected on the basis of a competitive examination given after graduation from a recognized high school. The College of Veterinary Medicine is allowed by law to accept 80 new students into the first year class at the beginning of each new school year.

There are certain subjects such as mathematics, physics, organic chemistry, and science or biology which serve as prerequisites for professional courses. Some veterinary colleges classify these as preveterinary courses and require the student to have completed them before he is considered for admission into the 4-year professional curriculum. Many veterinary colleges now require 2 years of preveterinary study. Veterinary colleges in other countries have increased the course of study to 5 or 6 years to allow time for the preprofessional courses.

The College of Veterinary Medicine at Seoul National University must give the preprofessional courses required as prerequisites and those required by National Law during the 4 years which should be used for professional courses. An equivalent of one school year is spent on these preprofessional courses. This means that less time must be spent on some of the professional courses in order to teach the preprofessional ones. The clinical laboratory or time spent by students in contact with sick animals has suffered most as the result of all of the college level training being crowded into 4 years.

The curriculum committee has recognized this and recommended to the faculty that one year of pre-professional training at college level be added to the veterinary curriculum. This was approved by the faculty of the college. The recommendation was tabled by the University Administration because a preprofessional curriculum to serve the Colleges of Law, Dentistry, Veterinary Medicine, and perhaps Medicine was under study. Now it is doubtful that any action can be expected in the near future.

In the meantime work by the curriculum committee and faculty to improve the present curriculum and to improve courses must continue. As fast as it can be arranged and staff members are available the students should spend more time in clinical training. As mentioned under Veterinary Hospital the establishment of a true ambulatory clinic would greatly aid the clinical teaching program.

In the meantime much can be done by the curriculum committee and faculty to further improve the College of Veterinary Medicine.

The curriculum committee has several problems which it must attempt to solve. One is the arrangement of courses so that students have more time for clinical training. As far as curriculum is concerned this is the greatest deficiency. During this school year two laboratory sessions per week for all senior students were started. As soon as sufficient staff members and student time can be made available this should be increased to 5 or 6 clinic laboratory sessions per week. Another problem is the fragmentation of courses. This is partially caused by the requirement that full-time staff members must teach 10 class hours each semester. If courses were consolidated more it would lessen the possibility of duplication allow for better organization of courses, and increase amount of subject material

that could be presented. Some progress has been made by the curriculum committee in equalizing the ratio between the credit given and credit earned in courses. This again is largely caused by the requirement that full-time staff members must teach 10 class hours per week. More emphasis should be placed on diseases of poultry and rabbits. They are of considerable economic importance in Korea and if the veterinarian is to be responsible for their health, he must receive more training in diseases of these animals.

The faculty can do much to improve the present 4 years of college level study by continuing to improve lecture material and especially the laboratory part of the courses. The content of courses and methods of teaching in the College of Veterinary Medicine are in a period of transition. The exposure to Western knowledge and methods was increased after the liberation of Korea. It has been greatly accentuated by the introduction of Western literature to the library and the return of four participants from the United States. When the participants presently at the University of Minnesota return they will bring with them still more Western knowledge and teaching methods. This calls for judicious blending of the best from the East and the West. In this blending what is best for the Republic of Korea must be the ultimate goal. This means that the students which receive the D.V.M. degree will have received the best possible training.

I believe that out of this blending of ideas and methods will come more emphasis on laboratories. I also believe that it will result in more attention being given to laboratories by senior staff members.

Specific Recommendations to Improve Teaching

Embryology -- The establishment of a laboratory with slides and teaching models.

Biochemistry -- Changing emphasis so as to act as more of a prerequisite for Microbiology, Physiology, Pharmacology, and Medicine courses.

Pathology -- Increase efforts to build up slide collection for student teaching and be more aggressive in obtaining specimens for laboratory. These are secured from Animal Hospitals, the market, and abbatoirs. At present the Pathology area is too short on personnel to do an effective job of teaching.

Physiology & Pharmacology -- As soon as feasible use more large animals in their laboratory work. This may need to be in the form of a demonstration. Another great aid would be an animal with a rumen fistula.

Obstetrics -- Secure specimens from the abbatoir for class study.

It is evident that some of the suggestions will cost money but some of them call for more effort and ingenuity than funds.

All concerned should remember that changes in curriculum for the most part are not made quickly. It may take as long as 4 years to complete one change in the curriculum. It also should be remembered that sometimes a change in curriculum does not bring the desired result and another change must be made. The main thing is to not have a static curriculum and not be afraid to try and improve it.

Once the course material has been revised and brought up to date the job is not finished. The instructor must continue to carefully read current literature and attend scientific meetings. This information must be carefully weighed to see if **it supports** the conclusions of the author. He

also must continue to draw upon his own experiences and if possible conduct research. In other words the members of the faculty have the never ending task of keeping fully informed but it has its reward in being able to impart this knowledge to the student.

Veterinary Curriculum

Freshman Year

<u>1st Semester</u>	<u>2nd Semester</u>
<u>No. per week</u>	<u>No. per week</u>

<u>Subject</u>	<u>Lect.</u>	<u>Lab.</u>	<u>Credits</u>	<u>Lect.</u>	<u>Lab.</u>	<u>Credits</u>	<u>Total Credits</u>
Histology	4	1	2.5	4	1	2.5	5
Embryology	2	-	1	2	-	1	2
Canine Anatomy	2	2	2	2	2	2	4
Organic Chemistry	3	1	2.5	-	-	-	2.5
Biochemistry	-	-	-	3	1	2.5	2.5
Korean*	3	-	2	3	-	2	4
English*	4	-	2	4	-	2	4
German*	2	-	1	2	-	1	2
Philosophy*	2	-	2	2	-	2	4
Cultural History*	2	-	2	2	-	2	4
General Science*	2	-	2	2	-	2	4
Mathematics *	1	-	0.5	1	-	0.5	1
History*	1	-	0.5	1	-	0.5	1
Economics	1	-	0.5	1	-	0.5	1
Physical Education*	-	1	1	-	1	1	2
Total Semester Credits			21.5			21.5	43

*Courses required by National Law

Sophomore Year

Subject	<u>1st Semester</u>			<u>2nd Semester</u>			Total Credits
	<u>No. per week</u>						
	Lect.	Lab.	Credits	Lect.	Lab.	Credits	
Biochemistry**	3	1	2.5	3	1	2.5	5
Comparative Anatomy	4	2	3	4	2	3	6
Physiology	4	1	2	4	1	2	4
Pharmacology	2	1	2	2	1	2	4
Pathology	2	1	2	2	1	2	4
Bacteriology	2	1	3	2	1	3	6
Physical Diagnosis	2	-	1	2	-	1	2
Genetics***	1	-	0.5	1	-	0.5	1
Animal Husbandry	2	-	2	2	-	2	4
Statistics *	1	-	1	1	-	1	2
Law	1	-	0.5	1	-	0.5	1
English	2	-	1	2	-	1	2
Physics*	-	-	-	2	-	1	1
Physical Education*	-	1	0.5	-	1	0.5	1
Total Semester Credits			21			22	43

* Required by National Law.

** To be given in Freshman year only after 1961.

*** To be dropped next school year and genetics will be taught as part of General Science course.

Junior Year

Subject	<u>1st Semester</u>			<u>2nd Semester</u>			Total Credits
	<u>No. per week</u>			<u>No. per week</u>			
	Lect.	Lab.	Credits	Lect.	Lab.	Credits	
Bacteriology & Virology	2	1	2	2	1	2	4
Animal Hygiene	2	-	2	2	-	2	4
Medicine	3	1	3	3	1	3	6
Obstetrics	2	-	1	2	-	1	2
Pathology	2	1	2	2	1	2	4
Pharmacology	4	-	2	4	-	2	4
Parasitology	2	1	2	2	1	2	4
Surgery	3	1	3	3	1	3	6
Surgical Anatomy	2	-	1	2	-	1	2
Animal Husbandry	4	-	2	4	-	2	4
English	2	-	2	2	-	2	4
Total Semester Credits			22			22	44

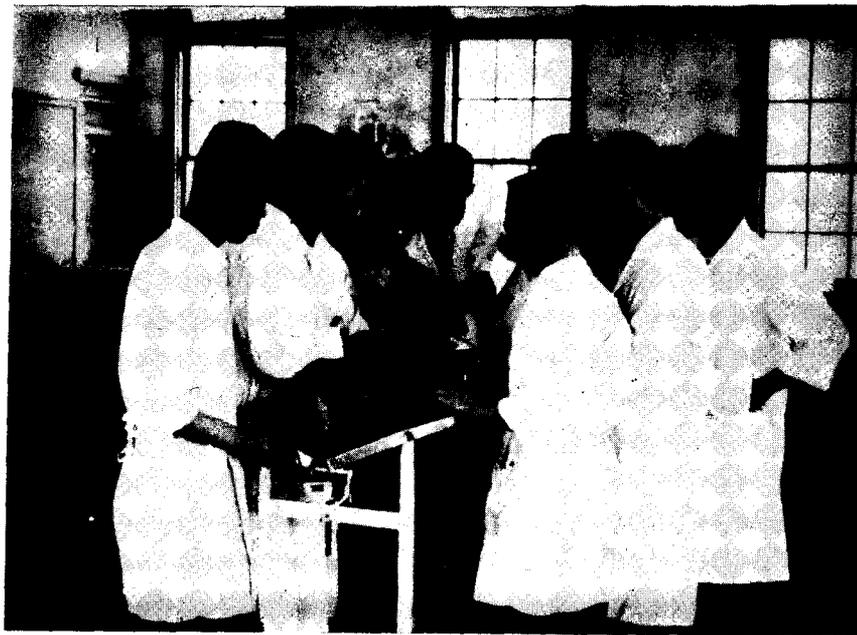
Senior Year

Subject	<u>1st Semester</u>			<u>2nd Semester</u>			Total Credits
	<u>No. per week</u>			<u>No. per week</u>			
	Lect.	Lab.	Credits	Lect.	Lab.	Credits	
Clinical Pathology	2	1	2	2	1	2	4
Infectious Diseases	4	-	2	4	-	2	4
Medicine	3	1	3	3	1	3	6
Obstetrics	2	-	1	2	-	1	2
Surgery	4	1	3	4	1	3	6
Public Health	5	1	2	5	1	2	4
Pharmacy	1	-	0.5	1	-	0.5	1
Radiology	1	-	0.5	1	-	0.5	1
Clinics	-	2	3	-	2	3	6
Animal Husbandry (Artificial Insemination)	2	1	2	2	1	2	4
Jurisprudence and Business Law	2	-	1	2	-	1	2
Constitution	1*	-	1	1	-	1	2
English	1	-	1	1	-	1	2
Total Semester Credits			22			22	44

*Required by National Law



Students using ICA-purchased microscopes



Clinical Laboratory



Preparing a cow for examination



Viewing x-ray films



Staff members at a dairy farm



Vaccinating a dog as part of a campaign to control rabies

K. VETERINARY HOSPITAL

The Veterinary Hospital or clinic is a place where animals are brought for the diagnosis, prevention, and treatment of diseases. In the College of Veterinary Medicine it is a teaching laboratory where students examine the animals presented and assist staff members in the treatment and care of these animals. Eight students are assigned to the hospital each week and all senior students have two clinic laboratories per week. The Veterinary Hospital is a very important part of the College of Veterinary Medicine as the main purpose of the college is to train students to protect the health of the livestock population of the Republic of Korea.

The number of patients treated in the Veterinary Hospital needs to be increased and an ambulatory clinic established. An ambulatory clinic means that the veterinarian goes to livestock farms to see sick animals rather than have the sick animals brought to him. This is the usual way in which large animal diseases are diagnosed and treated. To establish an ambulatory clinic would require funds to purchase a vehicle and to operate it. The operation of a vehicle involves buying a license, gasoline, oil, and maintenance. If an ambulatory clinic is established, the college could have a sufficient number of large animals for teaching purposes from its present location.

A change in the National Law is needed if the number of hospital patients is to be increased and an ambulatory clinic established. Now as mentioned above, the college receives funds from the National Treasury part of which it allots to running the Veterinary Hospital. In return all fees collected for treating animals must be turned over to the National

Treasury. The result is that the more animals treated the more drugs the College of Veterinary Medicine must purchase. This leads to the purchase of obsolete drugs because they are cheaper and more drugs can be purchased with the small budget. The law needs to be changed to allow the Veterinary Hospital to keep the fees collected to pay for drugs and the replacement of instruments and equipment. As stated above the Veterinary Hospital is a teaching laboratory and as such can be expected to do no more than pay for drugs and maintain instruments and equipment on the fees collected. Many in America cannot even do that and must have support from other funds.

The Veterinary Hospital now has an assignment schedule for clinic duty. Unfortunately the two highest ranking staff members in the clinical areas do not appear on the list. This places the clinic duty on two teaching assistants who are aided by an assistant professor when he is not lecturing.

The Veterinary Hospital also has not fully realized the value of clinical laboratory tests. This in part is due to the lack of space and equipment. However, more effort should be made to utilize the assistance laboratory procedures can give in cases which are difficult to diagnose. In other words they are used to supplement a thorough physical examination when more information is needed.

L. RESEARCH

At present there are two research projects supported by special funds in progress at the College of Veterinary Medicine. They are "Study of Korean Cattle Tick Repellent Using Crude Native Grass Extract" by Lee Jang Nag and "Variation of Blood Globulin Fractions in Animal Diseases" by Shim Jae Du.

A real need exists for research equipment and more research money for staff members. Not only is research necessary for the advancement of veterinary medicine and in turn the livestock industry in Korea, but it is necessary for the development and retention of good staff members as teachers. Some funds should be available to use on small research projects for the returning participants. Research funds which are available go to those with the rank of assistant professor and above. Thus most of the returning participants will not be eligible for these funds. It is desirable for them to have a small research project to maintain their enthusiasm and their interest, to fully utilize the training which they have received, and to stimulate other staff members.

M. SUMMARY OF RECOMMENDATIONS FOR THE COLLEGE OF VETERINARY MEDICINE

More detailed information regarding the recommendations given below can be found under the various headings in this part of the report.

1. Location.

The College of Veterinary Medicine should remain at its present location.

2. Administration.

- a. Set up a working budget for the College.
- b. More support for the Veterinary Hospital. This could be accomplished by changing the National Law so fees collected could be used for drugs and other costs.

3. Faculty.

- a. Adjust salaries so that full-time staff members need not take other jobs.
- b. Remove the rigid requirement that full-time staff members must teach 10 class hours per week each semester.

- c. More staff members in some areas.
 - d. Send a participant abroad in the area of medicine.
 - e. An overall adviser with clinical experience for 1 year.
 - f. Secure more research funds for faculty members.
4. Physical Plant.
- a. Obtain an auxiliary source of electric power.
 - b. Build a new Veterinary Hospital with an attached wing for Pathology.
 - c. Improve facilities for teaching Gross Anatomy.
5. Teaching.
- a. Establish an ambulatory clinic.
 - b. Improve laboratories.
 - c. Improve course content.
 - d. Reduce fragmentation of courses.
 - e. Allow more time for students in the clinical laboratory.

N. CONCLUSION

The College of Veterinary Medicine has grown in stature since it was organized in 1947 and then had to start anew in 1950 after the communist invasion had destroyed equipment and wrecked facilities. The College has made great strides since Dr. Boyd was at Seoul National University as its adviser. This is readily evident from reading his final report with suggestions for the future and from personal information received from Dr. Boyd. The growth has been accomplished through hard work by staff members of Seoul National University with the assistance of staff members of the University of Minnesota under the ICA program. Through this assistance staff members

have been trained, equipment has been obtained, and facilities improved. As a result the College of Veterinary Medicine of Seoul National University is nearing the standard in other countries. To attain this standard means more hard work and more teamwork by staff members of the College. Attainment of the desired standard would be made quicker and more certain by assistance and changes in the areas mentioned in this report.

O. APPENDIX

College of Veterinary Medicine Faculty

I. "Table of Organization" (Regular) Staff Members

Name	Age	Degree	Rank	Program Participant Period
<u>1. Area of Veterinary Anatomy</u>				
1. Oh, Soon Sup	47	D.V.M., Azabu Veterinary College, 1938 B.L., Nippon U., 1941	Dean & Prof.	Aug.10,56-Jan.28,1957
2. Yoon, Suk Bong	36	D.V.M.,SNU, 1950 M.S., SNU, 1953	Assoc. Prof.	Aug.10,56-Nov.9, 57
3. Kim, Sang Nam	31	D.V.M.,SNU,1952; M.S.,SNU, 1955	Instructor	Aug.13,58-Aug.12,59
<u>2. Area of Veterinary Physiology & Pharmacology</u>				
1. Rhee, Young So	45	D.V.M., Azabu Veterinary College, 1940	Professor	Aug.10,56-Aug. 4,57
2. Lee, Jang Nag	36	D.V.M., SNU, 1949	Assoc.Prof.	
<u>3. Area of Microbiology & Infectious Diseases</u>				
1. Jeon, Yun Seong	34	D.V.M.,SNU, 1951; M.S.,SNU, 1955; M.S., Univ.of Minn., 1959	Asst..Prof.	Aug.21,57-Aug.21,61
2. Cho, Byung Ryul	35	D.V.M.,SNU, 1951; M.S. SNU, 1955; M.S., Univ. of Minn., 1959	Instructor	Aug.13,58-Aug.13,61
<u>4. Area of Veterinary Pathology & Parasitology</u>				
1. Yun, Kwai Byeong	38	D.V.M., Tokyo Livestock & Vet.Col,1945; Ph.D.,Kwan-sai Medical Col., 1961	Professor	

Name	Age	Degree	Rank	Program Participant Period
<u>5. Area of Biochemistry</u>				
1. Shin, Jae Doo	40	B.S., Tokyo School of Physics, 1942	Assoc. Prof.	
<u>6. Area of Medicine & Clinics</u>				
1. Hong, Byung Uk	42	D.V.M., Tokyo Vet. Col., 1940 M.D., Manchurian Med. Col., 1942	Professor	
2. Oh, Su Kak	33	D.V.M., SNU, 1953	Instructor	
<u>7. Area of Surgery & Radiology</u>				
1. Ock, Chong Wha	45	D.V.M., Azabu Vet. Col., 1938	Assoc. Prof.	
2. Cheong, Chang Kook	38	D.V.M., SNU, 1951	Instructor	Nov. 4, 59 - Nov. 4, 61

II. Non-T.O. (Regular) Staff Members

Name	Age	Degree	Rank	Program Participant Period
<u>1. Area of Veterinary Anatomy</u>				
1. Lee, Jun Sup	25	D.V.M., SNU, 1958	Teaching Asst.	
<u>2. Area of Veterinary Physiology & Pharmacology</u>				
1. Lee, Chang Eup	33	D.V.M., SNU, 1953	Instructor	
2. Kwon, Chong Kook	31	D.V.M., SNU, 1956	Teach. Asst.	July 26,60-July 26,61
<u>3. Area of Microbiology & Infectious Diseases</u>				
1. Chung, Gill Taik	25	D.V.M., SNU, 1958; M.S., SNU, 1960	Teach. Asst.	July 26,60-July 26,61
2. Suh, Ik Soo	30	D.V.M., SNU, 1957; M.S., SNU, 1959	" "	
<u>4. Area of Veterinary Pathology & Parasitology</u>				
1. Schofield, F.W.	72	D.V.M., Ontario Vet.Col., 1911 Ph.D., Ludwig Maxillian Univ., 1952		
2. Jang Du Whan	33	D.V.M., SNU, 1954; M.S., SNU, 1958	Instructor	Aug. 17,58-Aug. 17,61
3. Lim, Chang Hyung	32	D.V.M., SNU, 1953	"	Aug. 17,59-Aug. 17,61
4. Im, Ok Bin	27	D.V.M., SNU, 1960	Teach. Asst.	
<u>5. Area of Biochemistry</u>				
1. Hahn, Su Nam	33	D.V.M., SNU, 1953	Instructor	

Name	Age	Degree	Rank	Program Participant Period
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6. Area of Medicine & Clinics

1. Choi, Hee In	30	D.V.M., SNU, 1956	Teach. Asst.	
2. Chang, In Ho	24	D.V.M., SNU, 1959	" "	July 26,60-July 26-61

7. Area of Surgery & Radiology

1. Sung, Jai Kee	28	D.V.M., SNU, 1957	Teach. Asst.	
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III. Part-time Staff Members

<u>Name</u>	<u>Age</u>	<u>Degree</u>	<u>Agency or Inst. at Which Employed</u>	<u>Position or Title at Employing Agency</u>	<u>Subject Taught</u>	<u>Foreign Travel for Observation or Study</u>
1. <u>Teaching Professional Subjects</u>						
1. Lee, Kyu Myung	40	M.D., SNU, 1946 Ph.D., Cornell, 1952	School of Public Health, SNU	Asst. Prof.	Infectious Disease	1949-1956, USA, U.S. State Dept.
2. Lee, Jung Jai	33	D.V.M., SNU, 1950	8th US Army Quartermaster	Veterinary Consultant	Public Health	
3. Whang, Hi Ja	37	B.S., Tokyo Women's Col. of Pharmacy, 1943	Col. of Pharmacy, Suk-Myung Univ.	Instructor	Pharmacy	
4. Lee, Kun Tae	60	B.A., Hiroshima Teacher's Col., 1929; B.S., Hokkado Im- perial U., 1934	Korea Univ.	Lecturer	Animal Husbandry	
5. Choi, Hyung Chong	59	B.L., Korea U., 1933	Practitioner of Herb Medicine		Veterinary History	
6. Chu, Il	36	M.D., SNU, 1950 M.P.H., Tulane U., 1956	National Vaccine Lab.	Chief of Para- sitology Sec.	Parasitology	1955-1956, USA, WHO
7. Paik, Yung Han	34	B.S., SNU, 1947 M.D., SNU, 1951	Sudo Medical Col.	Research Fellow	Envir. Hygiene	
8. Kang, Wu Hyung	29	B.S., SNU, 1955	Col. of Lib. Arts & Sci., SNU	Lecturer	Physics	
9. Kim, Sun Whan	35	D.V.M., Vienna, 1959			Animal Husbandry	

<u>Name</u>	<u>Age</u>	<u>Degree</u>	<u>Agency or Inst. at Which Employed</u>	<u>Position or Title at Employing Agency</u>	<u>Subject Taught</u>	<u>Foreign Travel for Observation or Study</u>
10. Kim, Gyo Hun	38	D.V.M., SNU, 1949	Col. of An. Husb. Kun-kuk Univ.	Asst. Prof.	General Surgery	1957-58, USA, ICA fund
11. Kee, Yong Suk	55	M.D., KMC, 1929 Ph.D., Manchurian Med. Col., 1941	Col. of Med., SNU	Prof. & Head of Dept.	Bacteriology	1949-50, USA, N.Y. State Lab., WHO 1956-57, USA, US State Dept.
12. Oh, Bong Kuk	38	B.S., Suwon Agr. Col., SNU, 1952 M.S., Univ. of Minn., 1957	Col. of Agr., SNU	Asst. Prof.	Genetics	1955-57, USA, ICA Fund
13. Kim, Chu Wan	37	M.D., SNU, 1953	Col. of Med. SNU	Instructor	Radiology	1955-57, USA, ICA Fund

2. Teaching General Subjects

1. Lee, Jung Hun	41	B.A., Tokyo Shochi Col., 1944 M.A., SNU, 1950	Pusan National University	Lecturer	German	
2. Hahn, Kil Soo	50	B.A., Yonsei Univ. 1934	USOM		English	
3. Yuk, Ji Soo	54	B.A., Tokyo Imperial U., 1933	Col. of Lib. Arts & Sci., SNU	Lecturer	Economics	
4. Hong, Chang Sup	39	B.L., SNU, 1954			Constitution	
5. Ohm, Chang Hym	36	M.D., SNU, 1953 C.P.H., London U., 1956 D.P.H., London U., 1956	Sch. of Public Health, SNU	Instructor	Statistics	1955-57, England, Gov't. Fellowship

<u>Name</u>	<u>Age</u>	<u>Degree</u>	<u>Agency or Inst. at Which Employed</u>	<u>Position or Title at Employing Agency</u>	<u>Subject Taught</u>	<u>Foreign Travel for Observation or Study</u>
6. Kim, Soon Kyu	29	B.S., SNU, 1957 M.S., SNU, 1959			Mathematics	
7. Kim, Sung Soo	42	B.S., Nippon Physical Ed. Col., 1942	Col. of Medicine SNU	Instructor	Physical Education	
8. Huh, Sun Do	34	B.A., SNU, 1953	Col. of Lib. Arts & Sci., SNU	Lecturer	National History	