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A Spy's Path: Iowa to A-Bomb to Kremlin Honor

By [WILLIAM J. BROAD](#)

He had all-American cover: born in Iowa, college in Manhattan, Army buddies with whom he played baseball.

George Koval also had a secret. During World War II, he was a top Soviet spy, code named Delmar and trained by Stalin's ruthless bureau of military intelligence.

Atomic spies are old stuff. But historians say Dr. Koval, who died in his 90s last year in Moscow and whose name is just coming to light publicly, was probably one of the most important spies of the 20th century.

On Nov. 2, the Kremlin startled Western scholars by announcing that President [Vladimir V. Putin](#) had posthumously given the highest Russian award to a Soviet agent who penetrated the Manhattan Project to build the atom bomb.

The announcement hailed Dr. Koval as "the only Soviet intelligence officer" to infiltrate the project's secret plants, saying his work "helped speed up considerably the time it took for the Soviet Union to develop an atomic bomb of its own."

Since then, historians, scientists, federal officials and old friends have raced to tell Dr. Koval's story — the athlete, the guy everyone liked, the genius at technical studies. American intelligence agencies have known of his betrayal at least since the early 1950s, when investigators interviewed his fellow scientists and swore them to secrecy.

The spy's success hinged on an unusual family history of migration from Russia to Iowa and back. That gave him a strong commitment to Communism, a relaxed familiarity with American mores and no foreign accent.

"He was very friendly, compassionate and very smart," said Arnold Kramish, a retired physicist who studied with Dr. Koval at City College and later worked with him on the bomb project. "He never did homework."

Stewart D. Bloom, a senior physicist at the [Lawrence Livermore National Laboratory](#) in California, who also studied with Dr. Koval, called him a regular guy.

“He played baseball and played it well,” usually as shortstop, Dr. Bloom recalled. “He didn’t have a Russian accent. He spoke fluent English, American English. His credentials were perfect.”

Once, Dr. Bloom added, “I saw him staring off in the distance and thinking about something else. Now I think I know what it was.”

Over the years, scholars and federal agents have identified a half-dozen individuals who spied on the bomb project for the Soviets, especially at Los Alamos in New Mexico. All were “walk ins,” spies by impulse and sympathetic leaning rather than rigorous training.

By contrast, Dr. Koval was a mole groomed in the Soviet Union by the feared G.R.U., the military intelligence agency. Moreover, he gained wide access to America’s atomic plants, a feat unknown for any other Soviet spy. Nuclear experts say the secrets of bomb manufacturing can be more important than those of design.

Los Alamos devised the bomb, while its parts and fuel were made at secret plants in such places as Oak Ridge, Tenn., and Dayton, Ohio — sites Dr. Koval not only penetrated, but also assessed as an Army sergeant with wide responsibilities and authority.

“He had access to everything,” said Dr. Kramish, who worked with Dr. Koval at Oak Ridge and now lives in Reston, Va. “He had his own Jeep. Very few of us had our own Jeeps. He was clever. He was a trained G.R.U. spy.” That status, he added, made Dr. Koval unique in the history of atomic espionage, a judgment historians echo.

Washington has known about Dr. Koval’s spying since he fled the United States shortly after the war but kept it secret.

“It would have been highly embarrassing for the U.S. government to have had this divulged,” said Robert S. Norris, author of “Racing for the Bomb,” a biography of the project’s military leader.

Historians say Mr. Putin may have cited Dr. Koval’s accomplishments as a way to rekindle Russian pride. As shown by a [New York Public Library](#) database search, the announcement has prompted detailed reports in the Russian press about Dr. Koval and his clandestine feats.

“It’s very exciting to get this kind of break,” said John Earl Haynes, a [Library of Congress](#) historian and an authority on atomic spying. “We know very little about G.R.U. operations in the United States.”

George Koval was born in 1913 to Abraham and Ethel Koval in Sioux City, Iowa, which had a large Jewish community and a half-dozen synagogues. In 1932, during the Great Depression, his family emigrated to Birobidzhan, a Siberian city that Stalin promoted as a secular Jewish homeland.

Henry Srebrnik, a Canadian historian at the University of Prince Edward Island who is studying the Kovals for a project on American Jewish Communists, said the family belonged to a popular front organization, as did most American Jews who emigrated to Birobidzhan.

The organization, he said, was ICOR, a Yiddish acronym for the Association for Jewish Colonization in the Soviet Union. He added that Dr. Koval's father served its Sioux City branch as secretary.

By 1934, Dr. Koval was in Moscow, excelling in difficult studies at the Mendeleev Institute of Chemical Technology. Upon graduating with honors, he was recruited and trained by the G.R.U. and was sent back to the United States for nearly a decade of scientific espionage, from roughly 1940 to 1948.

How he communicated with his controllers is unknown, as is what specifically he gave the Soviets in terms of atomic secrets. However, it is clear that Moscow mastered the atom very quickly compared with all subsequent nuclear powers.

In the United States under a false name, Dr. Koval initially gathered information about new toxins that might find use in chemical arms. Then his G.R.U. controllers took a gamble and had him work under his own name. Dr. Koval was drafted into the Army, and by chance found himself moving toward the bomb project, then in its infancy.

The Army judged him smart and by 1943 sent him for special wartime training at City College in Manhattan. Considered a [Harvard](#) for the poor, it was famous for brilliant students, Communists and, after the war, [Julius Rosenberg](#), who was executed for conspiring to steal atomic secrets for the Soviets.

But Dr. Koval steered clear of all debate on socialism and Russia, Dr. Bloom said. "He discussed no politics that I can recall. Never. He never talked about the Soviet Union, never ever, not a word."

At City College, Dr. Koval and a dozen or so of his Army peers studied electrical engineering.

Dr. Kramish said the Army unit lived in the Hebrew Orphan Asylum, across from City College, adding that Dr. Koval called himself an orphan. Something else about him stood out, Dr. Kramish said — he was a decade older than his peers, making everybody wonder "why he was in this program."

Meanwhile, the Manhattan Project was suffering severe manpower shortages and asked the Army for technically adept recruits. In 1944, Dr. Koval and Dr. Kramish headed to Oak Ridge, where the main job was to make bomb fuel, considered the hardest part of the atomic endeavor.

Dr. Koval gained wide access to the sprawling complex, Dr. Kramish said, because “he was assigned to health safety” and drove from building to building making sure no stray radiation harmed workers.

In June 1945, Dr. Koval’s duties expanded to include top-secret plants near Dayton, said John C. Shewairy, an Oak Ridge spokesman. The factories refined polonium 210, a highly radioactive material used in initiators to help start the bomb’s chain reaction.

In July 1945, the United States tested its first atomic device, and a month later it dropped two bombs on Japan.

After the war, Dr. Koval fled the United States when American counterintelligence agents found Soviet literature hailing the Koval family as happy immigrants from the United States, said a Nov. 3 article in Rossiiskaia Gazeta, a Russian publication.

In 1949, Moscow detonated its first bomb, surprising Washington at the quick loss of what had been an atomic monopoly.

In the early 1950s, Dr. Kramish said, the [F.B.I.](#) interviewed him and anyone else who had known Dr. Koval, asking that the matter be kept confidential.

Dr. Bloom was working at the [Brookhaven National Laboratory](#) on Long Island at the time. “I was pretty amazed,” he recalled. “I didn’t figure George to be like that.”

In Russia, Dr. Koval returned to the Mendeleev Institute, earning his doctorate and teaching there for many years, Rossiiskaia Gazeta said. It added that he was a soccer fanatic even in old age and that people at the stadium who knew of his secret past would quietly point him out.

Dr. Koval’s spy role began to emerge publicly in Russia in 2002 with the publication of “The G.R.U. and the Atomic Bomb,” a book that referred to Dr. Koval only by his code name. The book offered few biographical details but said he was one of the very few spies who managed to elude “the net of the counterintelligence agencies.”

Dr. Koval died on Jan. 31, 2006, according to Russian accounts. The cause was not made public. By American reckoning, he would have been 92, though the Kremlin’s statement put his age at 94 and some Russian news reports put it at 93.

Posthumously, Dr. Koval was made a Hero of the Russian Federation, the highest honorary title that can be bestowed on a Russian citizen. The Kremlin statement cited “his courage and heroism while carrying out special missions.”

Dr. Kramish surmised that he was “the biggest” of the atomic spies. “You don’t get a medal from the president of Russia for nothing,” he said.