

William G. Myers Collection to Open at The Ohio State University

The William G. Myers, MD, PhD, Collection at the Medical Heritage Center (MHC) of The Ohio State University (OSU) is set to open later this month in Columbus to honor one of the pioneers in the applications of radioisotopes in medical diagnosis and treatment. On May 25, as part of the opening festivities, historian and long-time Myers associate Henry N. Wagner, Jr., MD, will lecture on Myers's role in the development of nuclear medicine and related fields. The opening will be accompanied by public programs designed to enhance awareness of the availability of these nuclear medicine-related materials for scholarly research. In addition, the MHC Web site will feature a Myers virtual exhibit and a new MHC digital library with the Myers Collection serving as the pilot project.

The collection documents the personal life and many professional achievements of Myers (1908–1988). In 1940, just 1 year after Ernest O. Lawrence won the Nobel Prize for development of the cyclotron, Myers attended a lecture by Ernest's brother John H. Lawrence on the potential uses of the cyclotron in medicine. The description of potential uses for radioisotopes in medicine ignited Myers's interest in what was to become his life-long research pursuit: applying the cyclotron to the development of radioactive isotopes for novel medical applications.

Myers was instrumental in bringing a cyclotron to the Physics Department at OSU in 1941. In 1948, he introduced ^{60}Co as a substitute for radium in cancer treatment, and, in 1952, he and Benjamin H. Colmery introduced ^{198}Au as a replacement for ^{222}Ra in permanent seed implantation for cancer therapy (Fig. 1). Myers is said to have introduced more radioisotopes into nuclear medicine than any other individual (Table 1).

The Myers Collection contains photographs, correspondence, news clippings, report cards, and other ephemera that document his early life. Myers was born in Toledo, OH, to a farmer father and factory worker mother. His parents divorced when he was quite young, and he was placed in an orphanage for several years. His father remarried and reunited the family on a homestead in Alberta, Canada. Young Bill helped to build the log house and support the family by hunting and fishing. After a brief stint away from high school, Myers graduated from Wauseon High School in Ohio and won a competitive scholarship to OSU. The Myers Collection contains his master's thesis, dissertation, and course work that document his years at the university, where he supported himself as a barber and a teaching assistant in chemistry. By attending for 39 consecutive quarters, Myers earned his doctorate in physical chemistry in 1939 and his medical degree in 1941.

A highlight of the Myers Collection is the group of letters he wrote in 1946 to Florence Lenahan, his new bride, describing his experience as a radiation security officer and radiation monitor during Operation Crossroads. This joint Army and Navy nuclear weapons test series took place in the Bikini Atoll of the Marshall Islands and included the first post-WWII nuclear bombing tests. The series consisted of 2 tests, Able and Baker, each using the same type of MK 3A fission bomb that was dropped on Nagasaki. Able was the first test designed to study the effects of the atomic bomb on naval vessels, planes, and animals. Utilizing an airburst-type detonation, Able produced radiation contamination that quickly dissipated. Baker, on the other hand, employed a subsurface burst and yielded very different results: an explosion that bathed the fleet in radioactive mist and debris and required almost a year of decontamination efforts. This experience cemented Myers's interest in what would soon be called the "atoms for peace" movement.

Containing approximately 16,000 letters, memos, and postcards, the Correspondence Series of the Myers



Photograph courtesy of The Ohio State University Photo Archives.

FIGURE 1. Myers with radioactive gold seeds for permanent seed implantation in cancer therapy.

(Continued on page 19N)

(Continued from page 16N)

TABLE 1

Radionuclides Introduced into Medicine by W.G. Myers

Radionuclide	Date	Half-life
^{60}Co	1948	5.3 years
^{198}Au	1952	2.7 days
^{51}Cr	1958	27.8 days
^{125}I	1960	60.0 days
$^{87\text{m}}\text{Sr}$	1960	2.3 hours
^{123}I	1962	13.3 hours
^{121}I	1966	2.1 hours
$^{85\text{m}}\text{Sr}$	1966	70.0 minutes
^{11}C	1967	20.3 minutes
^{38}K	1973	7.7 minutes
$^{79\text{m}}\text{Kr}$	1986	50.0 seconds

Collection is especially strong. Myers cultivated professional and personal relationships with Nobel Prize winners and other important figures in the fields of chemistry, physics, and nuclear medicine at hospitals and research centers throughout the world. The collection includes letters from many important figures in nuclear medicine and physics, including Paul Aebersold, John Lawrence, Rosalyn Yalow, Hal Anger, Irene Curie, and Glenn T. Seaborg. Myers made copies of letters he sent, so that the collection contains an unusually complete record of his written communications. Correspondence with various United States government agencies is also represented, including the U.S. Atomic Energy Commission.

The correspondence also provides information about Myers's interest in the history of nuclear medicine. An early member of the SNM, Myers remained active in the organization throughout his long career and served as the Society's historian for 13 years (1973–1986). During this time, he published many articles documenting the history of nuclear medicine in *The Journal of Nuclear Medicine* and in *Newsline*.

The Photographs Series of the Myers Collection is particularly rich and includes approximately 3,840 photographic prints, 4,508 negatives, and 18,400 slides. Myers was an avid photographer and an active member of the faculty photography club. His photographic subjects include nuclear medicine pioneers, historical OSU Medical Center events, and nuclear medicine equipment. Perhaps the most fascinating photographs in the collection are those

made during the early days of nuclear equipment production, when changes occurred rapidly and the previous year's innovations were quickly outdated and discarded. To better catalog these equipment images, the MHC is working on a photograph identification project with specialists in nuclear medicine who are familiar with this early equipment.

Other series, such as Associations and Conferences; Publications; Research, Speeches and Exhibits; Teaching; and Equipment, Laboratories, and Supplies document Myers's more than 4 decades in nuclear medicine. The Association and Conferences Series contains more than 3 linear feet of civil defense-related materials. As a faculty member at the OSU College of Medicine, he researched and taught for more than 40 years. He taught the university's first radiation biology course (the first such course to be taught by a physician); held faculty positions in the departments of Medicine, Physiology, and Radiology; and earned emeritus professor status in 1979. He served as a visiting professor of biophysics at the University of California, Berkeley, in the 1970s, and Cornell University (Ithaca, NY) in the 1980s. He also conducted extensive research with larger cyclotrons at the Lawrence Berkeley National Laboratory and the Memorial Sloan-Kettering Cancer Center. Myers was a prolific author, publishing more than 200 articles.

Throughout his career, Myers championed the cyclotron. With Myers as its backer, OSU acquired one of the first cyclotrons in the world and was among the first universities to make short-lived radionuclides for medical use. As Myers's career progressed, he studied radionuclides with progressively shorter half lives and was among the first to champion the notion of hospitals installing their own cyclotrons. Wagner, the current historian of the SNM and coauthor of the soon-to-be-published book *Atoms for Life: A Personal History of Nuclear Medicine*, calls Myers the "godfather of the cyclotron."

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For more information on the opening event or on conducting research in the collection, please contact the Myers archivist, Mary Manning MA, MLIS, at manning.84@osu.edu or 614-292-9966 or visit the MHC online at <http://mhc.med.ohio-state.edu>.