Beyond Unit 731: Japanese Medical Atrocities in the Greater Pacific War, 1931-45 — Context and Implications

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CONTENT WARNING

This presentation contains descriptions of medical atrocities, human experimentation, and wartime violence.

Please be advised that some content may be disturbing. Audience members are encouraged to care for their own wellbeing and step out if needed.

Overview

- Introduction
- History of (modern) Japanese Medicine
- Unit 731 & Shiro Ishii
- Medical Atrocities Beyond Unit 731
- Postwar Consequences
- Discussion & Conclusion

Abstract

Between 1931 and 1945, as part of Japan’s broader war in Manchuria, China and the Pacific, both the Japanese Army and Navy Medical Corps, and the civilian Japanese medical establishment regularly engaged in horrific acts of medical experimentation. This included large-scale lethal experiments in support of the development of biological weapons, the widespread practice of vivisection as a tool of both medical research and education, and regular involvement of medical personnel in war crimes. This presentation will explore the history of these crimes, their context, and the broader conditions that made them possible.

History of Modern Medicine in Japan

A Brief Overview

Modernization, Medicine, and the State (1870s–1930s)

- **Meiji Restoration (1868):** Japan embraced Western science and turned away from traditional Chinese medicine.
- **Quick to Embrace Germ theory** of disease (adopted in the 1880s–1890s)
- **Imported German approach** to medical science and practice
  - including Staatmedizin — medicine as a function of state power.
  - Founded medical schools and public health/hygiene bureaus
- **Emphasis on hygiene, epidemic prevention and population health**
- **Early global success stories**: national campaigns in vaccination, sanitation, and quarantine

Eugenic Science, Social Darwinism, & Morality

- Early 1900s: Western Social Darwinism reframed as Japan's struggle for national survival
- Eugenic thinking was increasing globally and gained legitimacy as a science of population improvement—and responsibility of government.
- Japanese Society of Racial Hygiene founded in 1930 → linking heredity, hygiene, and nationalism.
- 1940 National Eugenics Law: promoted "improvement of the race" and sterilization of the "unfit."
- Physicians became guardians of the nation's health, not just individual healers.
    - No patient-centred ethical code and no formal ethics education in medicine
- Secret Military Societies

Japanese Military Medicine

- Origins in the 1870s
- Army Medical School established in 1888; renamed sanitary school in 1894
- Great emphasis on sanitation, hygiene and disease prevention; medicine as a means to maintain military efficiency
- Came to fruition during Russo-Japanese War (1904-5) with far fewer deaths from disease than in combat

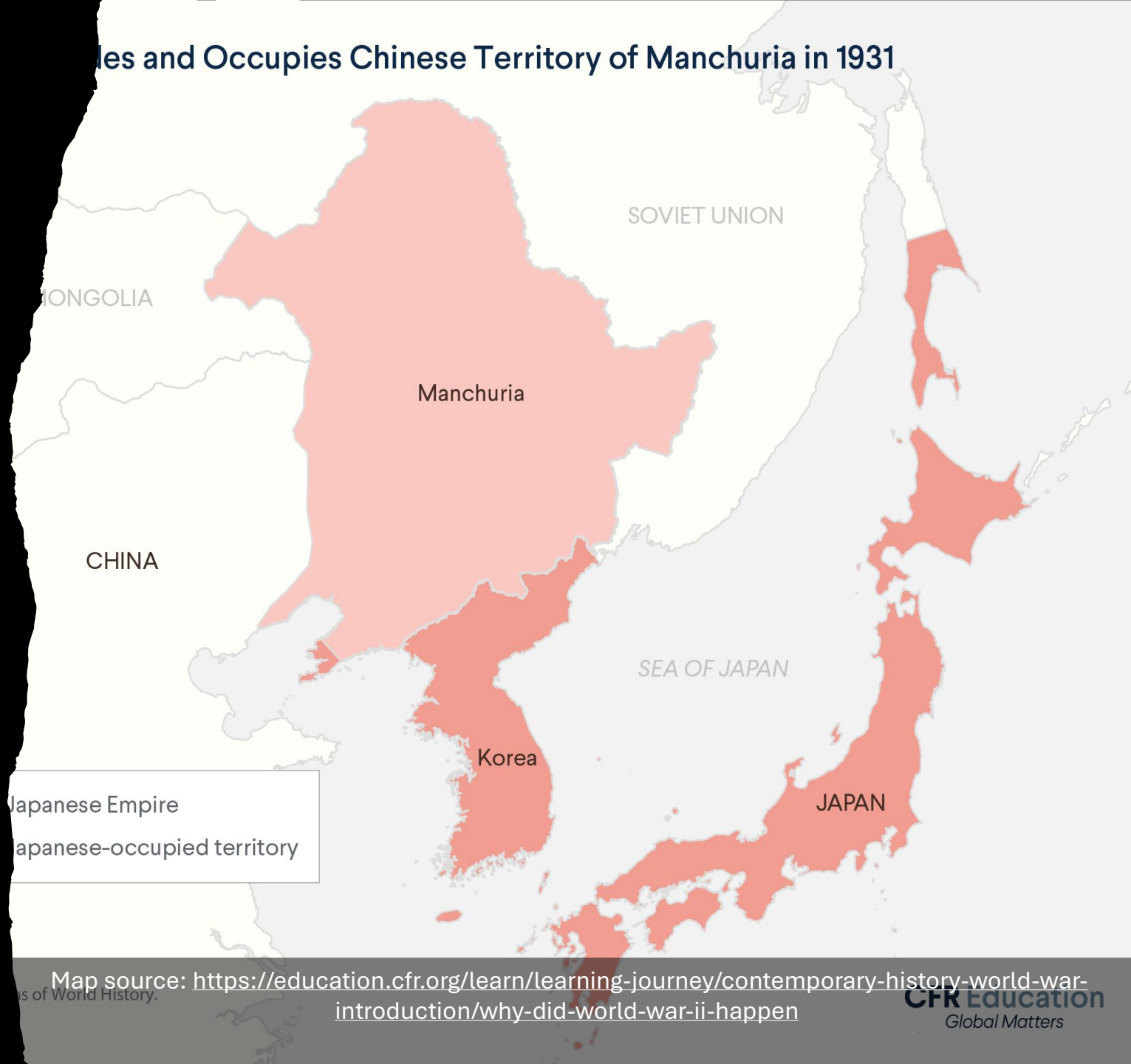
Japanese Military Medicine

"At the turn of the century, the Imperial Japanese Army fielded the world's most sophisticated military medical department....Influenced by the discoveries of Pasteur and Koch, Japanese military medicine's emphasis on sanitation and disease prevention had no counterparts in western armies."

- Source: Alan Hawk and George Sharpe, "The Paradox of the Imperial Japanese Army Medical Department,"
  1. https://www.academia.edu/2898317/The_Paradox_of_the_Imperial_Japanese_Army_Medical_Department

Manchuria

- Japan had a major sphere of influence in Manchuria since defeating Russia in 1905.
- Substantial economic and military presence
- Desire to colonize Manchuria for raw materials and land



Map source: https://education.cfr.org/learn/learning-journey/contemporary-history-world-war-introduction/why-did-world-war-ii-happen

CFR Education
Global Matters

Manchuria

- Mukden Medical College (MMC, est. 1911) became a major source of Japanese medical research
- Fewer laws and cultural restrictions meant research cadavers were far easier to obtain and use
- Use of Chinese and Manchurian patients for training and research; free on condition that they left their body to the hospital
- Lack of patient consent/ethical safeguards

Manchuria

- 1931: Japanese army occupies all of Manchuria
- Greatly increased medical research opportunities, with wartime environment further eroding ethical limits
- Anti-Japanese rebels ("bandits") were given to MMC for dissection after execution; executions scheduled to facilitate autopsies
- Vivisections began to occur at MMC in the mid-1930s

Manchuria

- 1933: Formation of the Togo Unit (forerunner of Unit 731)
- July 1937: Japan begins full-scale war with China
- In Manchuria, Japanese imperial ambitions, unethical research practices, and medicine for military purposes all converged to lay the groundwork for a horrific campaign of medical atrocities

Manchuria

"In Manchuria… a precedent already existed for colonial medicine to unilaterally impose the risks of human experimentation on local populations. Vivisection and biological experimentation pushed the existing practices regarding the use of the human body for medical research purposes far past legitimate limits. The expropriation of human bodies in the practice of colonial medicine in Manchuria thus set the historical precedent for Unit 731"

- Source: Keiko Suenaga, “Bodies in the Service of the Japanese Empire: Colonial Medicine in Manchuria.” *The Asia Pacific Journal*, 19 (24/3), December 2021. 15-16.


Unit 731

Unit 731: The Medical Empire of Shiro Ishii

- Established officially in 1936 under the Epidemic Prevention and Water Purification Department of the Kwantung Army.
- Directed by Lt. Gen. Shiro Ishii (Kyoto Imperial University bacteriologist).
- Massive complex at Pingfang, Manchuria — labs, animal houses, prisons, autopsy halls, crematoria, and a full medical school.
- Staffed by over 3,000 personnel including army doctors, scientists, technicians, and students (some Youth Corps trainees).
- Supported by leading universities (Tokyo, Kyoto, Keio, Manchuria Medical College).
- Ostensible purpose: research on epidemic control and biological defense; real aim: biological warfare development.

Unit 731: Human “Experimentation”

Human subjects: Chinese civilians, anti-Japanese guerrillas, prisoners, and Allied POWs — referred to as *maruta* (“logs”).

Experiments:

- Surgery Practice
- Infection experiments: deliberate exposure via ingestion, injection, aerosols, or fleas.
- Vivisection and autopsy: observation of organ pathology in real time; no anesthesia.
- Frostbite tests: determining gangrene thresholds and thaw-treatment protocols.
- Weapons tests: grenades, flamethrowers, and bombs with pathogens.
- Blood and seawater transfusions, decompression, starvation, dehydration studies.

Published & Open Discussed:

- Named as only “monkeys"

“As soon as the symptoms were observed, the prisoner was taken from his cell and into the dissection room. He was stripped and placed on the table, screaming, trying to fight back. He was strapped down, still screaming frightfully. One of the doctors stuffed a towel into his mouth, then with one quick slice of the scalpel he was opened up… The researchers then conduct their examination of the organs, remove the ones that they want for study, then discard what is left of the body.”

— Gold, Hal. *Unit 731 Testimony: Japan’s Wartime Human Experimentation Program*. Tokyo: Tuttle Publishing, 1996 (or later edition). p. 109

Unit 731: Field Trials

“The plane scattered wheat into the city center. People began to sweep it up to use to feed their chickens, not knowing that the wheat contained plague-infected fleas. Reverend Crouch did not realize what had happened until a few days later, when ‘the first bubonic plague symptoms appeared among people who lived in the center of the city.’ Twenty people died within a few days of the pathogen delivery.” (Description of Ningbo)

- Biological attacks documented in:
  - Nomonhan (1939) – first field test.
  - Ningbo (1940) – plague release.
  - Changde (1941) and Zhejiang (1942) – cholera and flea bombs.
- Weapon design innovations:
  - plague-flea ceramic bombs, germ-contaminated food and clothing.
- Estimated >200,000 civilian deaths from biological warfare in China.

Shiro Ishii Network

Network of *biomedical research and field units* spanning Japan's empire:

- **Unit 731 – Ping Fan, Manchukuo** (plague, anthrax, frostbite, vivisection).
- **Unit 100 – Changchun** (plant toxins, anthrax, animal vectors).
- **Unit 1855 – Beijing** (typhus, cholera).
- **Unit 1644 – Nanking** (plague, typhoid, anthrax field tests).
- **Unit 8604 – Canton** and **Unit 9420 – Singapore** (mass production & field release).

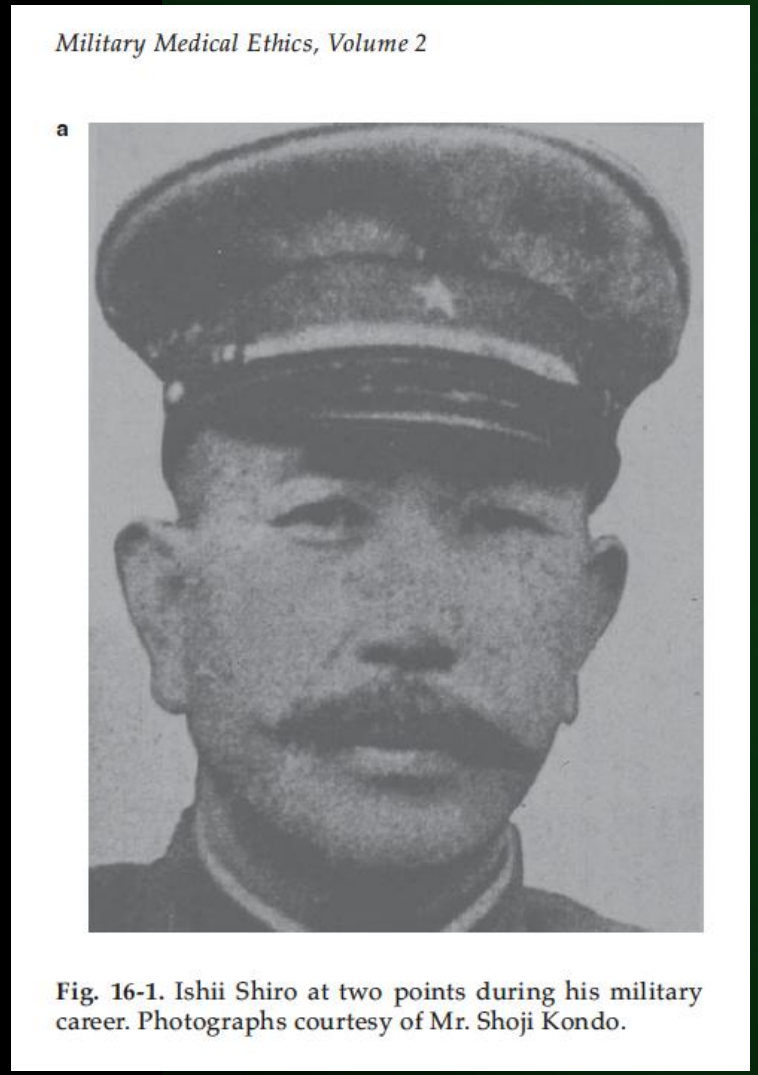


Fig. 16-1. Ishii Shiro at two points during his military career. Photographs courtesy of Mr. Shoji Kondo.

- “I did it [performed vivisections] because I thought I was serving the Emperor. At first I felt very bad, but after a few operations I got used to it. What is scary, is that I don’t get nightmares.”
- “The logs [human research subjects] were there for experimental purposes. There was no guilt associated with the process. I take pride in having taken part in this work. I have no regrets. It was war.”

Harris, Sheldon H. “Japanese Biomedical Experimentation During the World-War-II Era.” In *Military Medical Ethics, Volume 2*

Medical Atrocities Beyond Unit 731

Medical Atrocities Beyond Unit 731

- Horrific medical experiments, up to and including vivisections, were performed throughout the Japanese wartime empire between 1937-45
- Involved members of Army Medical Corps, Naval Medical Corps, and civilian medical establishment
- Two purposes:
  - training medical personnel
  - research on human subjects

Vivisection for Training

- Entry from captured Japanese diary: Guadalcanal, September 26, 1942:

"The two prisoners were dissected while still alive by Medical Officer YAMAJI and their livers were taken out, and for the first time I saw the internal organs of a human being. It was very informative."

- Source: *Infringement of the Laws of War and Ethics by the Japanese Medical Corps*. ATIS Research Report 117, January 26, 1945.

https://upload.wikimedia.org/wikipedia/commons/2/22/NDL12920200_Pros._Doc._No._409-_ATIS_Research_Report_No._117%2C_I._G._No.3860%2C_6340._Infringement_of_the_Law_of_War_and_Ethics_by_the_Japanese_Medical_Corps.pdf

Vivisection for Training

- Former Japanese Navy medic Akira Makino came forward in 2006 to confess that he performed surgical experiments "on about 30 prisoners between December 1944 and February 1945 while working as a medic on the island of Mindanao."

"As part of his medical training he said he had been ordered to conduct amputations, abdominal dissections and other experiments on condemned men, women and children, including two men who had been beaten unconscious for allegedly spying for the US."

- Source: "Japanese veteran admits vivisection tests on PoWs." *The Guardian*, November 27, 2006. https://www.theguardian.com/world/2006/nov/27/secondworldwar.japan

Vivisection for Training

- Ken Yuasa served as a Japanese Army doctor in China from 1942-45.

"Vivisection was used to practice for performing operations at the front lines. I operated on living Chinese for who I had no hatred whatsoever to gain surgical ability in order to win the war."

- Yuasa participated in 14 dissections and a number of vivisections.

- In one vivisection, four Chinese prisoners were each shot twice in the belly, then used to demonstrate how to treat gunshot wounds.
  - Source: "Army doctor (Yuasa Ken.)" In Hal Gold, *Japan's Infamous Unit 731*,Tuttle, 2019. 206-15

Research on Human Subjects: Truk Lagoon: January-February 1944

- Naval surgeon Cpt. Hiroshi Iwanami murdered eight American prisoners at Truk Lagoon in the Central Pacific
- January 30, 1944: four American POWs infected with streptococcus bacteria, four more used in tourniquet experiment; six of the eight died
- February 1: two survivors of the tourniquet experiment murdered and then dissected
- Iwanami was tried for war crimes in 1947, hanged in 1949

IMG Source: *Newcastle Morning Herald and Miners' Advocate,* July 16. 1947. https://trove.nla.gov.au/newspaper/article/140314126

Jap Captain On Trial

Former Japanese Captain Hiroshi Iwanami sits in a courtroom at Guam, where he and 18 others are on trial for the deaths of 10 American prisoners-of-war on Truk. It is charged that two Americans were stabbed to death and eight others died of excessive application of tourniquets, bacterial injections, dynamiting and throttling.

Research on Human Subjects:
Kyushu Vivisections, May-June 1945

- Eight members of a captured American B-29 crew were vivisected and killed by medical staff at Kyushu Imperial University
- Two had a lung removed; two had stomach, heart and liver removed, one had a brain operation, the last three had stomachs, gall bladders, livers and hearts operated on.
- Use of seawater as a blood plasma substitute
- The operations were performed at the behest of Kyushu University surgeons, with the cooperation of the army

IMG Source: http://mansell.com/pow_resources/camplists/fukuoka/fuk_01_fukuoka/fukuoka_01/Images/B29crew.jpg

Other Medical Experiments

- Numerous small-scale non-surgical medical experiments were conducted throughout the Japanese empire
- January 1945 Surabaya Tetanus vaccine test
- July 1945 Rabaul malaria experiment

Post War Cover-up & Consequences

The American Immunity Deal

The 1947–1948 U.S. Immunity Agreement

- After Japan’s surrender, U.S. military intelligence sought Unit 731’s biological warfare data.
- Lt. Gen. Shiro Ishii and colleagues were granted full immunity from prosecution in exchange for their research records.
- Negotiations led by General Douglas MacArthur’s staff and Lt. Col. Murray Sanders (U.S. Army epidemiologist).
- Tokyo War Crimes Tribunal excluded biological warfare and human experimentation charges.
- Data sent to Fort Detrick, Maryland, to advance U.S. biowarfare research during the Cold War.
- No major Japanese medical personnel were tried for these crimes.

Postwar Silence

- Many Unit 731 alumni resumed academic and medical careers:
- Cold War priorities reframed Japan as a U.S. ally against communism → suppression of atrocity narratives.
- Public acknowledgment delayed until late 1980s–1990s:
- Investigative journalism, survivor testimony, and discovery of remains at Tokyo Army Medical College (1989).
- Japanese medical ethics education long emphasized Nazi crimes, not Japanese ones.

The Khabarovsk Trial

- In December 1949, 12 Japanese officers involved in Unit 731 were put on trial by the USSR in the city of Khabarovsk
- Evidence collected from 1,000 prisoners tied to Unit 731 from 1946-9
- Show trial, designed to embarrass US and Japan, but reasonably accurate source on Unit 731

The Khabarovsk Trial

- All 12 defendants convicted, sentenced from 2 to 25 years of forced labor
- Sent to special prison in Cherntsy, where they aided Soviet biological weapons program
- 11 of 12 released in 1956, returned to Japan (one committed suicide)

Discussion: How Healers Become Killers

The Medical atrocities of Unit 731 were not anomalies.

- **Desensitization to suffering**, bureaucratic obedience, and racialized pseudoscience normalized cruelty as clinical duty.
- **Language of science sanitized violence.** Killing was reframed as "disinfection," "prevention," or "purification."
- **Language made atrocity tolerable.** At Unit 731, human beings were renamed *maruta* — "logs" — stripped of names, identity, and moral worth.
- **Caregiving & Medicine were grounded in** "protection" of the state's biological health.
- **"banality of evil:" Terrible acts can be committed not by fanatics or sociopaths, but by ordinary individuals who unthinkingly conform to authority, follow orders, and accept prevailing norms without moral reflection.**
    - Evil, Arendt argued, can emerge not from deep malevolence but from *thoughtlessness* — a failure to think critically about the moral consequences of one's actions.

Conclusion & Questions