

(The paper for the plenary session "Ethical Lessons from Unit 731's Human Experiments" [PS2] in the 8th World Congress of Bioethics, Beijing, August 8, 2006. This is abridged from my chapter "The Imperial Japanese Experiments in China" in *The Oxford Textbook of Clinical Research Ethics*, Oxford University Press, forthcoming. An earlier version of these papers have already presented under the title "Japanese Medical Atrocities 1932-45: What, Who, How and Why?" at the 22nd International Congress of History of Science, Beijing, July 29, 2005 (available at <http://www.asahi-net.or.jp/%7Erz7t-ty/gyoseki/presentation/ICHHS05oral.html>).

The "\*" indicate the number of the Powerpoint slides that was shown in the speech. Japanese names are written in Western form, given name first and family name last. All quotations from Japanese documents in this chapter were translated into English by the author.)

## **The Imperial Japanese Medical Atrocities and Its Enduring Legacy in Japanese Research Ethics**

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\*2 This paper has four parts. First, I will explain the background of Imperial Japanese medical atrocities 1932-45. Second, their outline will be described with several examples. Third, the story of their postwar concealment will be told. Finally, I will analyze their enduring legacy in contemporary Japanese society.

### **Part I. BACKGROUND**

\*4 Shiro ISHII, the founder and leader of Japan's network of human experimentation facilities, entered the Army in 1920 upon graduation from Kyoto Imperial University Faculty of Medicine. In 1925, Ishii began to lobby his superiors for research on biological warfare. In 1930, after a two-year trip to Europe and the United States, he became a professor in the Department of Epidemic Prevention of the Army Medical College (Rikugun Gun'i Gakko Boeki Bu—Boekigaku Kyoshitsu) in Tokyo. In this position he performed bacteriological studies, conducted research on and development of vaccines, and trained

army surgeons. \*5 He wanted to improve the prestige of medical officers in the Japanese Army by developing a powerful biological weapons program—even though biological and chemical weapons had been prohibited by the Geneva Convention in 1920. Using the Army's authority and prestige in 1930s Japan, he also envisaged a national network for medical research that would be much more powerful and effective than the existing academic infrastructure, and that would be furnished with state-of-the-art laboratories that could freely use humans for research and development of military medicine.

\*7 The takeover of northeastern China—Imperial Japan called it "Manchuria"—by Japan's Kwantung Army in 1931 gave Ishii his opportunity. \*6 The following year, he established a large new department specializing in biological warfare in the Army Medical College, and deceptively named it the Epidemic Prevention Laboratory (Boeki Kenkyu Shitsu). This laboratory became the headquarters of his network. \*7,8 Simultaneously, he built a secret facility called the Togo Unit in Beiyinhe, a small town in Manchuria about 70 km southeast of Harbin. This was Ishii's first prison-laboratory, where deadly human experimentation probably began in the fall of 1933. The subjects were mainly Chinese but included some Soviets, Mongolians, and Koreans who were arrested by the Kwantung Army Military Police as spies and resisters and who were scheduled to be executed without trial. Ishii and his colleagues thought it was better to use them as human guinea pigs than merely to execute them.

\*9 The facilities of Beiyinhe were insufficient for Ishii's project. The buildings were not strong enough to serve as a prison; in fact, in September 1934, 16 captives revolted and escaped. So Ishii and the army built a much larger, stronger prison laboratory-factory in Pingfang (sometimes written as Ping Fan), about 20 km southeast of downtown Harbin.

\*10 Construction at Pingfang began in 1935; residents of four nearby villages were forced to evacuate, and the huge complex was completed around 1938. The Togo Unit became an official unit of the Japanese army in 1936, even before construction was completed. This means that the Japanese Emperor, Hirohito, formally acknowledged Ishii's project, though it seems he was unaware of its details.

\*11 The Togo Unit was now known as the Epidemic Prevention Department (Boeki Bu) of the Kwantung Army, and as Unit 731. In addition to medical experimentation, Ishii's units were

responsible for water purification for Japanese troops in China from 1937 on, and so the unit was soon renamed the Epidemic Prevention and Water Supply Department (EPWSD) (Boeki Kyusui Bu). Ishii had invented a water purification machine that could be easily carried to the battlefield. During the battles for Beijing and Shanghai, he sent teams to the front to operate it—garnering even more support from army leaders. In 1938, the Japanese army adopted Ishii’s machine as standard equipment and organized 18 divisional EPWSDs (Shidan Boeki Kyusui Bu), whose directors were officers of Unit 731. <sup>\*12</sup>By 1939, Ishii’s network included some field water purification units, 18 divisional EPWSDs, and five permanent Epidemic Prevention Departments—in Harbin (Unit 731), Beijing (Unit 1855), Nanjing (Unit 1644), Guangzhou (Unit 8604), and Tokyo (Boeki Kenkyu Shitsu). Altogether, Ishii commanded more than 10,000 people. <sup>\*13</sup>When the Japanese army occupied Singapore in 1942, another permanent EPWSD was added to the network (Unit 9420). Unit 731 itself had a proving ground in Anda (about 150 km northwest of Harbin) and five branches in Mudanjiang, Linkou, Sunwu, Hailar, and Dalian.

<sup>\*14</sup>In addition, as a leader of army surgeons, Ishii had power over army hospitals in occupied cities in China. His network had also close connections with other biological warfare departments such as the Military Animals Epidemic Prevention Department (Gunju Boeki Shou) in Changchun, Manchuria (Unit 100), and institutions for chemical warfare such as the Army Sixth Technology Institute in Tokyo, the Army Narashino School in the Tokyo suburb of Narashino, the Army Ninth Technology Institute (Noborito Institute) in Noborito, also a Tokyo suburb, and the Kwantung Army Chemical Department in Qiqihar in Manchuria (Unit 516).

<sup>\*15</sup>Unit 731 probably moved to the new base in Pingfang in 1938. It was a 6 km<sup>2</sup> complex of secret laboratory-factories surrounded by trenches and high voltage electric wires. The whole district became a special military area, which meant anyone approaching without permission was to be shot by the guards. <sup>\*16</sup>The main building had two special prisons in its inner yard, so that escapees could never get outside. The captives were called “maruta,” which means “logs” in Japanese, and were identified only by numbers.

At a little-noted war crimes trial conducted by Soviet authorities at Khabarovsk in 1949, Surgeon Major General Kiyoshi KAWASHIMA, who was chief of a division of Unit 731, testified that the prisons usually held 200 to 300 captives, including some women and children, but that their

maximum capacity was said to be 400. (Materials p. 257) \*17 The Military Police sent 400 to 600 captives to Unit 731 every year under the Special Transfer Procedure (Tokui Atsukai), a system the Japanese army developed to supply human subjects. (ibid.) This system for procuring subjects marks a difference from that of Nazi Germany. The Nazi transfer system was not for procuring subjects but for genocide. But in the case of the Japanese medical experiments, victims were purposely selected and sent to Ishii's network to be subjects of experiments.

At least 3,000 people were tortured to death at Unit 731 from 1940 to 1945. (Materials p.117) But this number does not include victims before 1940 or at other medical experimentation sites. Allied prisoners of war (POWs) may have been subjected to experiments by Unit 731 researchers at the camp in Mukden (now Shengyang). (Williams & Wallace 1989, Chap.5; Harris 2002, Chap.9)

\*18 In fact, the activities of Unit 731 researchers were only a part of the medical atrocities committed by Imperial Japan. According to a large body of testimony, deadly experiments also were performed in other permanent EPWSDs such as Units 1644 in Nanjing and 1855 in Beijing\*19 . American, Australian, and New Zealander POWs were forced to participate in experiments by Surgeon Captain Einosuke HIRANO of the 24th Field EPWSD in Rabaul, Papua, New Guinea (Tanaka 1996), and eight U.S. airmen were killed in surgical experiments in Fukuoka, on the Japanese home islands. (SCAP: Legal Section 1940-48)

## **Part II. MEDICAL ATROCITIES**

\*21 Medical atrocities performed by Imperial Japanese doctors can be classified into three categories:

1. Training of Army Surgeons
2. Biological Warfare Maneuvers
3. Research with Humans

Here I can only describe outlines and a few examples. [In order to know other examples, please buy and read *The Oxford Textbook*.]

### **1. Training of Army Surgeons**

Surgeons at army hospitals performed many vivisections on Chinese captives, with anesthesia. For

example, these doctors performed appendectomies and tracheostomies on the prisoners, shot them and took bullets from their bodies, cut open their arms and legs and sewed up the skin around the wounds, and finally killed them. This was purportedly part of training newly assigned army surgeons to treat wounded soldiers at the front lines.

Confessions by many of the surgeons involved are on record (Yoshikai 1981, Chinese Central Archive et al. 1989). \*23,24 At Datong Army Hospital in Datong, Shanxi, in June probably of 1941, Surgeon Major Kazuharu TANIMURA and Surgeon Lieutenant Rihei MIURA conducted a three-day training program that involved lectures on military surgery and exercise surgeries such as suturing of blood vessels and nerves, thoracotomy, celiotomy, craniotomy, blood transfusion, various anesthetizations, appendectomy, and nephrectomy, performed serially on “six bodies of prepared materials.” (Daido Rikugun Byoin) The trainees were army surgeon officers of the Army Medical College. Judging from confessions about similar cases, the “materials” probably were arrested Chinese resisters who probably were killed in these exercises.

## 2. Biological Warfare Maneuvers

Hundreds of confessions testify to Imperial Japanese research into the use of biological warfare.

\*26 According to testimonies of former junior assistants of Unit 731, when a war between Manchukuo-Japan and Mongol-the Soviets broke in 1939 ("Nomonhan Incident" in Japan or "Halha War" in Mongol and Russia), Unit 731 performed biological warfare against the troops of Mongol-the Soviet. (Takidani 1989, pp.187-188, 208; 731 Kenkyukai 1996, pp.64-67) Moreover, Japanese army officers themselves wrote about biological warfare against China in their official records. According to these notes, at least three major attacks on Chinese citizens were carried out. (Imoto)

## 3. Research with Humans

\*28 The research by Japanese doctors falls into three categories:

(3-A) Explaining Diseases

(3-B) Development of Therapies

(3-C) Development of Biological and Chemical Weapons

### (3-A) Explaining Diseases

\*29 Doctors in Ishii's network performed lethal experiments on captives in order to gain new scientific knowledge. There were two major kinds of research programs. One group of experiments involved bacteriological studies, including intentional infection in order to observe how the disease occurs and progresses and to search for its pathogen. Another group involved physiological studies, which were similar to the experiments Nazi doctors performed, including observation of the body's reaction to conditions such as extremely low temperature, low pressure such as that experienced at high altitudes, salt overdose, drinking only distilled water, and intravenous air injection.

#### Bacteriological Studies

\*30 Shiro KASAHARA, a researcher at Kitasato Institute in Tokyo, worked for Unit 731 for several years. In 1944, Kasahara, Surgeon General Masaji KITANO, Commander of Unit 731 from August 1942 to March 1945, and others published a paper concerning the identification of the pathogen of epidemic hemorrhagic fever, the etiology of which was then still unknown. It reads:

We made an emulsion with 203 ground-up North Manchuria mites and salt water, and injected it into the thigh of an ape hypodermically. This first ape became feverish with a temperature of 39.4 degrees Celsius on the 19th day after injection and moderately infected. Then we took blood of this feverish ape and injected it into the second ape, which became feverish and produced protein in its urine. Typical epidemic hemorrhagic kidney was found at its autopsy....Epidemic hemorrhagic kidney was never found at autopsy in the most feverish period....But kidney, liver, and spleen of this period are most infective.

(Kasahara et al. 1944, p.3)

\*31 This means they vivisected the "ape," because in order for surgeons to "autopsy in the most feverish period," the subject needed to be alive. Moreover, "the ape" must have been a human being, because the normal temperature of an ape is higher than that of a human being; 39.4 degrees Celsius is normal for an ape. In another paper, Kasahara and his colleagues noted that apes do not become feverish from

this disease. So seems probable that they infected humans and vivisected them. (Tsuneishi 1981)

Kasahara himself confessed later that he and his colleagues performed deadly experiments. (Williams & Wallace 1989, pp.39-40)

\*32 Extensive data regarding the dose at which 50% of those exposed would develop various diseases, the so-called minimum infectious dose for 50% (MID50), were described in a U.S. investigator's report. (Fell 1947) A determination of the MID50 was thought to be very important for the development of biological weapons. Japanese researchers infected humans to learn the MID50 of anthrax, plague, typhoid, paratyphoid A and B, dysentery, cholera, and glanders. Experiments were performed to determine the MID50 for a variety of pathogens that were introduced into humans subcutaneously, orally, and through respiration of infected air samples. Some of the infections were not fatal, but many of those exposed died.

### Physiological Studies

\*33 Hisato YOSHIMURA was a lecturer at Kyoto Imperial University Faculty of Medicine when his head professor ordered him to go to Unit 731 in 1938. He stayed there until Unit 731 collapsed in 1945, and he used captives in studies of frostbite. At the Khabarovsk Trial, many officers and soldiers testified about the cruelty of Yoshimura's experiments. Yoshimura himself gave a lecture on his frostbite studies in Harbin in 1941, although he said nothing about cruel experiments. (Yoshimura 1941) After the war, he and his colleagues published three papers in Japanese medical journals—in English—reporting part of the studies. (Yoshimura & Iida 1950-51, Yoshimura & Iida 1951-52, Yoshimura, Iida & Koishi 1951-52) We know that these English papers concern their studies at Unit 731, because they themselves wrote that outlines of the papers were read at the 21st and 22nd annual meetings of Japanese Physiological Society in 1942-43. They wrote, "The experiments were made on about 100 male subjects (laboratory workers, students, soldiers and laborers)." (Yoshimura & Iida 1950-51, p.149) Women, children, and even an infant were included in the experiments:

\*34 The temperature reaction in ice water was examined on about 100 Chinese coolies from 15 to 74 years old and on about 20 Chinese pupils of 7 to 14 years.... Though detailed studies could not be attained on children below 6 years of

age, some observations were carried out on a baby....[T]he reaction was detected even on the 3rd day after birth, and it increased rapidly with the lapse of days until at last it was nearly fixed after a month or so.

As to sexual difference of the reactivity, only an outlining aspect was obtained from the observation on Orochon subjects....The reactivity of the female subject was a little lower than the male's in adult age, while they were nearly the same with each other in childhood.

(Yoshimura & Iida 1951-52, pp.178-179)

Frostbite experiments with Chinese captives were also performed elsewhere. \*35,36 Surgeon Major Kazuharu TANIMURA of Datong Army Hospital organized a detachment and went on an expedition into Inner Mongolia from Jan. 31 to Feb. 11, 1941, to study frostbite, field surgeries, hemostatis, blood transfusion, and other procedures. (Toki Eisei Kenkyuhan 1941) \*37,38 He took eight “living bodies”—male Chinese captives—as “material” for experiments. At dawn on Feb. 6, researchers performed frostbite experiments on six people in various conditions such as wearing wet socks or gloves, drunk, hungry, and after administration of atropine. \*39,40 Their report, reprinted in 1995, describes the results precisely with sketches and photographs. (ibid.) The eight captives were also used in other experiments and operations, and finally were shot or vivisected to death. The report includes the names of the subjects, direction for their confinement, a log of their killing, the program of their memorial service, and Tanimura's condolences. (ibid.)\*41

### (3-B) Development of Therapies

\*43 The second category of imperial Japanese human experiments was for development of therapies, including vaccines, surgical techniques both in hospital and on the battlefield, hemostasis, and transfusion of blood or its substitute.

#### Vaccine Experiments

\*44 Yoshio SHINOZUKA, a former junior assistant of Unit 731 whose birth name was Yoshio Tamura, wrote in 2004:



\*45 Unit 731 was developing an envelope vaccine of plague ... Karasawa Division, to which I belonged, also performed human experimentation and vivisection on five Chinese under the pretext of a virulence test of the germ. First we collected blood from them and measured their immunity. On the next day, we injected four kinds of plague vaccines to each of four subjects. No vaccine was given to one subject as control. A week later, vaccines were given again. A month later, we injected 1.0 cc liquid with the same number of plague germs in every subject. All five were infected with plague.... The man that had no vaccine was infected first. Two or three days later he became feverish and pale. On the next day he was dying and his face grew darker. He was still alive but the members of the Special Division, which administered the special prison of "Maruta" ["logs"] brought him naked on the stretcher to the dissection room where we awaited him.... Lieutenant Hosoda auscultated his heartbeat on his chest. At the moment the auscultation finished, Surgeon Colonel Ohyama ordered "Let's begin!"

(Shinozuka & Takayanagi 2004, pp.78-82)

Shinozuka's superiors vivisected the subject and took organs as specimens. \*46 Shinozuka testifies that even his friend, junior assistant Mitsuo HIRAKAWA, was detained in the special prison and vivisected when infected with plague. (ibid, pp.88-96)

### Surgical Innovation

Deadly experimental surgeries were performed on captives to develop new surgical methods, not to train beginning surgeons. At least two studies are documented. One set of experiments aimed at developing hospital techniques was performed on U.S. Army Air Corps crews in mainland Japan. The other experiments, to develop field surgical procedures, were performed on Chinese captives in Inner Mongolia.

\*47 From May to June 1945, Professor Fukujiro ISHIYAMA of the First Department of Surgery, Apprentice Army Surgeon Taku KOMORI, and other Ishiyama subordinates performed experimental surgeries on eight U.S. crewmen at Kyushu Imperial University Faculty of Medicine. The American airmen were captured when their B-29s were downed. The Japanese Western District Army decided to execute them and handed them over to Komori and Ishiyama. On May 17, 1945, Ishiyama removed a lung from two POWs. On May 22, Ishiyama and his team performed total gastric resection and heart

surgery on a POW, and removed the gall bladder and half of the liver of another POW. On May 25, they performed trigeminal rhizotomy (severing the facial nerve roots) on a POW. Finally, on June 2 Ishiyama performed surgery on the mediastinum and removed the gall bladder of two of three POWs. All eight American POWs died during these operations. (SCAP: Legal Section 1940-48)

\*48 After the war, GHQ/SCAP brought this case to the military tribunal in Yokohama. Komori had already died; he had been badly injured in a U.S. air raid on Fukuoka in July 1945. Ishiyama hanged himself in prison in July 1946. On Aug. 28, 1948, the Yokohama tribunal condemned two army officers and three university doctors to death by hanging, and sentenced another officer and two doctors to life imprisonment. Five other officers, eight doctors, and a head nurse were ordered to hard labor. However, their sentences were reduced in 1950 when the Korean War broke out and none among the convicted was executed.

\*49 Surgeon Major Kazuharu Tanimura and his colleagues experimented with field surgery during their expedition to Inner Mongolia. \*50 They wrote in their log that on Feb. 4, 1941, they performed enteroanastomosis (intestinal bypass) on “living material No. 1.” \*51 On the next day, “In order to follow up wounds, using living material No. 3, we amputated the left thigh, cut and sewed right thigh skin, and cut open the skin of the left hypogastrium. Treatments of dummy perforate gunshot wounds were performed on the left arm and right thigh of living material No. 7, and on the left waist and left chest of No. 6.” On Feb. 6, they shot No. 8 to make perforate wounds, then performed transfusion and tracheostomy on him. (Toki Eisei Kenkyuhan 1941)

### Transfusion Experiments

\*52 Tanimura’s detachment performed various transfusion experiments, also to develop battlefield treatments. On Feb. 5, 1941, they wrote that subjects No. 1 and No. 3 had transfusions of blood and Ringer solution at room temperature. \*53,54 On Feb. 7 they transfused blood kept in a thermos bottle, blood that had been frozen and then thawed, and sheep blood. On Feb. 8, they transfused blood taken from the heart of a corpse. (Toki Eisei Kenkyuhan 1941, pp.25-29)

\*55 At Kyushu Imperial University Faculty of Medicine, sterilized and diluted brine was transfused into U.S. airmen as a blood substitute in the experimental operations described above. On

May 17, 1945, Professor Ishiyama and his aides transfused 2,000 cc of blood substitute into the POW whose lung was removed. On June 2, they drew about 500 cc of blood from the right thigh artery of another POW and transfused 300 cc of blood substitute. (SCAP: Legal Section 1940-48)

### (3-C) Development of Biological and Chemical Weapons

\*56 The third research category related to weapons development. The aim of those engaged in this kind of research was to find ways to kill people more effectively and efficiently. Doctors in Ishii's medical network performed both biological and chemical weapon experiments on humans.

#### Biological Weapon Experiments

\*57 U.S. investigator N.H. Fell described many biological weapon trials in his report. Regarding anthrax bomb trials he noted:

In most cases the human subjects were tied to stakes and protected with helmets and body armor. The bombs of various types were exploded either statically, or with time fuses after being dropped from aircraft....The Japanese were not satisfied with the field trials with anthrax. However, in one trial with 15 subjects, 8 were killed as a result of wounds from the bombs, and 4 were infected by bomb fragments (3 of these 4 subjects died). In another trial with a more efficient bomb ("Uji"), 6 of 10 subjects developed a definite bacteremia, and 4 of these were considered to have been infected by the respiratory route; all four of these latter subjects died. However, these four subjects were only 25 meters from the nearest of the 9 bombs that were exploded in a volley.

(Fell 1947)

Fell's description coincides with testimony by Japanese officers and soldiers at the Khabarovsk Trial and the Chinese investigation. He also reported of plague and glanders trials precisely. (Fell 1947)

#### Chemical Weapon Experiments

\*58 A report authored by unknown researcher in the Kamo Unit [Unit 731] describes a large human

experiment of yperite gas (mustard gas) on Sept. 7-10, 1940. Twenty subjects were divided into three groups and placed in combat emplacements, trenches, gazebos, and observatories. One group was clothed with Chinese underwear, no hat, and no mask, and was subjected to as much as 1,800 field gun rounds of yperite gas over 25 minutes. Another group was clothed in summer military uniform and shoes; three had masks and another three had no mask. They also were exposed to as much as 1,800 rounds of yperite gas. A third group was clothed in summer military uniform, three with masks and two without masks, and were exposed to as much as 4,800 rounds. Then their general symptoms and damage to skin, eye, respiratory organs, and digestive organs were observed at 4 hours, 24 hours, 2, 3, and 5 days after the shots. Injecting the blister fluid from one subject into another subject and analyses of blood and soil were also performed. Five subjects were forced to drink a solution of yperite and lewisite gas in water, with or without decontamination. The report describes conditions of every subject precisely without mentioning what happened to them in the long-run. (Kamo Butai)

\*59 Poison experiments were also performed at other EPWSDs. Engineer Major Shigeo BAN of the Army 9th Technology Institute (Noborito Institute) confessed to performing poison experiments at Unit 1644 in Nanjing. Early in May 1941, the Army General Staff Corps ordered Ban and his eight colleagues to visit Unit 1644 to test the toxicity of a newly developed poison, acetone cyanhydrin, in humans. (Ban 2001, pp.81-82)

### **Part III. COVER-UP**

\*61 Ishii's medical network suddenly collapsed in August 1945 when the Soviet Union declared war on Japan and advanced into Manchuria. The Japanese Army immediately decided to withdraw all human experimentation units from China and to destroy evidence of medical atrocities. At Unit 731, all the surviving captives were killed, cremated, and cast into the Songhuajiang River. The main building with its special prisons was totally destroyed by artillery. Its surgeon officers, researchers, workers, and soldiers were hurriedly evacuated in specially chartered trains and ships. Most succeeded in escaping and returned to Japan. In Tokyo, the Epidemic Prevention Laboratory, headquarters of Ishii's network, had already been destroyed by U.S. air raids in March and May of 1945. But Ishii and his colleagues held onto their biological warfare data.

\*62 Although the United States occupied Japan after Japan's surrender on Aug. 15, 1945, General Headquarters/Supreme Command for the Allied Powers (GHQ/SCAP) did not investigate medical crimes. Instead, investigators from the U.S. Army Chemical Corps in Camp Detrick, Md., which oversaw U.S. chemical and biological warfare efforts, sought the biological warfare data that Ishii and his colleagues had accumulated—so that the United States could catch up with the Soviet Union and other countries in biowar research and development. (Ohta 1999, Tsuneishi 1994, Harris 1994, Regis 1999) The Soviets had begun research in biological warfare in 1928, but the United States had not started it until 1942. The Cold War had already begun to emerge, and U.S. officials were under pressure to surpass Soviet capabilities in all fields.

\*63 In return for the Japanese data, Lieutenant Colonel Murray Sanders, the first Chemical Corps investigator, asked General Douglas MacArthur and General Charles Willoughby, a close MacArthur aide, to promise Ishii and his researchers immunity from war crimes charges in September 1945.

\*64 Ishii and his colleagues gave up some data, but they concealed from Sanders and his successor, Lieutenant Colonel Arvo T. Thompson, that the data were from experiments with humans. The United States did not obtain evidence of deadly human experiments until 1947.

\*65 Early in January 1947, the Soviet Union sought the extradition of Ishii and his researchers for investigation of their experiments, which the Soviets had learned about from captured officers and soldiers of Ishii's network. The Soviets also wanted the biowar data and threatened to reveal the Japanese medical atrocities at the International Military Tribunal for the Far East—the Tokyo Tribunal, which conducted the war crimes trial of top Japanese leaders from 1946 to 1948—if the United States did not share the information. U.S. officials dismissed this threat—the United States controlled the Tokyo Tribunal—but then began to investigate the Japanese researchers more closely.

\*66 At this point, U.S. officials recognized that human experiments had occurred, and the immunity that they had granted to Ishii and others now became a problem. In Nuremberg, the United States was prosecuting Nazi doctors for their human experiments. MacArthur's headquarters discussed the dilemma repeatedly with officials in Washington, and an interagency task force in the U.S. capital finally concluded \*67:

Information of Japanese BW [biological warfare] experiments will be of great value to the U.S. research program....The value to the U.S. of Japanese BW data is of such importance to national security as to far outweigh the value accruing from “war crimes” prosecution....The BW information obtained from Japanese sources should be retained in Intelligence channels and should not be employed as “war crimes” evidence.

(State-War-Navy Coordinating Subcommittee for the Far East 1947)

This conclusion was based on close examination of the data that was finally provided by Ishii and his colleagues. \*68The last investigator, Edwin V. Hill, reported to the Chief of the U.S. Army Chemical Corps:

\*69Evidence gathered in this investigation has greatly supplemented and amplified previous aspects of this field. It represents data which have been obtained by Japanese scientists at the expenditure of many millions of dollars and years of work. Information has accrued with respect to human susceptibility to these diseases as indicated by specific infectious doses of bacteria. Such information could not be obtained in our own laboratories because of scruples attached to human experimentation. These data were secured with a total outlay of ¥250,000 to date, a mere pittance by comparison with the actual cost of the studies.

(Hill 1947)

Thus, most officers and researchers involved in Japan’s human experimentation program, including Ishii himself, never faced war crimes charges. Ishii died of laryngeal cancer in 1959, at the age of 67. Many army surgeon officers and researchers gained positions in medical schools, national institutes, or hospitals. Some practiced in their own clinics; some others established pharmaceutical companies. (See Williams & Wallace 1989, Chap.17)

\*70Although failing to get custody of Ishii or access to his data, the Soviet Union brought 12 captured officers and soldiers to trial before an open military tribunal at Khavarovsk in December 1949, commonly called the Khavarovsk Trial. (Materials 1950) The accused included the Captain General of the Kwantung Army, Otozo YAMADA, six army surgeon officers, and two veterinarian officers. Six of

the accused were from Unit 731 and two from Unit 100. They were all sentenced to confinement in a labor correction camp for sentences that ranged from two to 25 years, but they returned to Japan by 1956 when the Soviet Union and Japan resumed diplomatic relations.

The Soviets had intended to spread the news of the medical atrocities worldwide, but because the prosecutors, lawyers, and judges were all Russian, and there were no reporters from abroad, the proceedings drew little attention. The United States succeeded in branding the trial as communist propaganda.

\*70 The People's Republic of China also tried Japanese war criminals before military tribunals in 1956, but only one surgeon officer of Ishii's network was included. None of these defendants received a death sentence, and all returned to Japan by 1964.

#### **Part IV. ENDURING LEGACY**

\*73 In cooperation with the United States, Japan hid the medical atrocities from both the international and domestic public for decades. Testimony from the Khabarovsk trial was regarded as false communist propaganda. Former soldiers and junior assistants who bravely confessed to conducting such experiments in China were considered to have been brainwashed and neglected. \*74 But in 1981, popular writer Seiichi MORIMURA published a bestselling book about Unit 731 that included testimony by many of its anonymous soldiers (Morimura 1981). In the same year, historian Keiichi TSUNEISHI published his first extensive study of Unit 731 (Tsuneishi 1981). Because of this, in Japan the word "Unit 731 (731 Butai)" became widely known with dire impression, and historical studies have advanced greatly since then as significant documents have been found in Japan, the United States, China, and the former Soviet Union.

\*75 Outside Japan, the Imperial Japanese medical atrocities did not become widely known until 1990s. But today, more than 60 years after the end of World War II, U.S. government can no longer be closing its eyes to the record of human experimentation. Now it has refused to allow former employees of Unit 731 into the country on the ground that they are war criminals. In 1998 Yoshio SHINOZUKA, a former junior assistant of Unit 731 mentioned above, was denied entry, and deported to Japan from Chicago's O'Hare International Airport. \*76 However, this attitude of U.S. government is superficial and

hypocritical, since the United States itself must share in the responsibility for keeping these experiments secret. Until 1980s it had allowed free entrance of Ishii's researchers such as Ryoichi NAITO, who had been Ishii's right-hand man and became president of a pharmaceutical company after the war. Now the United States denies entry of Shinozuka, the most courageous person who continues to publish his experience at Unit 731 and had been invited to confess his crimes in public symposia.

\*77 On the other hand, the Japanese government is still keeping silent on this issue. It acknowledged in the Diet in 1982 that Unit 731 surely existed, but has never explained what was done there. The government and conservative nationalists in Japan are still hiding the historical truth. Moreover, it seems they wish the truth would be forgotten. One of the most enduring legacies of these experiments is therefore the silence that continues to surround them.

\*78 Within the Japanese medical profession, the subject of “Jintai Jikken” (human experimentation) became taboo after the end of World War II. Many of the researchers who performed these experiments became prominent figures in academia. If junior researchers speak of human experimentation, they might touch on their head professors’ “secret of secrets” and wreck their own academic careers. Therefore, not only Ishii’s researchers themselves but also their disciples have hardly mentioned this issue publicly.

\*79 On the other hand, most of the public has thought it unnecessary to discuss human experimentation seriously. Because the Japanese and U.S. governments have been fairly successful in covering up the experiments, even today most people find it hard to believe that medical doctors, who devote themselves to saving lives, really treated human beings like guinea pigs. Those who found historical documents to be credible and who appealed for public inquiry were often sneered at.

\*80 This failure to examine history publicly permits most Japanese citizens to regard human experimentation as a barbarism performed by mad doctors—totally different from typical medical procedures carried out by normal doctors. As a matter of fact, many cases of abuse of humans in research have been reported in newspapers, journals, and TV in postwar Japan. (Tsuchiya 2003) However, these were presumed to be exceptional deviations. The Japanese public has avoided reflection on human experimentation in both military and civil medicine.

\*81 These circumstances are reflected in the field of medical ethics. The failure to confront reality



means that Japanese medical ethics lack a framework for critically discussing and evaluating human experimentation. Medical ethicists have seldom tried to draw from historical cases of abuse the guiding principles that should regulate medical research. There has been little discussion, publication, or teaching about protection of humans in research. Even in postwar cases of abuse, journalists and ethicists have focused discussion on a case-by-case basis and failed to derive general principles. Consequently, politicians have never proposed a blanket law to govern medical research, and the government has never articulated a general policy for the protection of humans in research. So far, Japanese guidelines for medical research are only patchworks of articles transferred from international guidelines such as the Declaration of Helsinki. They have not been derived from the lessons of history, especially of the past medical massacre performed by our own doctors.

This is a poor ethical state for a country boasting of its economic development and trying to lead world medical science. \*82 Looking into and evaluating one's own past is one of the prime imperatives of ethics. In order to be acknowledged as an ethical country, Japan must admit its past deeds, inquire into the truth, apologize to and compensate the victims for their suffering. This will surely lead to the establishment of true clinical research ethics in Japan.

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