

## Guinea Pigs

By Nikolaus Wachsmann

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Siegmund Wassing, a 36-year-old Austrian Jew, arrived in Dachau in November 1941. Five months later, the former film technician from Vienna was condemned to the most dreadful death. On April 3, 1942, he was locked into a pressure cabin, inside a special truck stationed between two infirmary barracks, and wired up to machines measuring his heart and brain activity. Then the air was pumped out of the cabin, simulating a rapid ascent to a height of over seven miles. Within minutes, Wassing, still wearing his striped prisoner uniform, was sweating and shaking and gasping for air; after half an hour he stopped breathing, and SS Untersturmführer Sigmund Rascher, an Air Force doctor, prepared for the postmortem. The ambitious 33-year-old Rascher had ordered the medical execution as part of a series of air pressure experiments, which had started in late February 1942, and also included simulated pressure loss and ejections from a height of up to 13 miles. In all, several hundred prisoners were abused during the trials in Dachau; dozens died. But Dr. Rascher was upbeat. In a letter on April 5, 1942, just two days after the murder of Siegmund Wassing, he envisaged "entirely new perspectives for aviation."

The recipient of this letter, Reichsführer SS Heinrich Himmler, who had authorized the experiments, was equally excited. So fascinated was he that he decided to see for himself, just as some Air Force and SS officers had done before him. With Oswald Pohl in tow, Himmler came to Dachau on the afternoon of May 1, 1942, and observed around a half dozen simulated ejections at high altitude; none of the prisoners died, apparently, but they cried and fainted, while the Reichsführer SS watched intently. Himmler left contented, but not before he confronted a few local SS men for making free with the coffee and cognac he had sent to the victims as a last meal.

It was around the time of Himmler's visit to Dachau that human experiments proliferated in the KL. Although some trials had taken place earlier, they expanded greatly as Germany's military fortunes declined. By 1942, SS leaders were grasping at projects that promised renewed hope, whatever their human cost, and treated the bodies of KL prisoners as commodities to be exploited for final victory — not just during slave labor, but also during experiments. Many of these trials, like the ones in Dachau, were explicitly conducted for the war effort. As losses at the front and at home grew, anxious officials looked to medical science to turn the tide. The abuse of KL prisoners was supposed to generate new treatments to save German soldiers from cold and hunger, injuries and epidemics, and to protect German civilians from infections and burns. "I thought it my duty to do everything to ensure this protection," one doctor later said, trying to justify his part in the murderous experiments, "and to save the lives of thousands of Germans."

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## **KL Experiments**

Human experiments accompanied the rise of modern medicine in Germany and beyond. Firm regulation was a long time coming, but after several scandals shook the Weimar Republic, the German medical authorities in 1931 drafted path-breaking guidelines for research on humans, banning any coercion of test subjects, as well as experiments on dying persons and those endangering children. Just a few years later, however, physicians in the KL threw out these fundamental rules. The first trials using prisoners, which took place before the outbreak of the Second World War, were still small-scale and comparatively harmless. Once Germany was at war, however, the SS supported potentially lethal tests, with events at the front influencing many of these experiments.

Probably the first such experiments took place in the Sachsenhausen infirmary, where two Camp SS doctors poisoned dozens of prisoners with mustard gas between October and December 1939. The order had come from Himmler, gripped by widespread hysteria about possible chemical attacks on German troops, which awakened traumatic memories from the Great War. To determine the effectiveness of two potential remedies, the Sachsenhausen doctors applied mustard gas onto the arms of prisoners, causing burns that spread all the way up to the neck; in some cases, the doctors infected the wounds with bacteria. In the end, the drugs they tested turned out to be useless. The doctors conceded as much in their final reports, forwarded to Himmler by SS Reich physician Ernst Robert Grawitz, who had personally observed the trials.

Many more experiments followed over the coming years, above all during the second half of World War II. In all, doctors abused more than 20,000 prisoners from over a dozen KL during the war; several thousand of them died. As the number of victims swelled, WVHA managers became concerned about the possible impact on forced labor and asked individual camps in late 1942 how many workers were being lost to the experiments. The doctors, meanwhile, covered their tracks, describing the deliberate infection of prisoners with viruses and poison as "vaccinations." Occasionally they slipped up, however, and spoke their minds, calling their victims "guinea pigs" and "rabbits" — terms appropriated, with gallows humor, by some of the victims themselves.

Heinrich Himmler presided over these experiments, probably with Hitler's backing. Although this was no centrally coordinated program, with many of the most radical initiatives coming from below, Himmler held the keys to the "guinea pigs" and insisted that no KL experiments go ahead without his say-so. Scientists with personal connections like Sigmund Rascher, whose wife was a close acquaintance of Himmler, could appeal to him directly. Another route led via the Ahnenerbe, Himmler's pseudoscientific research institute. Originally set up to uncover the mythical roots of the Germanic race, it drifted into military research during the war, and facilitated the supply of KL prisoners for various experiments. A third path went through SS Reich physician Grawitz, who became a more influential figure during the war and took control of all SS medical services in 1943. Despite Himmler's repeated attacks on the professionalism of his chief physician, Grawitz proved himself no less enthusiastic about experiments in the camps than his boss, for whom he evaluated applications from scientists.

Himmler was an obsessive micromanager of medical torture, devouring reports and suggesting bizarre new treatments. He was dazzled by science and easily captivated by radical schemes of supposed experts, especially when they chimed with his own worldview. The sacrifice of worthless subhumans in the KL would save the lives of German soldiers, he argued, and anyone who objected to this was a traitor. In Himmler's mind, war justified any means, and he opened the door to many lethal experiments, with Dachau emerging as one of the main centers.

## Himmler's Favorite Doctor

The history of human experiments in Dachau is closely linked to Dr. Sigmund Rascher, whose murders in the air-pressure cabin were the first in a series of often deadly trials. Born into an affluent family in Munich (his father was a doctor, too), he had qualified in 1936 and served as a physician in the air force from 1939. His rapid rise thereafter owed little to his political activism (he only joined the SS in 1939), and even less to his abilities as a physician. Rather, Rascher was propelled by his ambition and his equally determined wife, who made the most of her contacts with Himmler. With the patronage of the Reichsführer SS, who always had time for young firebrands promising scientific breakthroughs by unorthodox means, he became the doyen of human experimentation in Dachau.

Not everyone was taken in by the brash upstart. Professor Karl Gebhardt, the leading clinician in the Waffen SS and a former assistant to Germany's most famous surgeon, Professor Sauerbruch, dismissed Rascher as a quack. Tellingly, his charge was not that Rascher's work was inhumane — Gebhardt himself carried out experiments in Ravensbrück — but that it was useless. Reviewing one of Rascher's reports, Gebhardt told him to his face that if a first-year undergraduate had handed it in, he would have thrown him out of his office. Rascher's superiors in the Air Force also grew wary. Grateful that he had initiated aviation experiments in Dachau, they became frustrated with the way Rascher used his direct line to Himmler to go over their heads. On Himmler's wishes, Rascher was eventually discharged from the air force in 1943 and now butchered and killed solely for the SS (with the rank of Hauptsturmführer), running an experimental station in Dachau bearing his own name.

As long as he had Himmler's backing, Rascher kept busy. After the air-pressure trials ended in May 1942, Rascher and some colleagues quickly moved on to the next experiment, suspending prisoners in icy water. Again, the trials were driven by military considerations. In view of the growing number of German pilots who crashed in the British channel, the Air Force wanted to learn more about lengthy exposure to water. During the tests, prisoners had to climb into a freezing tank, with pieces of ice floating inside. Some victims wore full pilots' outfits; others were naked. One young Polish prisoner begged his tormentors to stop, over and over in broken German: "Nothing more water, nothing more water." Another Polish prisoner, the priest Leo Michalowski, later testified at the Nuremberg Doctors' Trial about his ordeal, the only survivor to do so: "I was freezing badly in this water, my feet became stiff as iron, my hands, too, I was breathing very shallowly. I started again to tremble badly, and cold sweat ran down my head. I felt like I was about to die. And then I pleaded once more to be pulled out, because I could not bear the water any longer."

After several hours, most prisoners were finally dragged out, unconscious, and the doctors then tried drugs, massages and electric blankets to revive them. Michalowski was saved, but many more succumbed. Others were deliberately left to die in the tank, so that Rascher could study more closely their cause of death. In all, some two to three hundred Dachau prisoners were tortured in the water tank. Many dozens of them died, mostly under Rascher's sole supervision. After the trials were officially called off in October 1942, because the Air Force had gathered sufficient data, Rascher himself continued, eager to further his career, and just as he had done during the air pressure experiments, he pushed for ever more extreme setups. Following the German catastrophe at Stalingrad in early 1943, he even extended his freezing experiments to dry land. To study extreme frostbite, Dachau prisoners were left to the elements during the winter nights; they were given a sedative to silence their screams. Rascher's ambition, one former Dachau Kapo recalled, literally made him "walk over corpses."

So fascinated was Heinrich Himmler by Rascher's freezing experiments that he became personally involved once more. The most promising way of reanimating prisoners

suspended in icy water, he suggested, was human warmth; to test his hypothesis, he asked Rascher to make naked women fondle the unconscious men. Himmler's suggestion was patently pointless. Even if "animal warmth" (as he called it) had made any difference, which it did not, no one, not even Himmler, would have suggested stationing prostitutes on German Navy vessels just in case they fished out a downed pilot. But Himmler's word was sacrosanct in the SS. Ravensbrück duly dispatched four women in October 1942 — the first female prisoners to arrive at Dachau — and the experiments could begin. Before long, Rascher's sordid sideshow had become a magnet for the local Camp SS and other interested parties.

The voyeur-in-chief was none other than the sexually repressed Reichsführer SS himself. Himmler felt "great curiosity" about the trials and made sure to see for himself, arriving in Rascher's Dachau station on the morning of November 13, 1942. Himmler watched everything close-up. A naked male prisoner thrown into the water; Rascher pressing him under as he struggled to get out; the man being pulled out unconscious; his frozen body placed in a large bed; two naked women trying to have sex with him. Himmler was satisfied, except for a minor complaint he passed on to Pohl: he felt that one of the women, a young German prisoner, could still be saved for the Nazi national community and should not be used anymore as a sex slave.

Everything seemed to be going right for Dr. Sigmund Rascher. With Himmler's help, he had made a name for himself and, by early 1944, he was closing in on his ultimate dream: a professorship. Meanwhile, he continued his human experiments. He was particularly interested in a hemostatic drug called Polygal and ordered the execution of several Dachau prisoners to test its effectiveness. The drug had been developed by a Jewish chemist imprisoned in Dachau, and Rascher planned to make a fortune with it, preparing to manufacture it in a factory of his own. Rascher's professional and financial future appeared rosy, and there was good news in his private life, too. His wife — who generated additional income by blackmailing released prisoners, threatening to have them taken back to Dachau — announced that she was pregnant with their fourth child.

But all was not as it seemed. Following a child-snatching incident in Munich, the criminal police discovered that the Raschers' picture-book family life — which had brought them gifts and goodwill from Himmler — was built on crime and deception. They had no children of their own; Frau Rascher had taken all her boys from other women, with her husband's complicity. The ensuing police investigation also uncovered evidence of her husband's corrupt deals in the camp. The arrogant Rascher had made plenty of enemies among the local Camp SS, and his bright prospects unraveled spectacularly. He was placed into custody in May 1944, and the SS shot him in the Dachau bunker just before liberation, not far from the sites where he had conducted his murderous trials. Around the same time, his wife, who had repeatedly tried to escape, was hanged in Ravensbrück.

The SS experiments in Dachau did not stop with Rascher's fall, however. He may have been the most prominent medical torturer in the camp, but he was not the only one. Since 1942, several other physicians worked on their own trials, infecting prisoners with bacteria to test drugs against blood poisoning and festering wounds, and forcing them to drink seawater to test a substance said to improve its taste. In fact, Dachau was the site of one of the largest KL trials, at the malaria research station run by Professor Claus Schilling, a pupil of the legendary bacteriologist Robert Koch (1843-1910). Schilling was already in his seventies and had spent his long career searching in vain for a vaccine. Given his paltry record, his proposal for human trials in the camps promised little success. Undeterred, Himmler — keen to find a drug to protect troops from malaria in the occupied East — gave him permission to proceed. The experiments began in February 1942, and Schilling, who moved to Dachau, continued until the camp fell apart in spring 1945. In all, around 1,100 prisoners, some already too weak to walk, were infected through injections or mosquito bites, to allow

Schilling and his men to test a range of drugs. The prisoners suffered swollen extremities, the loss of nails and hair, high fevers, paralysis and more. Numerous victims died through drug overdoses, while survivors often endured further experiments.

The Dachau Camp SS participated in these trials, just as it did in others. When Professor Schilling needed new victims, a list of inmates was drawn up in the office of the Dachau camp doctor. This list was sent to the SS labor office; all registered prisoners had to be accounted for, after all, and prisoners held in the experimental stations were officially classified as employed (their job being tortured as a "guinea pig"). Then, the list of names went to the camp compound leader, who often made a few alterations. Finally, it landed on the desk of the commandant for his signature. Only then were the unfortunate prisoners dragged away to Schilling's malaria station. Similar scenes took place in other KL, where the Camp SS assisted doctors as they abused and killed prisoners to aid their careers and help Germany win the war.

### **Killing for Victory**

On August 14, 1942, Wladislawa Karolewska, a young and slight teacher who had been part of the resistance in Nazi-occupied Poland, was ordered to report to the Ravensbrück infirmary, together with several other Polish prisoners. Here she was given an injection in her leg, which made her vomit. Then she was carted into the operating room, where she received another injection; pretty much the last thing she saw before she lost consciousness was an SS doctor wearing surgical gloves. When she awoke, her leg was throbbing: "I realized that my leg was in a cast, from the ankle to the knee." After three days, running a high fever and with fluid oozing from her swollen leg, Karolewska was set upon once more by the same doctor. "I felt great pain," she testified after the war, "and I had the impression that something was being cut out of my leg." After Karolewska lay for two weeks in a room filled with the stench of excretions, together with the other Polish women who had suffered a similar fate, her bandages were finally taken off and she saw her leg for the first time: "The cut was so deep that I could see the bone itself." After another week, the SS released her to her barrack, even though pus was still running from her leg and she could not walk. Soon she was back in the infirmary, where the SS doctor operated once more; her leg immediately swelled up again. "After this operation I felt even worse and I was unable to move."

Wladislawa Karolewska's mutilation was as painful and traumatic as it was incomprehensible. She did not know that it was part of a coordinated series of experiments across several KL, testing drugs against so-called gas gangrene. Army and SS physicians had debated the usefulness of sulfonamide drugs for the treatment of wound infections since late 1941, as fatalities of German troops on the Eastern Front shot up. Following the death of Reinhard Heydrich in early June 1942 from gas gangrene — the explosion from a hand grenade thrown by one of his assassins had embedded parts of the car's upholstery in his body — the issue gained even greater urgency for Himmler, who believed in sulfonamide as a miracle cure.

In Ravensbrück, the experiments began on July 20, 1942, within weeks of Heydrich's death. SS clinician Professor Karl Gebhardt, who ran a sanatorium and SS hospital in nearby Hohenlychen, supervised the trials. To simulate the symptoms of gas gangrene, doctors made deep incisions into the legs of dozens of prisoners, mostly young Polish women like Karolewska, and inserted bacteria, earth, wood shavings, and glass fragments. Eventually, Professor Gebhardt determined that sulfonamide drugs had little effect on treating these infections. In fact, Gebhardt had wanted the drugs to fail all along. As the leading SS surgeon, he had a stake in defending the primacy of frontline surgery. More pressingly, he was fighting accusations that he had bungled Heydrich's treatment (dispatched by Himmler

to attend to his wounded lieutenant in Prague, he had opted against the use of sulfonamides). To prove that he had been right all along, Gebhardt needed the drugs trial in Ravensbrück to come to nothing. Several women died after the ensuing operations, and the others bore the physical and mental scars for the rest of their often short lives.

Like Dr. Rascher's murderous high altitude and freezing trials in Dachau, the mutilation of Ravensbrück prisoners was part of the war experiments, ostensibly designed to help save German troops from fatal injuries. In several other KL, too, prisoners were deliberately wounded and killed for this purpose. In Natzweiler, for instance, a Professor Otto Bickenbach supervised lethal trials with phosgene, a toxic gas used during chemical warfare in the First World War. To study its effects, and to test a drug meant to protect German troops, well over 100 prisoners were forced into the small Natzweiler gas chamber in 1943-44. Within minutes, one survivor recalled, he felt such pain he could barely breathe: "It felt like someone was piercing my lungs with needles." Many prisoners suffocated. Others died a long, lingering death over the coming days, coughing up blood and the remains of their lungs.

Another series of war experiments aimed to safeguard German troops from infectious diseases, such as hepatitis, tuberculosis, and, above all, typhus. The German authorities regarded typhus, frequently contracted by German soldiers in occupied Eastern Europe, as a grave threat, not only to the troops but also to the population back home. The most extensive efforts to find a vaccine came in Buchenwald. Here, some 24 different trials were carried out in a permanent research station under SS Hauptsturmführer Dr. Erwin Ding (also known as Ding-Schuler), an inept young physician from the Hygiene Institute of the Waffen SS. His deputy was the Buchenwald SS doctor Waldemar Hoven, a dropout from a respectable family who had drifted around the world — including a spell as an extra on the film sets of Hollywood — before opting for medicine and joining the Camp SS, after less than five years of studies (Hoven was so incompetent he asked prisoners to write his thesis for him). The flawed setup of the Buchenwald experiments rendered them largely futile, scientifically speaking. The most tangible result was suffering. During one trial in 1943, which tested two drugs developed by the firm Hoechst, 21 out of 39 prisoners died; most survivors developed high fevers, swollen faces and eyes, delusions and tremors. In all, the doctors are said to have experimented on well over 1,500 subjects between 1942 and 1944; more than 200 prisoners did not survive the Buchenwald typhus research station.

A final series of war experiments was designed to boost the performance of German troops, rather than their protection. Physicians carried out several trials along these lines with Sachsenhausen prisoners. In November 1944, a Navy doctor administered high doses of stimulants, including cocaine, in the search for drugs that would allow the deployment of submarine crews for days on end. The Camp SS let him loose on one of the most exhausting labor details, where inmates walked in a circle for up to 25 miles a day, shouldering heavy sand bags, to test the design of new footwear. The 20-year-old Gunther Lehmann was among the prisoners selected for the experiments. During the four-day trial with cocaine, he slept no more than a few hours, forever stumbling along the test track, with a rucksack weighing 25 pounds on his back. Lehmann survived his ordeal, unlike so many other victims of the Nazis' human experiments.

### **Auschwitz and Nazi Racial Science**

SS Hauptsturmführer Josef Mengele arrived in Auschwitz at the end of May 1943, aged 32, after spending most of the previous two years on the Eastern Front, as an SS battalion medical officer. During his first year in the camp, he was the main SS doctor in the so-called Gypsy enclosure; later he took over the infirmary sector and became the senior SS physician in Birkenau. Just like the other Auschwitz doctors, Mengele performed a range of

murderous duties. He supervised prisoner executions and gassings, and became known among the SS staff for his lethal approach to epidemics. Mengele was also a frequent presence during selections of Jews at the ramp, conspicuous by his elegant looks, high spirits, and theatrical manner, dividing prisoners like a conductor into separate groups. In summer 1944, the chief SS physician in Auschwitz, Eduard Wirths, praised the "prudence, perseverance, and energy" Mengele brought to the job. In addition, Wirths was struck by Mengele's zealous use of his spare time, "utilizing the scientific material at his disposal" to make a "valuable contribution in his work on anthropological science." What Wirths pictured here as a sideline was Mengele's chief obsession: the torture of prisoners in the name of Nazi racial science, which formed part of a second area of KL research, different from the war experiments and clustered around Auschwitz in particular.

Dr. Mengele was a disciple of racial biology, putting his faith in science to purify the body of the nation by identifying and removing supposedly inferior races. Although his beliefs were very much in line with Nazi thinking, Mengele (like Dr. Rascher) was no early Nazi fanatic. He came from an affluent national-conservative family and only applied to join the NSDAP and SS in his mid-twenties (in 1937 and 1938, respectively). His main calling was racial science. As an eager student, gaining not one but two doctorates, Mengele had specialized early in racial genetics and anthropology. The diligent young scientist was quickly taken under the wing of Professor Otmar Freiherr von Verschuer, one of the doyens of German racial hygiene, who later headed the Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics in Berlin. Mengele became one of his assistants and continued to work with him after joining the SS full-time.

Auschwitz during the Holocaust was a dream for a striving and amoral racial biologist like Mengele. He was free to test any hypothesis he wanted, however repugnant, and there was always a ready supply of "scientific material." Prisoners he claimed for his experiments received special status. Isolated from the others, they were at his personal disposal; their bodies, dead and alive, belonged to Mengele. Among his victims were those with stunted growth and other unusual features, with Mengele and his assistants eagerly taking photographs, measurements and X-rays. He was particularly excited in May 1944, when a family of traveling performers with diminutive stature arrived from Hungary. Mengele hoped to experiment on them for years and lost no time in getting started, submitting his victims to injections, bloodletting, eye drops, and bone marrow extraction. One of the artists, Elisabeth Ovici, later recalled that "we often felt sick and miserable and had to throw up." She escaped the worst, though, for Mengele had many prisoners with physical abnormalities murdered; after meticulous autopsies, their bones were dispatched to the skeleton collection of the Kaiser Wilhelm Institute. Specially prepared eyeballs were couriered to the same address, as Mengele supplied one of Verschuer's other assistants, Dr. Karin Magnussen, who was researching Gypsies, with different-colored eyes.

The specialty of Dr. Mengele was the torture of twins. Racial genetics in Germany and abroad had long focused on twins, piquing Mengele's interest early in his academic studies. After his posting to Auschwitz, he systematically scoured the camp for victims on whom he hoped to build his career. In all, he probably selected more than 1,000 twins for experiments. Most of them were boys and girls between the ages of two and 16, among them some siblings who had passed themselves off as twins to escape the gas chambers. Mengele subjected them to a battery of tests. First came the obsessive collection of anthropological data, as Mengele, always a pedant, believed that enough facts would inevitably yield important insights; for each twin, a form with 96 different sections had to be completed. "Examined, measured and weighed a hundred times," is how Eva Herskovits later described her ordeal at Mengele's hands. The SS took so many blood samples that some children died of anemia.

Then came the experiments. To change the twins' eye color, apparently, Mengele and his staff injected liquid into their eyes, causing swelling and burns. The SS also infected them with illnesses to test their reactions. In addition, Mengele carried out grotesque surgical experiments, often without anesthetic, to compare the children's susceptibility to pain. Once, two boys, no more than three or four years old, were stitched together like Siamese twins; they screamed night and day before they died. Death offered Mengele yet another opportunity for his research, and he often set lethal injections himself.

Given the magnitude of Mengele's crimes, it is easy to see why he has become the most infamous of all Auschwitz perpetrators. But his notoriety has obscured the deeds of other doctors. Mengele was not a loner. He operated in an environment where medical murders of prisoners were normal. Dozens of physicians carried out racial experiments in Auschwitz, not just other Camp SS doctors like Dr. Wirths, but SS, Army, and civilian researchers from outside, as well. As the concentration camp with the largest prisoner population, among them many Jews, Auschwitz proved even more attractive than Dachau for physicians searching for human "guinea pigs," and no other camp would claim more victims.

Among the physicians lured to the East were two rival doctors, Professor Carl Clauberg and Dr. Horst Schumann, who experimented with fast and cheap mass sterilizations. Keen to eliminate unwanted population groups in occupied Eastern Europe, Himmler gave the go-ahead for trials in summer 1942. This triggered a macabre race between the two physicians to find the most effective method. In all, they butchered many hundreds of Auschwitz prisoners (overwhelmingly Jews), in the largest series of experiments in the camp.

The first doctor, Professor Clauberg, who discussed his plans for sterilizing Jewish women with Himmler and Glücks over lunch one day in July 1942, injected a chemical substance into the cervix to cause sterility by closing off the fallopian tubes. The procedure caused excruciating pain and numerous women died from complications; others were murdered so that Clauberg could examine their organs. One survivor, Chana Chopfenberg, later recalled that Clauberg had treated them all "like animals." During the injections, she had been blindfolded; she was also threatened with execution if she dared to scream. Unrepentant, Dr. Clauberg claimed after the war that his experiments had been scientifically valuable and saved many women from extermination (he died of a stroke in a German remand prison in 1957).

His rival Dr. Schumann was feverishly working nearby, using extremely high doses of radiation in a careless, hit-and-miss manner (he had no training as a radiologist), followed by operations. The immediate results were deep burns of the sexual organs, serious infections, and many deaths. Unlike his competitor, Dr. Schumann mainly chose male prisoners for his experiments. One of the men, Chaim Balitzki, broke down in tears after the war when he testified about his ordeal. "Worst of all," he said, "I no longer have a future." Undeterred by the human cost, Schumann pressed ahead but eventually had to admit that surgical procedures were more effective than his X-rays. Professor Clauberg claimed victory. In June 1943, he informed Himmler that his trials were close to completion. With the right equipment and support, he claimed, he would soon be able to sterilize up to 1,000 women a day. He was not yet done with his experiments, though, carrying out further trials with chemical injections in Ravensbrück in 1944.

Nazi doctors even selected Auschwitz prisoners for lethal procedures in other KL. The most notorious case involved the skeleton collection at the Reich University of Strasbourg, a hotbed of Nazi race science established in 1941. In February 1942, Himmler received a report from Professor August Hirt, the leading physician of the Ahnenerbe and recently appointed as professor of anatomy in Strasbourg. Hirt's report included a proposal for killing "Jewish-Bolshevik commissars" to fill gaps in existing "skull collections." Himmler agreed, and the plan soon expanded: by murdering selected prisoners in Auschwitz, an entire racial-



anthropological skeleton collection would be created. Eventually, three Ahnenerbe officials visited Auschwitz in June 1943. They picked out prisoners from different countries, who were measured, photographed and filmed. One of them was Menachem Taffel, aged 42, who had been born in Galicia and later worked as a milkman in Berlin, from where he had been deported to Auschwitz in March 1943 (his wife and 14-year-old daughter were gassed on arrival). In late July 1943, the SS deported Taffel, together with 86 other Jewish prisoners, to Natzweiler, where the SS drove them into the new gas chamber (except for one woman who was shot for resisting); Commandant Josef Kramer then personally inserted prussic acid and watched the prisoners die. The corpses were sent to the Anatomical Institute in Strasbourg, about 40 miles away. As the Allies approached Alsace in autumn 1944, Hirt and his colleagues tried to cover their tracks. But they failed to destroy all the evidence and, when the soldiers entered the basement of the Strasbourg institute, they found vats full of corpses, sawn-off legs, and torsos, which had been preserved for Hirt's skeleton collection.

### **Scientific Executioners**

After the war, the physicians behind the KL experiments were often depicted as solitary and mad scientists like Dr. Frankenstein, laboring secretly on macabre schemes. The truth is less lurid and more disturbing. Most research was inspired by what passed for mainstream scientific thinking, and many perpetrators were respected members of the medical community. Men like Professor Grawitz and Professor Gebhardt belonged to the German medical elite (as well as to the new SS aristocracy). So did Professor Clauberg, who was so well respected as a gynecologist that a senior WVHA officer brought his wife, who had suffered several miscarriages, all the way from Berlin to Auschwitz for an exclusive consultation.

Even the men behind the most gruesome experiments were no rank outsiders. Granted, perhaps Dr. Sigmund Rascher was a psychopath, as several historians have contended. But his experiments were driven, at least initially, by Germany's perceived military needs; hence the eager cooperation of the Air Force, whose scientists had called for the air pressure, freezing and seawater experiments in Dachau. As for Dr. Josef Mengele, although his crimes seem to speak for themselves — an Auschwitz prisoner doctor later called him a sadistic "subhuman" who was "veritably insane" — his peers saw him in a different light. Unlike Rascher, Mengele was an academic highflier and he remained associated with his venerable teacher Professor Verschuer. Human organs harvested by Mengele were analyzed at Verschuer's institute, which was part of the Kaiser Wilhelm Society, the elite organization for scientific research in Germany (renamed the Max Planck Society in 1948) that did much to support Nazi racial policy. Mengele also supplied blood samples from "persons of the most diverse racial backgrounds," as Verschuer put it, for a project on protein funded by the highly respected German Research Association (DFG), which supported several other human experiments in the KL, such as Professor Schilling's malaria experiments in Dachau.

Complicity extended far into the wider German scientific community. The experiments were an open secret, at least in some circles, even if it was considered poor form to talk about them. Senior medical officers in the German armed forces were especially well informed, thanks to papers at medical congresses. One such meeting in October 1942 brought together more than 90 leading Air Force doctors and hypothermia specialists in a plush Nuremberg hotel, where they were initiated into the Dachau freezing experiments. The presentation, led by Professor Ernst Holzlohner from the University of Kiel, included remarks by Dr. Rascher that left no doubt that some prisoners had died during the experiments; not one physician in the audience raised concerns. Some perpetrators even published details about their work in scientific journals and books. While they remained quiet about the abuse of prisoners, one could read between the lines that the experiments must have taken place

in the KL; it did not require forensic skills to figure out that trials on "test persons" in "Dachau" had involved prisoners.

The German pharmaceutical industry was involved as well. As early as 1941, Dr. Hellmuth Vetter, a Bayer employee (IG Farben) who also served as a Camp SS doctor, was testing a range of sulfonamide drugs on Dachau prisoners. He was delighted to be able to "put our new products to the practical test," he wrote to his colleagues in the company headquarters, and he assured them that he enjoyed the food, accommodation and company of the SS: "I feel like I am in paradise here." Vetter later moved on to other camps, administering potentially lethal drugs (developed by IG Farben) in Auschwitz and Mauthausen. Meanwhile, Buchenwald became a veritable "laboratory of the pharmaceutical industry," in the words of the historian Ernst Klee, as drug companies vied to test their products on prisoners infected by the SS with typhus.

Looking at the enthusiastic participation of physicians in medical torture and murder, it is worth recalling that German doctors were among the most fervent supporters of National Socialism, which promised them a national renewal and a brighter professional future. During the Third Reich, half of all male physicians joined the Nazi Party and seven percent the SS. Nazi biopolitics not only increased the standing of doctors, it also encouraged a shift in medical norms. Measures like mass sterilization made clear from early on that the health of the "national community" was everything and that "community aliens" had no rights.

Once the KL experiments were under way, they created their own dynamic, further extending ethical boundaries. Take the case of Professor Gerhard Rose, the head of the department for tropical medicine at the famous Robert Koch Institute. In May 1943, Rose attended a conference during which Dr. Ding from Buchenwald gave a paper on typhus experiments. To everyone's surprise, Professor Rose openly challenged Ding, attacking his trials as a fundamental break with medical convention. Put on the back foot, Dr. Ding claimed (falsely) that he was only using criminals already sentenced to death. The flustered chairman quickly ended the discussion. But Professor Rose's principled stance did not last; as human experimentation became more commonplace, he wanted his own research to benefit, too. Just a few months after his attack on Ding, he contacted the Hygiene Institute of the Waffen SS and proposed a new typhus vaccine for tests in Buchenwald. Himmler agreed to a trial on so-called professional criminals, and Dr. Ding was happy to help his erstwhile critic; the experiment took place in Buchenwald from March 1944, killing six prisoners.

Forced to defend his experiments at the conference in 1943, Dr. Ding had rightly assumed that many of his colleagues would have few objections to killing selected enemies of the state, especially those who were already doomed. There can be no doubt that the use of KL inmates, whose lives counted for little anyway, helped to ease any misgivings about the experiments. The physicians also stressed the utilitarian nature of their trials. Since invalids were being gassed "in certain chambers" anyway, Sigmund Rascher rhetorically asked in summer 1942 (in a veiled reference to Action 14f13), would it not be better to test "our different chemical warfare agents" on them? Similar arguments were heard elsewhere in the Third Reich. State prisoners were abused as "guinea pigs," too, and one doctor collected the blood of guillotined inmates for transfusions in his local hospital; otherwise, he reasoned at the time, the blood just "flows off without use."

The allure of amoral science even captivated some prisoners. Dr. Miklós Nyiszli, an accomplished forensic pathologist, was deported with other Jews from Hungary to Auschwitz in May 1944. The SS spared his life because he was healthy and spoke fluent German, and thanks to his medical skills he soon became a prisoner doctor at the Birkenau crematoria complex. His superior was none other than Josef Mengele, with Nyiszli serving as his pathology expert; he assisted in murders, dissected twins, wrote up reports, and prepared

corpses for skeleton collections. Although he knew all about the depravity of Nazi race science, and was appalled by it, Nyiszli's passion for science occasionally carried him away. Writing soon after the war, he referred to the "vast possibilities for research" in the camp, and recalled with excitement the "curious" and "extremely interesting" medical phenomena he had uncovered during autopsies, and which he had discussed at length, like any medical colleague would, with Dr. Mengele.

As for the victims, a few were saved by the experiments, paradoxically. They were butchered, but escaped certain death at the hands of the SS. The two young Czech brothers Zdeněk and Jiri Steiner, for example, survived Auschwitz only because Dr. Mengele had claimed them for his experiments. Once, he apparently struck their names from a list of prisoners selected for the gas chamber. "Luckily, Mengele heard about it and saved us," the brothers testified in 1945, "because he still needed us."

Many more victims, however, were butchered and killed. Overall, the SS targeted more men than women, not only because they were more numerous in the KL, but also because the war experiments were meant to benefit German soldiers. Most victims stood near the bottom of the Nazi racial scale, with Poles making up the largest national group of victims. At times, the SS could not agree whom to target. When it came to forcing prisoners to drink seawater, different officials proposed different "guinea pigs." Richard Glücks from the WVHA wanted to use Jews; Arthur Nebe from the RSHA suggested "asocial half-Gypsies." Both were opposed by SS Reich physician Ernst Robert Grawitz, who argued that the victims had to "racially resemble the European population." In the end, no inmate groups were safe. After all, Himmler himself had announced in 1942 that one reason for selecting KL prisoners for potentially lethal trials was that they were "deserving of death" — a label that could be applied to pretty much any inmate, as far as the SS was concerned.

Not even children were exempt, and, from 1943, more and more were targeted. They stood at the center of Mengele's twin experiments in Auschwitz, as we have seen, and they were also dispatched from there to other concentration camps. In November 1944, for example, the SS sent a group of 20 Jewish children for tuberculosis trials to Neuengamme, where they would meet a terrible fate. Among them was the 12-year-old Georges Kohn. He had been deported from Drancy in August 1944 together with his father, the director of the Paris Hôpital Baron de Rothschild (the largest Jewish hospital in France), and five other members of his family. By the time the train pulled into Auschwitz, Georges was all alone, except for his 80-year-old grandmother: an older brother and sister had escaped from the train, his mother and another sister were in Bergen-Belsen, and his father, Armand, was in Buchenwald. His father would be the only one to survive the KL; he returned to Paris after the war, a sick man, and never learned what had happened to his youngest son.

### **Author**

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