



Fountain of Innovation

*aims to discharge knowledge,
ripple inspiration,
infuse new ideas into the vast
and sublime world of medicine*

The Pioneer of Pathology

Narrated by: Dr. Yung-Hsiang Hsu,
Director, Dept. of Pathology, Hualien Tzu Chi Hospital



Observe your surrounding, be grateful for everything you own in this transient life.

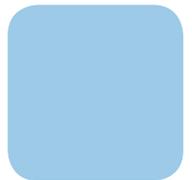
In Taiwan, for those who have dedicated 6 years in the medical school and are about to arrive in a hospital as physicians who attend to patients and their surroundings, this is a new starting point. Here, in Tzu Chi University and hospital we have top of the line equipment and faculties, so settle down, stop whining, study hard, and you shall learn.

24 Years to Attain Masterhood

Looking back at my affinity with pathology in Tzu Chi hospital, since my master graduation at National Taiwan University (NTU) College of Medicine in Feb. 1989, I stayed and completed the residency training in July 1990, with the aim to become a chief resident. My mentor, Prof. Shu-Wen How of Dept. of Pathology, recommended me, “NTU has no vacancies. The only place in Taiwan that has vacancy is Hualien Tzu Chi Hospital. Do you want to go?” My newly wedded wife strongly opposed against the idea, and since she refused to come, I came alone. I am grateful to my parents-in-law, as they were fairly “reasonable” and said that “Since my daughter is married, she must follow her husband to eastern Taiwan”, and subsequently “dragged” my wife to Hualien. Fortunately, Tzu Chi College of Technology was hiring faculty, so my wife stayed with me eventually.

After reporting on July 16, 1989, I served to this very day. We are the pioneers here, with 24 years of hard work. Of course there were times when our heart became restless, eager to move, it is a process every doctor in Hualien must face. The key is the thought that bought you here; the original intention is vital.

From 1990 to 1994, it was the toughest years: I was the only physician in pathology, and another resident was receiving training in NTU. Those days could be summed up by “just do it”, and many things were accomplished because of it. In 1995, I went to University of Southern Carolina to further my education. In 1996, Prin. Ming-Liang Lee entrusted me to plan all the training biopsies and begin preparing teaching materials, since the first batch of medical students were about to start pathology in 1997, and the clock was ticking. How is it possible in such a short time? Time was scarce and I had no choice, so, with two partners at my side, we prepared 200 biopsies and all the materials within a year’s time. 1998, with Prof. Teh-Hsiou Huang came to our aid, we finally





finished building the dept. of pathology. Jing Si aphorism says “Waste no second, and let every step we take be solid ones”. That was exactly how we pulled through, step by step.

Nothing Is More Important Than Students

Feb 27, 2010, Prof. Shu-Wen How mentioned in his speech at NTU that any medical education is the same, “Education, Research, Service”. Pathology may have different emphasis than Clinical or any other fundamental courses, but as a whole, education is always ranked first in field of pathology. I was a teaching assistant in NTU, and Prof. How told me then that there is “nothing more important than students”. Even if you are preoccupied, when students come to you, their affairs take priority. In my past 24 years, medical education always come first, students always come first. Everyone knows, I always accompany students as they study the biopsies, you can’t lie about such thing. Therefore, when I visited Taipei recently, I couldn’t help but whined to Prof. How, “It is so tiring, I feel like quitting, getting ready to run away.” “You must persist! You started out doing this, if you quit now, people will criticize.” He replied. “I can’t help it, I am running out of steam!” I answered. “Persist. Student’s education always comes first. It cannot change, it can never change.” He insisted.

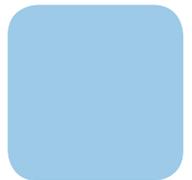
Just like the spirit of volunteers, it contains not only passion, fervor and persistence, but also the endurance to fight on even when things are going south, just like the baseball team “Sinon Bulls”, who fought to the end despite its horrible records. I went to Taipei for a pathological convention not long ago, many physicians who came to assist Tzu Chi hospital asked “You have worked there for over 20 years, how can you still hang on?” There were many many supports and motivations for me to endure, I replied honestly. A legend was created in Hualien: our medical students always come first in national examinations, particularly from the dept. of pathology. Prin. Pen-Jung Wang named them “Dongfang Bubai” after an invincible fictional swordsman, and our brilliant records demonstrated the appropriateness of the title.



Director Yung-Hsiang Hsu exhibits the spectacular results of pathological biopsy in Tzu Chi hospital, attracting the full attention of the interns below.

All About Saving Lives

Majority of the students back then are attending physicians now. I got along very well with physicians graduated together with Dr. Ya-Ju Wu of General Internal Medicine, Hualien Tzu Chi Hospital. I used to accompany students completing their biopsies every noon, someone would call out “teacher, time to eat!” We would then gather in a corner of the dining hall, research together and eat together. Come to think of it, those days are filled with joy. What I have done the most in Tzu Chi hospital is “pathological anatomy”, with Master Cheng Yen’s “we do not have ownership of our life, only the privilege of using it”, I have accumulated 317 cases of pathological autopsy (updated 2012). During these autopsies, I was most grateful to the company and prayers of Tzu Chi volunteers. Master once asked me, “what is the purpose of conducting so many autopsies?” To save others, I said. I love the verses in the “Sutra of Innumerable Meanings”, “Having attained great wisdom; they penetrate all laws; and come to understand; all the innumerable teachings.” Every patient is a sutra, and





sufficient wisdom is required to fully comprehend it. Sometimes when I had trouble with a case, I seek help from my teacher. I would reexamine the case with Prof. How in NTU in Taipei, and he would then pointed it out, "this is that certain sickness!" Oh, so that is how it is! So enlightening!

On March 21, 2006, a senior veteran was sent to the hospital with lung issues, and biopsy revealed severe hemorrhage with no cause to be found. I read this file afterwards over and over again, and a student of mine, Yi-Feng Wu, now a physician at Hematology & Oncology, Hualien Tzu Chi Hospital, made the right diagnosis; while in ICU, he discovered an anomaly in the test data, and that discovery eventually solved the case. After solving the case, on March 28, 2007, I shared the experience in Lotung Poh-Ai Hospital. A day after, I received a phone call, informing me that the mother of Director Tsung-Lang Chiu of Neurosurgery, Hualien Tzu Chi Hospital was hospitalized in Taipei on March 27, and the doctors were pessimistic. Director Chiu hired a helicopter to transport his mother to Hualien Tzu Chi Hospital. X-Ray indicated infiltration on both lungs with impaired renal functions. I intuitively associated this case with the veteran case I shared earlier and asked Director Chiu to send a blood sample to Director Teng-Yi Lin in Laboratory Medicine. When the result came out on the 30th, the cause was the same, and the



Director Yung-Hsiang Hsu(center), who places students above all, stayed and chatted with students in a medical student consensus camp, wishing to root his ideal value into the hearts of these students.

medical team was soon on the move! Director Shih-Tzu Tsai of Rheumatology and Director Te-Chao Fang of Internal Medicine assembled a care team and proceeded with plasmapheresis and immune therapy. By May 13, Dr. Chiu's mother recovered completely. Saving lives is the result of our effort. In fact, cases like this happened before, but by the time we apprehend the situation it was too late. Therefore, this is the reason why pathological autopsy saves lives.

Transform Crisis into Classic

In the past years I have encountered numerous cases, and the crisis moments are also precious pathological teaching material, worth sharing with all of you.

In 2002, a Chinese woman was bitten locally by a canine and became symptomatic when she visited her relatives in Taiwan, which made rabies, extinct in Taiwan for the past 40 some years, resurfaced again. We performed autopsy under the order of the Centers for Disease Control, with the help of two students, Tzu-Meng Yang and Mu-Huan Kung. We wore standard protective suits and worked until 1am before we finally documented rabies, a rare disease and precious pathological data to Taiwan.

During 2003 SARS, a 42 years old male patient was hospitalized. His X-ray before hospitalization appeared fine, but another X-ray few hours later revealed whiteness in the lungs, and by later that night, the entire lungs turned white. Dr. Jen-Chih Lee from Chest Medicine called me at home and asked "Dr. Hsu, do you dare?" I pondered and replied, "I'll have to ask my wife." Even though she said "you shouldn't do that! No way!" I bit the bullet and went through with it, with the assistance of Dr. Cheng-Hsiang Hsiao from NTU. During pathological autopsy, we discovered hemorrhage has filled the lungs, but no sign of inflammation in sight, however the hemorrhage was so severe, leaving the cause a mystery. I did two sets of biopsies and passed it around Taiwan,





asking medical professionals in Taipei to examine it, but in the end no one could identify the cause. Just then, Prof. Wen-Ju Shieh from US Centers for Disease Control (USCDC) returned to Taiwan, and with only a peek, he identified the cause as leptospirosis, the specialty of Deputy Supt. Lih-Shinn Wang of Haulein Tzu Chi Hospital. Prof. Hsieh called me right away and asked me to perform a “silver staining”, and our team was cooperative, by that afternoon we have identified the leptospirosis. The journal “Pathology” used our biopsy as the title in the 2004 issue, making it a timeless classic. Prof. Hsieh had taught me that, in addition to experience, one needs to look at kidney to diagnose leptospirosis; the inflammation within renal interstitial cells is a characteristic of leptospirosis. Ever since this case, Supt. Wang Li-Hsin gradually discovered several more similar cases.

What happened in 2006 was even more horrifying. I have performed autopsy on rabies patient, would I dare to perform one on mad cow patient? On Dec. 21 2006, case number 279, a 78 years old female patient. The director of Internal Medicine at the time, Woei-Cherng Hsu, was certain it was mad cow disease after the band was detected with PCR (Polymerase Chain Reaction). He asked me, “Would you dare to perform?” I said, yes! With proper protection, there should not be any issue. Together with Dr. Bo-Yuan Tseng, Dr. Chi-Hsin Pang from CDC, and ex Director-General of Hualien County Health Bureau Jen-Hsing Shih, we were like soldiers marching onto battlefield, staring death in the face. Pi-Yu Lin, the Vice President of Tzu Chi Foundation, summoned a meeting precisely for this matter. Eventually she said, “Don’t do it, it’s too dangerous!” The ex Director-General replied, “We can’t, it is already agreed upon, we have to proceed!” After a prolonged back-and-forth discussion, Vice President Lin reminded everyone: “Go ahead, but be careful.”

The autopsy room was sealed completely to prevent saw dusts or fragments floating in the air, and plastic bags were used to cover the brain while extracting. Since the room was sealed, we had to carry oxygen tanks with a supply of only an hour and a half. With saw in one hand, plastic bag in another, it was difficult to proceed, but nevertheless we had to continue with the autopsy. Once we began, though, we could care less about anything else, so we included internal organs in our autopsy and gone all the way.



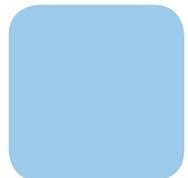
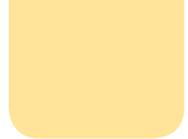
With years of pathological autopsy experience, Director Yung-Hsiang Hsu autopsied each cadaver as if reading a Buddhist sutra. One step at a time, he established a set of comprehensive pathological doctrines.

Even with so many obstacles in our way, we managed to wrap it up! We went in 8 in the morning and came out 1:30 in the afternoon, feeling dazed and confused from the lack of oxygen. Why? Because the oxygen tank only last one and half hour! The dizziness was the result of inhaling our own exhaled air.

Chin-Cheng Li, the director of Pathology, Shin Kong Wu Ho-Su Memorial Hospital, who received his Ph.D. at University of London, is a classmate of mine. We entrusted him with the wax block to be sent to England for examination. He said, "Only you have the courage to do it!" "Not really, it's my job, so I did it." I answered.

The Decision Between Price and Value

The 1st CPC (Clinical Pathology Conference) of Hualien Tzu Chi Hospital took place on May 31 1991, hosted by Prof. Shu-Wen How of NTU; it took 15 years to reach our 100th CPC. Our feature is that every semester we hold a student CPC, and 5th year students do pathology while 6th year students do clinical.





Fountain of Innovation

Honorary Supt. Ing-Ho Chen and Wen-Pin Tseng are very supportive towards our CPC. Honorary Supt. Tseng was in fact very diligent, attended every CPC; he was unwell in the recent years and could not attend every conference, but whenever he does, it is a immense encouragement. After the 100th CPC, I have come to a conclusion that “a hospital cannot operate without CPC”. Why? Many hospitals with CPC came to me. Chung Shan Medical University invited me to visit biannually, and I agreed, thinking that I arrange it on the same day as Changhua Christian Hospital. Director Chin-Cheng Lee of Shin Kong Wu Ho-Su Memorial Hospital also asked me, “come on, we are classmates! Just come and visit on the way!” I replied, “How can it be possible? I am no superman! Running around Taiwan, I am running out of breath!” Then a teacher would join the persuasion, “Say Yes, say yes!” How can those mad cow disease and rabies have answers without autopsies? What is pathology? Final diagnosis! Therefore no hospital cannot operate without CPC. Tzu Chi hospital used to be national first in autopsy, and now it is running out of successors, but I continue to persist with the saying “there’s nothing more important than our students”!



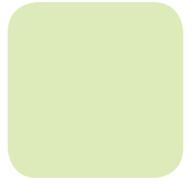
Director Yung-Hsiang Hsu instruct the students on the procedures before specimen production. First one on the right is Dr. Huai-Ren Chang, Cardiology, Hualien Tzu Chi Hospital.

So many autopsies, so many CPCs, the sentiments are profound. Price, what is “price”? I remember in the beginning, Tzu Chi hospital performed 40 to 50 autopsies annually, and many resident and attending physicians quit, they felt overwhelmed. When they quit, some told me that “only you wanted to perform, we don’t”, and some said “other hospitals pay TWD20,000 per autopsy, Tzu Chi paid nothing”. I think, before you even started, I have already performed 150 cases, should Tzu Chi hospital pay me 3 million dollars? It doesn’t sound right.

So, it is not about pricing. If you treat it as “value”, believe that the knowledge from these cases can be inherited, just like reading Buddhist sutras; if every physician performing autopsies can be like me, treat it as reading sutras, it would not be as painful! It should be something that is enjoyable. In Tzu Chi, we have received pathology of rabies, mad cow disease, as well as leptospirosis, what have we not? We even have amyotrophic lateral sclerosis (ALS). A Tzu Chi volunteer, after he realized that he had contracted ALS, dragged his symptomatic body to Hualien for pathological autopsy. He respect Master Cheng Yen’s ideal, and we, as Master’s disciples, should continue pursuing our goals instead of preoccupied with money issue.

Unwilling to participate, unwilling to support because it is worthless, those days made me felt extremely lonely. Evert time I do CPC in other places, they would complain that “you have taken all the good cases”! Is that so? Instead of accusing us taking the cases, they should say that they refused the cases.

Therefore when those physicians quitted their job, I simply said, “Please, go!” If they price each autopsy as TWD 20,000, it is pretty sad; it is wrong, as Jing Si aphorism says “Be willing to do, be happy to bear”. If you believe that working in Tzu Chi is meaningful, then you would be both happy and willing, which of course demands great courage and wisdom to attain such





mentality. Recruiting new talents is difficult at the moment, since most youths would rather choose other hospitals that promise “no teaching and no autopsy”. All that I can do is continue searching for talents and endure the sorrow alone.

Be Grateful Always

To be honest, in Hualien, I do not perform autopsy every single day, I also write thesis and conduct researches with these autopsy cases. I was certified as a Tzu Chi commissioner in 2008, and the Dharma Name Master gave me was “Chi Yung (means eternal)”. I am a Tzu Cheng Father, in fact. The medical graduates the same year as Dr. Yi-Feng Wu, the physician who identified the anomaly in the veteran



Director Yung-Hsiang Hsu (Third from Right, First Row) has many students. His biggest wish is that every physicians nurtured by Tzu Chi can return and contribute when Tzu Chi University and Tzu Chi Hospital are in need. The photo is a group photo of all the attendees and instructors from 2012 Tzu Chi Hospital Intern Medical Ethics Consensus Camp.

case, was under my care. I became, in the recent years, particularly focused on nurturing talents, starting as early as seniors in universities. However, I often feel sad towards pathology and towards myself.

Dr. Yin-Jen Chen decided to pursue pathology during her 4th year in university, and I started nurturing her since. In her 5th year, I sent her to deliver a speech at Taiwan Association of Pathology, and again in her 6th year, consolidating her training every step of the way. But just as Chen was about to serve in Tzu Chi hospital, the government assigned quota for PGY (Post Graduate Year) to pediatrics, obstetrics and gynecology, due to the recent recruit famine in these departments, which, of course, leave no quota for small departments like pathology. I was extremely devastated as I wrote a recommendation letter for her to attend NCKU Hospital, hoping that she could return in 4 years time.

My endeavors all these years are not wasted. From north to south, including two resident physicians in Taipei Mackay Memorial Hospital came from Tzu Chi, while two resident physicians from Koo Foundation Sun Yat-Sen Cancer Center, three resident physicians from NCKU Hospital and 2 resident physicians from Kaohsiung Chang Gung Memorial Hospital all graduated from Tzu Chi University. Every time I travel to Taipei, all my pupils would come visit me. I always spoke to them with a heavy heart, that "it is important to come back when the university and the hospital needs you", wishing to pass the torch to the younger generation.

For twenty-some years I walked this lonely and fulfilling Tzu Chi pathology path, and I want to encourage everyone who is able to become physician to remain grateful at all time, be grateful to Tzu Chi and everything else; most important of all, one must be a physician with conscience and persistence. I do not regret my devotion with Tzu Chi all these years.

