

## Second Pathology Department

The staff at that time were Professor Umeda, staff member Fukahori, and Tsunoda.

The situation at the time of the bombing

Professor Umeda was killed in the bombing while lecturing the second-year students in the Pathology Department Auditorium. Tsunoda was killed in the bombing outside the air-raid shelter in front of the building. Fukahori escaped the disaster because she was away in the countryside, evacuating her younger brother who was ill.

Biography of late Professor Umeda

Senior Fifth Rank, the Sixth Order of Merit, M.D, Ph.D., professor of pathology

February	1903	Born in Tokyo
March	1925	Graduated from Tokyo Imperial University School of Medicine
April	1925	Appointed assistant professor at Gyeongseong Imperial University, specializing in pathology.
October	1929	Appointed associate professor at the same university.
May	1936	Studied in Europe and the U. S. for pathological anatomy research
July	1938	Returned to Japan
August	1941	Became a professor of medicine at Nihon University
July	1944	Appointed professor at Nagasaki Medical College, appointed Senior Officer
9 August	1945	Killed in the line of duty by an atomic bomb at the College

Main research topics

Morphological study associating iron metabolism

Official position and name of the deceased

Official position	Name
Professor	Kaoru Umeda
Staff	Seki Tsunoda

## The Pathology Department at the time of the bombing

Takeo Wakahara

Ten years have already passed while I kept myself busy as if I were in a dream. All the people working in the department that day were gone, along with the building. I, the writer of this memoir, fortunately or unfortunately, was drafted three and a half months earlier, and was sent to the front line of Kyushu on the west coast of the Satsuma Peninsula. As a miserable apprentice officer in the military, I was busy at quarantine, treating dysentery which spread in the camp beyond my control. One can never guess his destiny. I am still alive today, as my family (our house was at the riverside of Shiroyama at the time). Upon the secretary's order, I began writing, but my daily practice hardly allows me any time to consider the structure of the content. I ask for your understanding and apologize in advance that it may not be very coherent. Let me also remind you that since I was away at the time of the atomic bombing and returned to the College later, descriptions about what happened on that day are based on the hearings from many others, especially the widow of the late Professor Takeuchi (Pathology).

Before writing about that time, I would like to go back a little earlier and share about our department back then. The Pathology Department was located in the middle of the westernmost building in the Basic Science Department, which consisted of three buildings standing south to north, and was a wooden building between the Anatomy Department in the north and Forensic Medicine in the south. It was a partly two-story concrete building, the Auditorium at the southern end, which is now the entrance and administration of the Basic Science Department. In these buildings, which were connected by corridors, the First and Second Pathology Departments, the Division of Pathology of the former Continent Medicine Research Institute, renamed to the Institute of Endemic (current Institute of Endemic), cohabited. Until around two years before the atomic bombing, there were ten staff members in the First and Second Departments led by the late Professor Takeuchi and Professor Yoshida (now a professor at the University of Tokyo), and the staff were all actively engaged in their part-time jobs and sports. It was also around this time that Yoshida Sarcoma was discovered. However, by the end of 1943, the number of members in both departments had dropped by half or less, as some were summoned to the military one by one, and others left the department after completing their research. By that time, many Koreans had also gone back to their country.

The East Asia Research Institute of Endemics was yet to be established the Clinical Department at the time, and there was only the Pathology Department (headed by Professor Kaneko of Pathology) within which the Division of Pathology and the Division of Bacteriology (rented a room within the Bacteriology Department headed by Professor Aoki who was an associate professor back then) existed. In the Division of Pathology, Mr. Maruyoshi was the

only assistant, but after he was drafted, the Division became quiet as there were only Professor Kaneko and two assistants.

In 1944, Professor Yoshida was appointed to the Pathology Department at Tohoku Imperial University, which was vacant as Professor Kimura was summoned as a military commissioned officer to the South Seas. At that time, there were only two staff members in the Second Pathology Department, Jinichi Sasaki (now practicing in Yamagata City) and I. Another staff member, Yoshio Muta (now practicing in Yagami-machi), had already joined the military and was waiting in the Kurume unit before being dispatched to the continent. After discussing, it was decided that Sasaki would accompany Professor Yoshida to Sendai, and I would remain in Nagasaki, but Sasaki was drafted a month before Professor Yoshida's transfer. Professor Yoshida took up his post in July 1944, and the College welcomed Professor Umeda from Nihon University School of Medicine in August. The Pathology Department at that time had a rich collection of hardcover books and journals. If Professor Umeda wanted to look for references in Tokyo, he had to go to Keio University School of Medicine in Yotsuya or Tokyo University in Hongo, so he was very satisfied to see enough reference materials at hand, and immediately after his arrival, he started occupying himself with his research from early morning until late at night, enthusiastically.

In November, I was appointed Associate Professor of Second Pathology as the position was vacant. As time passed, the situation of war became more and more intense, and B-29 formations were frequently observed flying over Nagasaki on the way to Omura and back. We were forced to evacuate to shelters every time an air-raid alarm was issued. However, until 1 August 1945, Nagasaki City had air-raids, which were not so heavy, and days passed without any major incident.

The military started to train women to fight with bamboo spears, which seemed like a last cry before its death, and they also encouraged us to join as reserve doctors so that they could send as many doctors as possible to the front. To be role models, professors at the College volunteered to join a 25-day educational training for reserve military doctors around this time. (Professors were summoned on a volunteer basis, but others were compelled to join the training and were subsequently called up.) In the fifth training (there were five training sessions in the same year), Professor Kunifusa from the Forensic Medicine Department and Professor Kiyohara of the Physiology Department participated from September to October. The first session, which was implemented in February 1945, was attended by young professors (I remember that there were five of them), including Professor Umeda (Pathology), Professor Uchino (Biochemistry), Professor Naito (Obstetrics), and others. Among them, Professor Uchino contracted bacterial meningitis while he was serving in the camp, and was administered penicillin (which President Tsuno'o had obtained from a certain source), which was developed only by the military and was not known to most of the Japanese at the time. Unfortunately, it did not work, and Professor Uchino finally passed away.

This was how the year 1945 started. On the night of 15 April, I received a draft paper, joined the unit in Fukuoka, and the Second Pathology Department was left with only Professor Umeda and two assistants (Ms. Fukahori and Ms. Tsunoda). At the time, Lecturer Tsutsui of the First Pathology Department was working at Mitsubishi Hospital. Lecturer Tada left for Koyano Surgery, Machida, and others were drafted, and the last remaining member, Harada, joined the military three days after me, leaving only Professor Takeuchi, Associate Professor Yasuno, and two assistants (Ms. Ono and Ms. Okada). Other staff who belonged to both departments were photography technician Shigeo Takatani, painter Shunko Shigeharu Nakata, who was in charge of creating medical drawings and specimens, anatomy assistants Sadaichi Ideguchi and Jinzo Tagawa, staff member Suesaburo Yamaguchi (he was an old man), and young Hitoshi Ikeda, who was also a student of a night school. In the Institute, there were Professor Kaneko and two assistants (Ms. Hirayama and Ms. Kusano), and that was all in the Pathology Department before the atomic bombing. There were not enough staff to conduct daily lectures and research.

Soon, air-raids on the mainland from Okinawa and the South Sea Islands increased, so that hardly a day went by without an alarm. So, while the alert was on, everyone had to leave their duties and evacuate to the air-raid shelters. Lectures for students (the fourth-year students of the Special Medical Vocational Department and the third-year students of the Special Pharmaceuticals Department) were almost suspended. However, Nagasaki City was almost unharmed as there were only light air-raid attacks. This was why the risk of air-raid attacks was perhaps underestimated, and I heard that the classes continued during the alert. Meanwhile, the College relocated its property, especially books and research materials, and some of them were taken to the Kashima area in Saga Prefecture.

On the other hand, to minimize the risk of fire, the buildings were demolished. In the Pathology Department, the corridors were disconnected, and the staff room was dismantled and removed. It seems that the evacuation of goods almost did not take place in the Pathology Department. (When the war ended, all we had were two or three microscopes returned in a baggage that had been evacuated.) As mentioned before, there was a two-story reinforced concrete building in the Pathology Department, and on the upper floor, there were Professor Takeuchi's room, a library, and a separate room, while the first floor consisted of two rooms, which were a storage for microscope specimens and a laboratory for animals with tuberculosis. So, instead of relocation, various goods were brought into this building, and all the windows were covered with tin sheets from outside and coated with red clay. This should have been enough to prevent the building from burning down under normal circumstances.

In parallel with this, people gradually evacuated too. Professor Umeda's family moved to Okusa from a hill of Hamaguchi-machi, so the professor appeared to be staying in the department most of the time, and returned to Okusa from time to time. Associate Professor

Yasuno lived in Shiroyama-machi, but he travelled back and forth to Shimane Prefecture to send his mother, then his wife and daughters. Perhaps because these travels were hard for him, his lung, which he had been treated for a while, worsened, so he had to take rest and recuperate from time to time. Professor Takeuchi's house was near Siebold's residence in Narutaki, but he seemed not to care about evacuation. However, since the number of department staff has been decreasing, he occasionally visited and stayed overnight in Saga Sanatorium for wounded veterans (now the National Saga Sanatorium) in Nakahara, Saga Prefecture, for further research on tuberculosis, which he had been working on for a long time. He carried out pathological autopsies and experiments, but perhaps due to hard work, combined with the lack of nutrition during wartime, as well as handling bacteria directly, he himself contracted tuberculosis, so at the time of the bombing, he was lying at his home in Narutaki. Professor Kaneko did not evacuate people, but was relocating the staff room, which was removed from the Pathology Department to the foot of Mt. Kompira deep in Moto'o-machi.

On 1 August, Nagasaki City was under air-raid attacks, and Ohato and other areas were bombed as well as the College, which was hit by a direct bomb. The surgical operation theatre, Obstetrics Department professor's office, library, and operation theatre were destroyed, and one or two students who were in charge of the patients were killed. Since then, the College discharged patients with minor conditions, so that there were not many patients remaining in the hospital.

This is what the department was like, and then the fateful 9 August came. Those who were working in the department were Professor Umeda, Takatani, Nakamura, staff Yamaguchi, Ikeda, five assistants, Ono, Okada, Tsunoda, Hirayama, and Kusano. When the atomic bomb was dropped, Professor Umeda was lecturing second-year students in the Pathology Auditorium and was killed instantly together with his students.

Others were in air-raid shelter in front of the department entrance or outside, and I heard that Nakamura was making assistants laugh in his usual funny way. Then came the flash of the atomic bomb, and everything was crushed by the tremendous blast, pushed by the vacuum, and the buildings collapsed. The reinforced concrete building, which the Pathology Department trusted, was also damaged with cracks in the building itself and dents on the ceiling and walls. The red clay and tin sheets, which covered the windows, were instantly blown away, followed by simultaneous fires in many places in the wooden building, eventually burning down the Pathology Department completely. Of course, the same was true of the inside of the concrete building with the remains of unburnable materials such as metals, porcelains, and glasses scattered around, but completely altered and became fragile since they were exposed to the scorching of a few thousand degrees. The position of the objects was also completely changed by the blast from their original state. The collection of books in the library turned into a mountain of ashes 90 to 120 cm high, and Professor Takeuchi's rare collection suffered the same fate.

On that day, Professor Takeuchi was in his sickbed at home and was saved, but when he took Professor Kaneko's son (the second son, around 5 or 6 years old) later, the cries of the boy throughout the night affected the professor's sleep, and his condition deteriorated. Later, when the College was a facility of Omura Naval Hospital, he was admitted there. However, as it was just after the end of the war, advanced treatment was not available as it is today, so he passed away in the hospital room on 19 April 1946.

Just four days earlier, on the 15th, Colonel Sams from GHQ came to Omura, and based on one-sided information, cruelly ordered the expulsion and relocation of the Medical College from Omura Hospital to Isahaya (current branch hospital). We were only given 15 days to move out, so we submitted to this order with tears, and started to prepare to move while busying ourselves going to Isahaya to submit an English list of equipment, medicines, and other items needed for research, treatment, and lectures to GHQ in a hurry. For Professor Takeuchi, it must have been a lonely time to be left alone in Omura after the College was gone. I believe that this event could have been a psychological shock and shortened his life.

As previously mentioned, Professor Kaneko was given a staff room in the department, which was being removed due to building evacuation. He was moving goods to the foot of Mt. Kompira. On that day, he was at the site with his youngest son (who was later taken to Professor Takeuchi's house), and together with staff Ideguchi and Tagawa, as well as neighbors, they were finishing the relocation. They were exposed to the atomic bombing while they were working, and each of them was wounded. So, Professor Kaneko, who was still fine at the time, left his team, saying that he would bring a rescue team from the College, but he never returned. Later, Professor Emeritus Kunitomo, who was evacuating on his way from the halfway of Mt. Kompira to the upper side of Nishiyama reservoir area along a mountain path, met Professor Kaneko. Professor Kaneko, who had run out of all his strength, was asking for water, but when they searched him later, he could not be found anywhere. It is unclear where he passed away. His son was soon taken into Professor Takeuchi's house, where he cried day and night because of his burns. He later recovered and was taken to Professor Kaneko's brother in Sasebo, but the boy passed away from pneumonia at the beginning of 1946. The professor's house was on the way up the hill of Hamaguchi-machi, overlooking what is now the Atomic Bomb Park, so of course, the entire family was killed. Ideguchi, who was with the professor, died soon, but Tagawa miraculously survived. He was in the shade between the roof and the house, and probably due to the good care he received afterwards from former lecturer, Dr. Tsutsui (then at Mitsubishi Hospital). Although he was unable to get up for a while, he gradually regained health, and today he is working as a head engineer in the carpentry section at Nagasaki University headquarters. He lost all his family in the atomic bombing, and was concerned about his fertility, but he is now a happy man; his health had been proven as he celebrated the birth of an offspring.

However, he still suffers from atomic bomb symptoms.

Another lucky survivor was Assistant Fukahori from the Second Pathology Department, who was out in the countryside accompanying her cousin (a former assistant in the Second Pathology Department). Her cousin was sending her sick younger brother for evacuation. Associate Professor Yasuno took up lodging in the late Professor Nagai's (Head of the Radiology Department, then Associate Professor) house in Ueno-machi, after sending his family to Shimane Prefecture, and it seems that he was sleeping in his room on the day, as his dead body in a sleeping position was found later. The atomic bomb is indeed a troublesome weapon, as its symptoms did not appear for some time if the person was not immediately killed. Therefore, the victims moved around as they wished. Some of them died soon, while others took a longer time before the symptoms appeared, and eventually died somewhere in a completely different location from where they were exposed to the atomic bomb. Furthermore, most of the people who were around at the time, i.e., witnesses to each other's identities, are almost all no longer alive, so there were no clues for searching the remains for the families, who came from other places. Even those who were killed instantly were blown to different locations by the fierce blast, which made the situation even worse. For these reasons, despite many stories I have heard, I could not find out any details about people who had no connections. I have not heard anything about old Takatani, assistants Yamaguchi and Ikeda. I have little information about Shunko Nakamura as his wife survived. That it, after he was exposed to the atomic bombing, Mr. Shunkou went to pick up his wife who had gone to get groceries in Nagayo (on the same day, his wife asked him to go with her as she had train tickets but he declined. However, as his wife was sickly and a weak woman, he became worried and went to pick her up). They met on the way and returned together to their home in Ofunagura-machi. When they arrived, they saw that their son, who had escaped from the College, was moaning in a trench as he had fallen ill. Soon, Mr. Shunko also developed the symptoms, and within a few days, two of them passed away. Fortunately, the families of Professor Takeuchi and Professor Umeda were all safe.

Among those who were related to the department and experienced the atomic bomb, Mr. Okuda, who worked for the prefectural government office at the time, and who used to come to the First Pathology Department, lived in Shiroyama-machi. He lost his family, but today, he has a practice in Hamaguchi-machi right under our College. Mr. Junshiro Okabe (First Pathology), who worked at Nagasaki Hospital in Takenokubo, left the hospital and temporarily returned to his hometown with his family. However, he was killed by the atomic bomb as he was visiting Nagasaki alone to fetch his belongings. Former lecturer, Tsutsui, moved to a place under a primary school in Shiroyama-machi due to the mandatory relocation for road expansion. He was safe since he was working in the hospital, but his family was not, and I heard a sad story about his severely wounded wife telling him in distress, "Can't you cure my illness?" in the air-raid shelter. Former lecturer

Tada survived as he moved to Koyano Surgery. These are the summaries of the atomic bomb victims on that day who were related to the department.

I heard many stories about people outside of my department, but nearly a decade later, my memory is slowly fading. One can never imagine that houses that had collapsed in the blast would catch fire at once, not immediately, but after a short while, from places that had no fire. I also heard a story about Professor Kunifusa from the Forensic Medicine Department, and Administrator Yamaki were both buried under timbers that fell by blast wind, so they promised each other that if one of them could escape from the debris, the person would surely rescue the other. Soon, Professor Kunifusa managed to crawl out, but he lost all his strength and was unable to do anything, while the timbers started to burn, killing the Administrator. Then the professor was carried to his house in Kozen-machi on a stretcher, but later passed away. Another story was that at the home of the atomic bomb survivors in Moto'o-machi, everyone slept side by side. When the condition deteriorated, the patients would suddenly get up on the floor and then fall down with a bump, as if a pillow had fallen. When the patients repeated this action, there was nothing you could do, and they died shortly thereafter. There is nothing that can be done when many family members are dying one by one in such a way. How did the remaining family feel when they were forced to see such a death? What a cruel weapon the atomic bomb is when you think about it. The atomic bomb gives a gradual death to the non-combatants, and I think it would be better to have a weapon that can kill people instantly. I am truly sorry for the deceased to say such a thing, while I did not experience the suffering at that time, but I believe that it is the duty of those who have survived to write down as faithfully as possible, although they are not first-hand accounts, but based on what I have heard later. This is why I am sharing my unworthy writing. As I live in the countryside away from Nagasaki, and have almost no documents, I have no way to confirm the facts, but I tried my best to write as much as I can about the people from the department, tracing my memory.

I returned to the College at the end of 1945, then spent more than five years, first at the Omura Naval Hospital, then in Isahaya and Nagasaki. While the College was in Omura and Isahaya, we had almost no equipment, and our budget was only about one-tenth of what it had been before the end of the war, so we worried about when the department would go back to the state it had been before. During that time, we welcomed Professor Hayashi and Professor Matsuoka, and I was running about to deal with issues such as the closure of the Special Medical Vocational Department, the transfer of the Specialized School of Pharmaceuticals to Kyushu University, negotiation on candidates for the first President of the University, collection of the donations for the alumni association, and gathering materials for lectures and research. It was a series of joy, sadness, and suffering. Nevertheless, as the years passed, reconstruction progressed step by step, and today, marking the 10th year, I am very happy to see the College



and the Department resurrected almost completely. Although the library and other things can not be compared to what we had before the atomic bombing, in other respects, we can say that the University is better today due to modernization. In the next five or ten years, I believe that the University will welcome the age of prosperity when no one would be able to imagine the immediate aftermath of the end of the war in their wildest dreams. However, when I look around the campus, people who suffered together back then have left one by one, and now only a few remain, which makes me feel a little lonely. On the occasion of the 10th anniversary of the atomic bombing, I recollected about the victims of the disaster with my poor writing, and as a conclusion, I pray for the repose of their souls, as well as the remarkable progress of the University in the future with the marks of reconstruction.

(27 May 1955, at Sechibaru)

#### A Memory

Sei Okamoto

According to Takeda, a second-year student who shared the story with Takatsu, who is now in the Pathology Department, on 9 August, Professor Umeda gave a lecture on the pathology specifics to the third-year students. The Pathology Auditorium was full, and the professor explained that “in general, the size of the human heart is about the size of a person's fist.”

At that moment, a glint of light came in, and all the students gazed at the professor's face. The professor looked around at his students. Instantly, the fire protection wall behind the professor fell, and the entire Auditorium collapsed, so the students hid under their desks. The room caught fire, and some students escaped through the cracks in the boards of the side walls. This is believed to be the last time Professor Umeda was seen, but his whereabouts since then are unknown. Furthermore, Takeda also passed away suffering typical atomic bomb symptoms.