

Poverty and Race Action Council, Simon Wiesenthal Museum of Tolerance, and Japanese American National Museum. He has remained involved in both of his alma maters, serving on the board of the Association of Yale Alumni and the Harvard University Graduate Alumni Council. In 1988, more than 40 years after the signing of Executive Order 9066 and the internment of Japanese Americans—including Nakanishi's parents and older brother—during World War II, the United States Congress established the Civil Liberties Public Education Fund as part of the Civil Liberties Act. Nakanishi would later be appointed by President Bill Clinton to the CLPEF, responsible for educating the public and providing materials for research on the circumstances and history of Japanese American internment.

Nakanishi has won several prestigious accolades for his accomplishments. In 2007, he received the National Community Leadership Award from the Asian Pacific Institute for Congressional Studies. His work with the Institute includes the joint formation, with AASC, of a Leadership Academy for Elected Officials, an annual program dedicated to providing leadership training to Asian American and Pacific Islander politicians. In 2008, Nakanishi received the Yale Medal from Yale University in recognition of his advocacy of Asian American issues and service to the university. In 2009, he was the inaugural recipient of the Engaged Scholar Award of the Association of Asian American Studies.

Nakanishi retired as director of the AASC in 2009. He was succeeded by David K. Yoo, a professor in the Department of Asian American Studies at UCLA and a former chair of the Departments of Asian American Studies and History at the Claremont Colleges in Claremont, California.

Nakanishi is married to Marsha Hirano-Nakanishi, the assistant vice chancellor for Academic Research and Resources at the California State University Office of the Chancellor. The two have a son, Thomas Nakanishi. In 2006, the family established the Nakanishi Prize at Yale, an annual award given to two graduating seniors with an excellent record of leadership in enhancing racial and ethnic relations at the university.

*Winston Chou*

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## Nambu, Yoichiro (1921–)

Yoichiro Nambu is a leading Japanese American theoretical physicist who made fundamental contributions to our understanding of the interactions between elementary particles as nature's building blocks. He shared the Nobel Prize in physics for 2008.

Yoichiro Nambu was born on January 18, 1921, in Tokyo to father Kichiro Nambu, a young man who ran away from his business-oriented family to study English literature at Waseda University in Tokyo, and mother Kimiko. Following the 1923 earthquake, the Nambus moved from the devastated Tokyo to the father's hometown of Fukui where he became a school teacher.

Reading science books that his father gave him and taking science courses in school led Yoichiro, with Thomas Edison as his inventor hero, to become interested in biology, mathematics, and physics. When still in grade school, Nambu built a radio set using electronic parts left by a deceased uncle. In 1937, he finished high school in Fukui, entered a higher school in Tokyo for three years, and then enrolled in the Imperial University of Tokyo in 1940. Inspired by Hideki Yukawa, an internationally respected Japanese physicist, Nambu chose to study physics and graduated in 1942 with an MS degree. He stayed on at the university as a research associate but was soon drafted into the Japanese army as a soldier for one year and then worked in a radar laboratory, especially in submarine detection, for two years until the end of the war.

In 1945, he married Chieko Hida and they would have a son, Jun-ichi.

In 1946, Nambu returned to his associate position at the University of Tokyo, but moved to Osaka City University in 1949 as an associate professor of physics. When there, he completed and submitted a thesis on quantum electrodynamics to his alma mater and received a doctor of science degree in 1952. Throughout this period, he was often on the verge of starvation because of severe food shortages but thrived scientifically, working on a variety of topics in physics, ranging from solid state physics to quantum field theory, by himself and with others in a community of talented physicists led by Yukawa and Sin-Itiro Tomonaga.

In 1952, Nambu spent two years visiting the Institute for Advanced Study in Princeton, New Jersey, at the invitation of its director, the well-known American physicist J. Robert Oppenheimer, probably upon the recommendation of Tomonaga or Yukawa. Although Nambu (and later his wife and son who joined him) enjoyed the living conditions in the United States, he did not make as much scientific progress in nuclear physics as he had hoped at Princeton. He also felt somewhat intimidated by Freeman Dyson, C. N. Yang, and T. D. Lee, some of the most brilliant physicists at the institute at the time. Nevertheless, dreading the poor living conditions in Japan, Nambu searched for a way to stay in the United States after his Princeton term ended. He received an offer from the University of Chicago and went there in 1954 as a research associate to work with one of its faculty members, Marvin Goldberger, on dispersion theory that had to do with the interactions of light and particles. In Chicago Nambu encountered some racial prejudice off campus, but he enjoyed the collegial atmosphere at the university much more than at Princeton. He thrived scientifically and was made an associate professor in 1956, which led to his permanent settlement in the United States and later naturalization as an American citizen in 1970.

It was in Chicago in the late 1950s that Nambu conducted a study on “spontaneous symmetry breaking” (SSB) that eventually won him the Nobel Prize. His success demonstrates the importance of scientific communication and interdisciplinary cross-fertilization. It started when he heard a talk at Chicago by J. Robert Schrieffer describing his recent research

with John Bardeen and Leon N. Cooper at the University of Illinois at Urbana-Champaign on superconductivity (it became known as the BCS theory following the initials of the three physicists). The talk presented a puzzle to Nambu because the superconducting fluid did not conserve the number of particles, which in physics was called a breaking of symmetry. Nambu used his expertise in particle physics to propose an explanation: a particle is like a dog choosing between two identical bowls of food in that it oscillates in the process, which according to quantum physics creates a new particle called boson. Nambu and other physicists soon elaborated on the idea of “oscillation creating a new particle” and found that it applied not only to the BCS theory but also to many particles in particle physics as well. In fact it became a key of the modern theory of elementary particles.

Described by colleagues as a powerful, visual, and foresighted thinker, Nambu would go on to make other fundamental discoveries in particle physics, including the founding of the string theory. At the University of Chicago, he was promoted to full professor in 1958 but recognition for his theories took a while to materialize. He was made Distinguished Service Professor at Chicago in 1971 and two years later was elected a member of the U.S. National Academy of Sciences, and in 1982 he received the National Medal of Sciences from President Ronald Reagan in the White House. He promoted U.S.-Japan scientific collaboration and was bestowed the Order of Culture by the government of Japan in 1978. The Nobel Prize eluded him until he was 87 years old—“I’d been told that I was on the list for many, many years”—and then when it finally came he said “I was very surprised when I got the news” (Manier). The two corecipients of the Nobel—Makoto Kobayashi and Toshihide Masukawa of Japan—both acknowledged Nambu’s influence as an inspiration for them.

*Zuoyue Wang*

*See also Japanese Americans*

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## Nathoy, Lalu

See Bemis, Polly (Lalu Nathoy); Perspective 1; Bemis, Polly (Lalu Nathoy); Perspective 2

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## National Civil Rights Movement Against Anti-Asian Violence

See Chin, Vincent

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## National Maritime Union (NMU) and Chinese Seamen

After the passage of the Chinese Exclusion Act, Chinese were forced out of the American labor market. White workers refused to work alongside them, and they demanded that employers not hire them. As a result, the Chinese were excluded from the American labor movement as well and from all the benefits participation would have entailed, especially during the heady days of industrial labor organizing of the 1930s. One of the few exceptions was the Chinese seamen.

During the Great Depression, when thousands of American seamen were unemployed, the U.S. shipping companies preferred to hire foreign crews, including Chinese, because of the conditions they could impose on them. The Chinese were forced to sign contracts that allowed the company to withhold 50 percent of their wages until their discharge. They also had to post a \$50 bond to guarantee compliance and promise not to join any unions.

Chinese seamen had a history of militancy. In 1922, under the leadership of the Nationalist Party,

50,000 Chinese seamen in Hong Kong organized the Lien Yi Society and demanded higher wages from British shipping companies. Their strike tied up 166 ships belonging to 16 steamship companies. In the celebrated 1925–1926 Canton-Hong Kong general strike, 20,000 Chinese seamen responded to the call to protest Britain's slaughter of Chinese workers in Shanghai. They completely paralyzed the Hong Kong harbor for nearly a year. But soon thereafter a split developed within the Lien Yi Society leadership between those supporting the Nationalists and the Communists, and the activism of the seamen waned.

In the 1930s American rank-and-file seamen, fed up with their ineffective "company union," the Seamen's International Union (SIU), formed a new labor organization, the National Maritime Union (NMU). They pledged to run it democratically, without discrimination based on race, color, political affiliation, religion, or national origin in their membership. During the national strike of 1936–1937, the NMU recruited some 20,000 black seamen and reached out to the Chinese, who occupied the lowest menial positions and were paid one-third less for their work. Chinese activists revived the Lien Yi Society and mobilized 3,000 Chinese to get off their ships and join the picket lines. In return, the NMU supported the Chinese demand for equal pay and the right to shore leave. Even though the Chinese never gained the full right of shore leave, many continued to work with the NMU. They convinced the union to support the Chinese war of resistance against Japan by ordering its membership to refuse to load scrap iron heading for Japan.

In December 1941, when the United States formally entered World War II, President Roosevelt initiated a Lend-Lease program to ship weapons and supplies to our allies, England and the Soviet Union. As convoys of these "liberty ships" crossed the Atlantic, they came under intensive attacks by German U-boats. By the end of 1942, the first year of U.S. participation in the war, almost 4 percent of all the U.S. merchant seamen were dead or missing—four times the combined losses of the army, navy, marine corps, and the coast guard during the same period. These high casualties led to the aggressive recruitment of 15,000 Chinese seamen from China to serve on U.S. and British merchant ships. Hundreds of them lost their