

Weekly Report Rakuno Gakuen University Name Shingo Takagaki

Sept 9 (Sat)	No training
Sept 10 (Sun)	No training



Sept 11 (Mon)	We studied concept of Epidemiology. We make framework about Mini case study. Case study is wasted mountain because of garbage. We separated three group. Our group's target is monkey living in mountain and human. Our plan is making monkey mountain, because monkey come to human town. It is very difficult to apply this plan. We have to decide how to check something. For example, how to observe, what type of monkey, what kind of disease. Next Monday, we present completed framework.
Sept 12 (Tue)	We studied statistical study which are description, inferential and association. Description include centered and spread. We firstly studied technical terms. Next, we studied inferential which include confidence interval and hypothesis testing. Inferential is most difficult to me, because it is complicated. Finally, we studied association of data. Professor will check our degree of understanding of today's thing tomorrow. We study again.
Sept 13 (Wed)	Studying test of statistic, continuous variable and categorical variable are tested by some statistical method. If we compare independent continuous variable and dependent continuous variable, we use regression. If we compare independent categorical variable and dependent continuous variable, we use T-test. If we compare categorical variables, we use Chi- square test. We studied procedure of statistic. For example, we check this data is normality or not. After this, we selected data and test. We can't understand this procedure at first, but I can understand it finally.
Sept 14 (Thu)	In morning, we study selecting sample. For example, simple random sampling, systematic sampling, cluster sampling and multiple sampling. We use apllies which proMESE and N4study. They are so convenient to calculate sample size. In afternoon we talking about our case study. We should completely finish concept and proposal. So we have to prepare them.
Sept 15 (Fri)	Going to Suvarnabhumi Airport, we studied inspecting animal and animal products. This airport have 4 big section of inspecting animal. We studied inspecting especially import and export. If owners bring their pets, they have to clear many check. For example, their pets are get health check. We have to write report about this by next Monday. In afternoon, we studied sniffer dogs which can find illegal food products. They are trained by their trainer. There are some kind of illegal food products from other country. After this, we can see real sniffer dogs, they are so wise. We have a good experience that we can see backyard in airport.



Sept 16 (Sat)	No training
Sept 17 (Sun)	No training
Sept 18 (Mon)	We prepare proposal of our study. Dr. Suporn checked our proposal and indicated pointe which we should fix. We concerned about this point and fixed this. In afternoon, Dr. Suporn checked again our seat and indicated point or gave us suggestion. We changed our proposal and rewrite to small seat. Tomorrow, we go to mountain where there are many monkeys. I'm looking forward to see monkeys.
Sept 19 (Tue)	We went to Lopburi at 6 AM, and arrived 9 AM. We were told story of Erawan mountain from officer. We asked questions to him, how many monkeys are in this mountain and so on. Our group observe monkey at lord and temple. We collected monkey's feces at there. We collected more than 20 feces. We discuss with professors. They gave us some advice that we should concern about our study.
Sept 20 (Wed)	In morning, we discussed about our study. We talked about how to decide method or something. We have to search what's evidence say our claim. In afternoon, we went to urban area in Lopburi. There are too many monkeys in the city. Building is like tree for these monkeys. Lopburi people think monkeys are messenger of god. They live in city with monkeys. It is unbelievable view. I was surprised.
Sept 21 (Thu)	We prepared tomorrow presentation whole day. In morning, I searchied about salmonella and made salmonella slide. In afternoon, I searched paper of prevalence of salmonella in monkey. It is didn't find easily. I searched 2 hours to find this paper. After dinner, our team discussed how to present or what kind of contents to present.



Sept 22 (Fri)	Presentation day, our group is first presenter. Every student have to ask question to presenter. Their question is so kindly. But Dr. Suporn's question is too hard to answer. It is important point asked by her. We have so many homework to make complete paper. I understood about Epidemiology. It is first time to consider about Epidemiology that too much time. It's great opportunity to learn statistic.
Sept 23 (Sat)	No training
Sept 24 (Sun)	No training
Sept 25 (Mon)	In morning, we participated 2 case of surgery, castration and remove remain testis, remove mammary tumor. We participated as assistant. I assist 2 nd case. I cut thread and hemostasis. It precious experience. In afternoon, we watched 4 case, remove ovary, remove leg, remove external fixation pin, suction pleural effusion. It is first time to see remove leg of squirre. Today is great opportunity for me to see many rare case that we can't see in Japan.
Sept 26 (Tue)	There are 3 case of surgery section. First case is dislocation of the hip joint. It was used femoral resection that doctor cutting femur head by cutter. Second case is patella luxation. It was used trochlear wedge recession especially small dogs. Third case is fracture of distal femur. It was used fixed pin. Almost all case is orthopedics. I was exiting because it is first case for me.
Sept 27 (Wed)	I participate O.P.D. O.P.D means outcome patient department. I followed doctor of specialist of cardiology I met special case of O.P.D, such as mitral regurgitation. I learned many technical terms of cardiology. In afternoon, I followed doctor of internal medicine. It was great experience for me because I am interested in internal medicine.



Sept 28 (Thu)	No training.
Sept 29 (Fri)	I also joined O.P.D. I also follow doctor of internal medicine. I saw case that cat don't defecate and urinate. This cat's result of some test is normal, such as blood test, urine test, X-ray. Doctor said "I don't know why this cat don't defecate and urinate." I also saw cat have pleural effusion. As chest X-ray, there are some white signs bottom of chest. Doctor suctioned pleural effusion by butterfly needle. They are most impressive case for me.
Sept 30 (Sat)	No training.
Oct 1 (Sun)	No training.
Oct 2 (Mon)	We start study Pathology. We consider about case study. This case is dog case. Medical history is previous corticosteroid. Presenting problem is pale mucous membranes and icterus. We check hematology, biochemistry and urinalysis. Result of blood test said this dog is regenerative anemia, leukocytosis, nutrophilia, lymphpenia and monocytosis. Liver enzyme is increasing by anemia. We suspect this is pre hepatic jaundice.
Oct 3 (Tue)	It was first time to do necropsy. There are 2 cases. 1 st case is pneumonia and cardiomegaly, cardiomyopathy. 2 nd case is suspected myeloma, myelitis, osteomyelitis and degeneration of heart valve. After necropsy, we discuss 2 case. Doctor teach us why this case dead or how to connect symptom and result of some test. It is easy for me to understand.



Oct 4 (Wed)	We studied neurology. We were already learned before in our university. This time, we studied how to check disease of neurology and location of disease. We use some method. For example, observing behavior and image(CT, MRI). Location of disease is detected by checking symptom. Direction of head, head press is cerebrum symptom.
Oct 5 (Thu)	In morning, we studied how to diagnosis of exotic. POMR(Problem Oriental Medical Record) is important to diagnosis. It includes database collection, problem identification, plan forming, follow up or assessment. We learn and practice process of POMR. In afternoon, we studied pig farm in Thailand, farm situation and how to fatting. After this, we practiced case study it was situation that many pigs were dead by pathogen.
Oct 6 (Fri)	We study horse. Firstly, we study anatomy of horse leg. Japanese students didn't learn technical term of anatomy in English , it is too behind for Japanese students to understand case study. I decide learn more about English. This case study is little difficult. We learned how to diagnosis and what procedure to diagnosis in this week. It is important to see animals and it is basic for us to be clinical veterinarian.
Oct 7 (Sat)	No training.
Oct 8 (Sun)	No training.
Oct 9 (Mon)	Problem 1 is pig farm case. It is have many pig in a farm. Problem is pig have some emaciation, unthriftiness, cough, dyspnea, pale skin and icterus. This farm vaccinated pigs. Necropsy finding said lymph nodes enlargement, lung become heavy, livers are orange discoloration and spleenomegaly. We check define terms and learning objective. After this, we get other information of this case. We also check define term and learning objective. It is today's homework.



Oct 10 (Tue)	We presented yesterday homework each group. We set hypothesis of this case. We thought what's information of this case is more need. It is PCR. And we went to laboratory to do DNA extraction, PCR and electrophoresis. I have done PCR in Japan. It is first time to teach something for Thai student.
Oct 11 (Wed)	Problem 2 is that cat case. This case have problem that depress, loss of appetite and abdominal distention. On X-ray, this case have fluids in thoracic and abdominal cavies. According to blood test, this case have Neutropinea, Lymphocytosis, high of liver enzyme, hyperproteinemia, and azotemia. On Effusion fluid analysis, there are yellow viscous fluid, modified transudate. We thought about define terms and learning objective of necropsy finding. We searched straw-colored fluid, fibrinous adhesions and white plaques. Last of today's class, we make group to do homework that histopathology finding and immunohistochemistry.
Oct 12 (Thu)	We talk about homework. We sat hypothesis and check conclusion. We learned how to do RT-PCR and extract virus RNA. On Laboratory, we extract virus RNA, RT-PCR and electrophoresis. When we checked result of PCR, Just one group of 12 is correct result. RT-PCR is more difficult than normal PCR, because RNA is unstable.
Oct 13 (Fri)	No training.
Oct 14 (Sat)	No training.
Oct 15 (Sun)	No training.



Oct 16 (Mon)	We joint surgery section at HuaHin Hospital. In early morning, there is no case. We joint department of image diagnosis. We learned principal of MRI and CT. It is so easy to understand. After this, we participate operations that removing mass are 2 case, pyometra and luxation of hip joint. These operations are often the case. I have seen all of these case. It is good experience to review. Lastly, removing cerebellum tumor, it was finished midnight.
Oct 17 (Tue)	Today's operation is also brain surgery. This is cerebrum tumor. It is easier than yesterday's brain operation. Procedure is, first is cutting skin, opening hall at skull, removing skull and removing tumor. When close hall, we bring muscle from femur and cover hall. It take 4 hour to operation. In afternoon, a dog have nasal cavity. We checked CT scan, structure is normal. We close cavity and biopsy from nasal tissue.
Oct 18 (Wed)	We have 5 case of operation, 2 castration, 2 femur fracture and auditory tumor. I participated castration as assistant. I tried suture of skin. I practice suture some time in HuaHin hospital. I suture better than 2 weeks ago. I observed 2 femur fracture. One of this is complex fracture. Doctor select internal pin method and cross pin method. It is first time to see this operation.
Oct 19 (Thu)	I have 10 case in O.P.D. Turtle was injured by grass cutting machine, doctor disinfect of wound. Cat have lymphoma, chemotherapy is COP method. I observed pyometra case. Dog have abdominal mass from lesion of vaccination. I had some eye problem, I don't have much knowledge of eye, It is difficult to understand. I have to review eye disease and anatomy. Lastly, I observed cardiology case, this case rupture sutured wound. We assisted this surgery 2 weeks ago. This dog came back, because surgery injured was rupture. It is looks like painfully, but it's situation is no problem. Doctor will observe this case.
Oct 20 (Fri)	I have 7 case in O.P.D. dog have indolent ulcer in eye, there are 2 treatment. One is grid keratotomy, other is 3 rd eyelid flap. Dog have grade 4 CKD. It is serious case. Medication and transfusion were used, but doctor said "this case's prognosis is not good." Other case is vaccination. It is different between Thai and Japan. Japanese core vaccine of cat have 3 kinds of virus vaccine, but Thai core vaccine of cat have 5 kinds of virus vaccine. Some case is skin problem. Doctor diagnosis is problem from infection of bacteria. Doctor take anti biotic for these case.



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Oct 21 (Sat)	No training.
Oct 22 (Sun)	No training.
Oct 23 (Sun) Chulalongkorn Memorial Day	No training(In Bangkok)
Oct 24 (Tue)	No training(from Bangkok to Chang island)
Oct 25 (Wed)	No training(In Chang island)
Oct 26 (Thu)	No training(In Chang island)
Oct 27 (Fri)	No training(In Chang island)



Oct 28 (Sat)	No training(from Chang island to KPS)
Oct 29 (Sun)	No training(In KPS)
Oct 30 (Mon)	In exotic section, we went to BKK campus. We learned POMR again. We think some questions. They are how to diagnosis of exotic animal, what is meaning of "problem" and what is contents of POMR. We draw pictures feces of rabbit, guinue pig, turtle and bird. Rabbit and guinue pig's feces have many fiber. There is intestinal parasite in turtle feces. After class, we discussed case of hedgehog. It is sneezing and depress. We think diagnosis this case following POMR.
Oct 31 (Tue)	We join clinical diagnosis. There are some kind of species include squeal, rabbits, turtle, chicken, hamster and golden fish. Squeal have leg problem from spinal code injured. Rabbits have wound and eye discharge. Golden fish is swim up side down. Chicken have depress and no ray egg for 2 months. Hamster have skin problem. Our group learn more about hamster case for tomorrow presentation.
Nov 1 (Wed)	We presented hamster case. Doctor advice something that relate POMR. We should think diagnosis combine all problem list. If we think diagnosis each problem, it is level of 4 th grade student. We have to step up thinking combine something. We have to numbering problem list. That is reason that we confirm owner how many problem them pet have, when we explain diagnosis. In afternoon, we check something got advice to improve our presebtation.
Nov 2 (Thu)	We went to Kanchanaburi to watching banteng. Banteng is breed of cattle and endangered species. Banteng breeding center have open since about 50 years ago. They have release 9 bantengs to the wild since opening. They will more 3 bantengs to the wild on next year. This center breeding banteng from baby to adult, and transport them to wild. When banteng is used to wild in cage, they are released to real wild by royal family. We went to release point and searched banteng. But we can't go to deep forest, because



	ground is wet and not good to go. We go back and learned about wild life of this area.
Nov 3 (Fri)	We learned about wildlife conservation. There are many kind of dangerous for decreasing species. For example, exploitation, habitat degradiation, Habitat loss and fragment, Alien, pollution and disease. We searched some kind of diseases of wildlife and presentation. We also learned risk analysis of disease. It is review and practiced contents of risk analysis. Our target is FMD and Bordetella disease. It is difficult to think ourselves, but I understood this in last.
Nov 4 (Sat)	No training
Nov 5 (Sun)	No training
Nov 6 (Mon)	We went to 2 farms in Kanchanaburi. Both of farms we updated some data, including date of AI, when will birth baby and milky condision. First farm have 5 cattle that suspected pregnancy. We do rectum palpation to diagnosis pregnancy. 1 cattle have cystic ovary. We take medicine to cystic ovaries. We saw calf case that have ophthalmic disease. Second farm have 16 cattle that are diagnosis of pregnancy and NVO(No Visible Oestrus). We practice many time to rectum palpation. We collected bloods of 5 cattle and do TB test. We saw 1 case have inappetite, hard feces and no rumen moving.
Nov 7 (Tue)	Doctor asked 3 question, anatomy of cattle, physiology of cattle and treatment of hoof lesion. When we arrive cattle farm, we saw 2 cattle. One have accidental wound and abscess, the other have ulcer. Doctor trimming nail and wear shoe for first one, and also do trimming nail and take anti- biotic for the other. We went to goat farm. We collect blood for checking Brucellosis. There are over 20 goats for blood collection. Method of



	collecting blood of goat is same method of cattle. It is good experience for me to collecting blood.
Nov 8 (Wed)	We visited 2 farms. First farm had dystocia of cow. When we arrived, we can see legs of calf from vagina. My friend do epidural block. I palpation vagina and pulled calf's leg. We can help calving. Then male calf was birth. It is first time to help dystocia case and great experience for me. We went to next farm. We do rectum palpation for 1 cow pre 1 student. They have retained placenta. We checked prognosis of retained placenta. I couldn't find ovary, but I can find harder uterus. We took them PG. After going back hospital, we saw other dystocia case. We took her caesarean section. It was take about 4 hours.
Nov 9 (Thu)	We visited 4 farms. First farm's cow have ulcer in left forelimb and white line laminitis in right forelimb. We do trimming hoof and wear shoe, taking anti-biotic. In second farm, we check pregnancy or not. I can decide pregnancy, but I'm not sure completely pregnancy. In third farm, we collect blood for checking brucellosis. I become better collecting blood than this Tuesday. In forth farm, we saw abscess and laminitis in left hindlimb. We do trimming hoof ,wearing shoe and taking anti-biotic.
Nov 10 (Fri)	In morning, we visited one farm. Cattle have chronic diarrhea. He is thin. Their diarrhea is watery diarrhea. This describing parabola. Doctor suspected paratuberculosis. It have to be reported to ministry agriculture. If detected paratuberculosis, it is so serious situation. In afternoon, we had presentation. We selected two case, abomasal displacement of cattle and neurological disease of goat. I presented neurological case. Doctor advised and asked us. We discussed these thing. Diagnosis is important, but it is more important true of disease actually.
Nov 11 (Sat)	No training



Nov 12 (Sun)	No training
Nov 13 (Mon)	In morning, we had lecture of POMR of horse. We thought about case study of horse. It is little bit different between horse and exotic. In afternoon, we went to demonstrate farm for learning how to do physical examination. We firstly learned how to take care for horse. After this, we do take care and physical examination for real horse actually. We also learned how to check hoof. It check for laminitis. Lastly, we learned nasal gastric incubation for clean gastric. It remove pain of stomach.
Nov 14 (Tue)	We are in charge of two horses. Their names are Keasel and Fedel. We took care of them. Firstly, we did physical examination and clean hoof, second we release them to outside. As for Fedel, he have chronical laminitis. doctor treat every day. In afternoon, cardiology doctor teach us cardiology of horse. It included how to do and interpret ECG. Actually we check ECG of real horse. This ECG said this horse have level 2 mobit 1 AV block. It is not need to treat.
Nov 15 (Wed)	In morning, we took care our horses. We diagnosis of pregnancy for mera. We used ultrasonography for check fetus. We can see fetus and vertebra of fetus. Doctor suspect 3month pregnancy. Next case have ataxia and abnormal walking. Doctor suspect injure spinal cord at C1~C5. Doctor treated this horse by acupuncture. We saw other case that have depress, inappetite and no feces. Doctor removed feces by rectal palpation and do nasal gastric incubation for clean stomach. After treat, she have stomachache and fall down. She have fever, we decrease temperature by water. After this, she was better.
Nov 16 (Thu)	One horse that came last case yesterday, was already have fever. Doctor do ultrasonography and diagnosis her colon is abnormal position. Her small intestine is thick. It was suspected inflammation. Doctor do nasal gastric incubation some time. But her condition was not better. Doctor check rectum by rectal palpation, she was suspected rectal rupture. Owner select euthanasia and necropsy. We know inflammation of intestine, adhesion between rectum and uterus and no problem of other organ. Doctor suspect this reason is some objects from outside.



Nov 17 (Fri)	We went to demonstration farm to bury yesterday case. After this, we have lecture for reproductive of horse. Horse's reproductive system is different with cattle. I never learned horse reproductive. Doctor gave us some homework. Our group's homework is how to check age of fetus. It is using ultrasonography for check eye length. Other group's homework are when we have to check pregnancy diagnosis and how to check twins. Their homework are so difficult. I understood how to check pregnancy diagnosis and reproductive system of horse, but not all. So I have to learn more.
Nov 18 (Sat)	No training.
Nov 19 (Sun)	No training.
Nov 20 (Mon)	We stand up a horse that she fall down every time. She is big horse like Banba in Obihiro. I estimate her weight over 1000 kg. We pull rope for standing her. It is so hard to stand up her. We can go out her outside. We use air conditioner to decrease her body temperature. However she was die. We bring her demonstration farm and necropsy her. We take sample for pathology from some organ.
Nov 21 (Tue)	We went to see princess cup Thailand 2017. We saw junior grade of competition. They are under 18-year-old. Three Japanese participated this contest. It is first time to see competition of jumping horse. I didn't know rule of this, but doctor taught us rule. Then we can understand and fun to see this competition. In evening, we saw inspector of horse health. Veterinarian inspector horse body and walking for checking lameness of horse. It just looking body, don't touch body.
Nov 22 (Wed)	We took care 2 horses and check physical examination. We prepared tomorrow presentation. Our presentation case is Mali's case that she had rectal tear and we did euthanasia. Before lunch, doctor ask us how about equine unit. I answered it is great experience for me to see many horses case. After lunch, we prepared presentation again, I learned more knowledge of rectal tear.



Nov 23 (Thu)	We joined academic meeting of ASEAN veterinary medicine. We have lecture Chinese medical philosophy especially clinical acupuncture. This lecture was similar lecture that we had in Japan. In afternoon, we had presentation. We present 20 minutes and question time 10 minutes. We divide 4 groups. Every group case is interested for me, because it is rare case and we have little opportunity to see horse in Japan.
Nov 24 (Fri)	In morning, we took photo for applying to extend VISA term. We wear school uniform and took photo. We got ID card. We prepare studying for examination. In afternoon, we had examination of equine. As for this examination, we had 2 cases that trypanosome and hindlimb's wound case. Doctor checked we know how to diagnosis and how to treat. It is good examination to confirm our knowledge.
Nov 25 (Sat)	No training.
Nov 26 (Sun)	No training.
Nov 27 (Mon)	In morning, we learned dairy farming system. We compare between Thai and Japanese dairy. Japanese population and number of dairy cattle are twice more than Thai. As for area, Thailand is 1.5 times bigger than Japan. When cattle have problem, farmer treat firstly, then paraprofessional treat, finally veterinarian treat in Thailand. We also learned geography of Thailand. Dairy is famous in center of Thailand. In afternoon, we went to demonstration farm. We were introduced the farm and how to milking by assistant.
Nov 28 (Tue)	We discussed which topic we will presentation. We decided searching BCS and consider relation of each lactation stage. Then, we went to demonstration farm and checked BCS. When we finished checking BCS, doctor said "This date is little bit wrong". So we had to check again. Today's homework was searching proper BCS of each lactation stage and cause of low BCS.



Nov 29 (Wed)	In morning, we learned how to diagnosis of pregnancy. It include anatomy of reproductive organ, how to palpation and ultrasonography of rectum and what kind of structure in ovary. Actually, we did rectal palpation and estimate structure in ovary. Then we checked answer by transrectal ultrasonography. I did rectal palpation many time. I can feel ovary and structure. I'm glad to know how to palpation ovary, because I didn't feel ovary in Japanese practice. In afternoon, we discussed our topic.
Nov 30 (Thu)	No training. But we prepared tomorrow presentation. I searched cause of low BCS of dairy cattle in morning. In afternoon, I searched paper or journal that feeding management of dairy cattle during transition period. I mainly searched food management of dairy cattle, but it is hard to find good journal. We finished searching and make preparing presentation at midnight.
Dec 1 (Fri)	No training. We went to immigrant center for extending VISA. It took over 7 hours, we can't go back finished presentation.
Dec 2 (Sat)	No training.
Dec 3 (Sun)	No training.
Dec 4 (Mon)	