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The Making of Nuclear Medicine in Taiwan, 1950s-1980s

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One of the salient features of the rhetoric of nuclear energy for peaceful purposes was the transformation of physics from the science of death to the science of life. Nuclear medicine, particularly in its application to diagnosis and treatments, would wage wars against diseases instead of people. Nurtured in Cold War politics, nuclear medicine took shape in strategic locations, which included Taiwan. The US and the Republic of China (Taiwan) governments signed an agreement on civil use of atomic energy in 1955. With much excitement and fascination, scientists and physicians in Taiwan embraced the atomic age. For example, the prominent radiologist Wu Ching claimed that the twentieth century would be the nuclear age and that medicine was following this trend, such that “radiation has claimed [mastery] over the diseases that cannot be cured by medications and surgery.” Scholars such as Angela Creager have pointed out that the line between science and military purposes was a fine one. In Taiwan, “Atoms for Peace” flourished within both the military and national institutions. Most of the resources provided by the US government and Taiwanese government were put into founding National Tsing Hua University and its Graduate Institute of Nuclear Science, building of a nuclear reactor on Tsing Hua University’s campus, establishing research centers at major hospitals, offering scholarships to send students, physicians, and scientists to the US, and introducing isotopes such as iodine 131 to Taiwan. These were crucial for the making of the new medical discipline of nuclear medicine in Taiwan. This paper explores the early years of nuclear medicine in Taiwan in the context of Cold War geopolitics, focusing particularly on the uneven exchange of people, materials, instruments, and practices. Scholars have done much on the history of nuclear science after WWII, but little has been done on how international Cold War politics shaped science in Taiwan and how scientific networks in East Asia functioned within the Cold War politics. Primary sources used include the documents of the Taiwan Atomic Council, US-Taiwan diplomatic papers, and oral history interviews of participants.