

The William G. Myers, MD, PhD Collection is expected to generate a great deal of research interest when it is opened to the public in the spring of 2006. The MHC's website will feature a Myers virtual exhibit and the new MHC digital library with the Myers Collection serving as the pilot collection. On May 25, 2006, as part of the opening festivities, nuclear medicine history scholar and long-time associate of Myers Henry Wagner MD will lecture on the history of nuclear medicine and Myers's role in that history. A reception at 4PM will be followed by the lecture at 4:30PM. Please RSVP to (614)292-3275 or charlesworthmil.1@osu.edu by May 5, 2006. For more information on the opening event or 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.ohiostate.edu/.

The lecture will be accompanied by two exhibits: a Myers exhibit containing materials from the Myers Collection that detail his life and the national traveling exhibit Atoms for Peace from the National Atomic Museum. Atoms for Peace contains portions of several lithographic, public-relations-oriented, fine art print programs created for the General Dynamics Corporation by Erik Nitsche in the 1950's and 1960's. The prints depict Nitsche's interpretations of nuclear energy uses, modern technologies for the era, and features posters created for promotion of nuclear energy in foreign countries, which are imprinted in the languages of those regions. (Copyright National Atomic Museum.)

The following article by Myers archivist Mary Manning discusses the importance of Myers and his manuscript collection. More information about the Myers Collection digital library project will follow in our next issue of "House Calls."

The Collection of William G. Myers, MD, PhD: The Godfather of the Cyclotron

By: Mary Manning, MA, MLIS **Myers Archivist**



Myers with Geiger counter. iam G. Myers, MD, PhD Collection.)

In 1940, just one year after Ernest O. Lawrence won the Nobel Prize for his invention of the cyclotron, William Myers attended a lecture by Ernest's brother John Lawrence on the potential uses of the cyclotron in medicine. The cyclotron was one of the earliest subatomic particle accelerators. When accelerated particles in the cyclotron struck ordinary nuclei, radioisotopes were produced. Lawrence pointed out (Photograph from the Will- that, at times, these radioisotopes had potential uses for medicine. Lawrence's lecture ignited Myers's interest in what

was to become his life-long research pursuit: using the cyclotron to develop radioactive isotopes for medical use.

The William G. Myers, MD, PhD Collection at the Medical Heritage Center (MHC) of The Ohio State University documents the personal life and professional career of this pioneer in nuclear medicine. At approximately 150 linear feet, it is one of the MHC's flagship collections. Myers (1908-1988) made many contributions to nuclear medicine and was instrumental in bringing a

cyclotron to the Physics Department at Ohio State in 1941. In 1948, he introduced cobalt-60 as a substitute for radium in cancer treatment, and in 1952, he and Benjamin H. Colmery introduced gold-198 as a replacement for radon-222 in permanent seed implantation for cancer. Myers was also instrumental in the development of radioisotopes for diagnostic and investigative medicine. He introduced more radioisotopes into nuclear medicine than any other individual-eleven in all.

The Myers Collection contains photographs, correspondence, news clippings, report cards, and other ephemera that document Myers's early life. Born in Toledo, Ohio, Myers was the son of a farmer and a factory worker. His parents divorced when he was very young, and as a result, he lived in an orphanage for a number of years. After remarrying, his father reunited the family and moved them to a homestead in Alberta, Canada.

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As a boy, Myers helped build the family log cabin and support the family by hunting and fishing. Myers rode ten miles by horse to attend the local school. However, he left home and school as a teenager to support himself as a photographer and waiter. Myers eventually returned to his family, and to school. A decent student whose grades were not always stellar, he excelled in the sciences, particularly in chemistry. Myers graduated from Wauseon High School and won a competitive tuition scholarship to The Ohio State University. The Myers Collection contains his master's thesis, dissertation, and course work that document his years at The Ohio State University, where he supported himself as a barber and a teaching assistant in chemistry. By attending 39 consecutive quarters, Myers earned his PhD in physical chemistry in 1939 and his MD in 1941.

The Myers Collection also contains the papers of his wife Florence Lenahan Myers. Myers and Lenahan met in a neuroanatomy class in 1938 and were married in 1940—the same year that Lenahan earned her MD. Lenahan was one of only three female medical doctors to graduate that year. His "favorite wife," as Myers affectionately called her, was a physician in Columbus for 35 years. Lenahan was one of the few doctors who remained in private practice in the Columbus, Ohio area during World War II. She made house calls in a rural area and often accepted canned goods, and even live chickens, for payment. In 1944, she and Myers were the first doctors to use penicillin in Columbus, and in 1945, they coauthored the article, "A Case of Osteomyelitis Treated with Penicillin with Unusual Bacteriologic Findings."

A highlight of the Myers Collection are the letters he wrote in 1946 to Lenahan 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 comprised the first post-WWII nuclear bombing tests. The series consisted of two 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 sub-surface burst and yielded very different results: an explosion that bathed the fleet in radioactive mist and debris and required close to a year of de-contamination efforts. All personnel were exposed to unhealthy levels of radiation, but in his job as monitor, Myers had the greatest risk of harmful exposure. This experience cemented his interest in what he called "atoms for peace."

Containing approximately 16,000 letters, memos, and postcards, the Correspondence Series of the Myers 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 the field of nuclear medicine and physics, including Paul Aebersold, John Lawrence, Rosalyn S. Yalow, Hal Anger, Irene Curie, and Glenn T. Seaborg. Myers made copies of the letters he sent, and consequently, there is a complete record of his written communications. The topics of his correspondence include his teaching, research, students and colleagues, civic and administrative activities, and professional and publishing activities.

The correspondence also provides information about Myers's interest in the history of nuclear medicine. A member of the Society of Nuclear Medicine since its inaugural year, 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 society's journal, *The Journal of Nuclear Medicine.* Correspondence with various United States government agencies is also represented, including the U.S. Atomic Energy Commission.

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. Myers was among the first researchers employing radiation in medical studies and counted among his friends many of the early innovators who are mentioned in a previous paragraph as recipients of his letters. Myers was particularly proud of the photograph he took of Madame Marie Curie's daughter Irene Joliot-Curie, which he donated to the Institut du Radium at the University of Paris.

Perhaps the most fascinating photographs in the collection are those shot during the early days of nuclear equipment production when changes occurred rapidly and the previous year's innovations were quickly dated and discarded. The images include early, experimental models of which very few images exist today. To better identify this equipment, the MHC is working on a photograph identification project with specialists in nuclear medicine who are still familiar with this early equipment.

Notable images include those of one particular piece of experimental equipment: the Anger scintillation camera. The scintillation camera, also known as the gamma camera or the Anger camera, was one of the earliest radionuclide imaging cameras, and was invented by Hal O. Anger in 1958. Although Ben Cassen developed the first imaging camera in 1950, Anger's camera had the advantages of simultaneously recording emissions from a large area at once and recording the motion of organs and fluids in the body. The Anger camera is still in common use and paved the way for more sophisticated imaging systems today. Through the determination of Myers, OSU purchased the first commercial version of it in 1962. Other important images include photographs of Michel Ter-Pogossian with the first in-hospital cyclotron, the gamma ray positron camera, and the Gammicon. The collection contains photographs of cyclotrons around the world. Photographs of remarkable equipment with colorful names, such as the "Monster" and the "Head Shrinker" are also included in the collection.

MYERS (continued)

Other series, such as Associations and Conferences; Publications; Research, Speeches and Exhibits; Teaching; and Equipment, Laboratories, and Supplies document Myers's forty-plus years in the burgeoning field of nuclear medicine. The Association and Conferences Series contains over three linear feet of civil-defenserelated materials. Myers pioneered safety standards for nuclear waste as well as the use of radio isotopes for medical use. As a faculty member at The OSU College of Medicine. Myers researched and taught for more than forty years. He taught the university's first radiation biology course (the first course in the world to be taught by a physician), held faculty positions in the departments of medicine, physiology, and radiology, and earned emeritus professor status in 1979. Additionally, he served as visiting professor of biophysics at the University of California, Berkeley (1970s) and Cornell University (1980s). Myers also spent considerable time researching with larger cyclotrons at the Lawrence Berkeley

National Laboratory and the Memorial Sloan-Kettering Cancer Center. Myers was a prolific author, publishing over 200 articles during his lifetime.

Throughout his career, Myers championed the cyclotron. With Myers as its backer, OSU acquired one of the first cyclotrons in the world and was one of the first universities to make short-lived radionuclides for medical use. However, the development of the nuclear reactor, which could produce larger quantities of radioisotopes than the cyclotron, began to put cyclotrons on the back burner. As Myers's career progressed, he studied radionuclides with progressively shorter half-lives. Many of these shorter-lived radionuclides could not remain radioactive in transit from a large nuclear reactor and could be better produced in a cyclotron. Myers argued that every hospital should have its own cyclotron. Through continuing research with cyclotrons, Myers played a large role in their resurgence in the 1990's. For his continuing role as proponent of the cyclotron, Henry Wagner, present historian of the Society of Nuclear Medicine and co-author of the soon-to-be-published book Atoms for Life: A Personal History of Nuclear Medicine, called Myers the "godfather of the cyclotron." This is a title he greatly deserves.

Friends of Nursing History Update

By: Carol Robinson, MS, RN

Steering Committee

A steering committee has been established to support the work of the nursing history project at the Medical Heritage Center. "Valuing our long tradition of service and caring" could be the motto of the members, who are committed to preserving nursing's past through program development and outreach to the community.

Committee members bring a wide variety of backgrounds to the effort. Members are: Mary Ann Burnham, Nursing Professor at Otterbein College; Sandy Cornett, Director, OSU/AHEC Health Literacy Program and formerly Program Manager for Consumer Health Education at OSU Medical Center; Debbie Freece, Executive Director of the Mid-Ohio District Nurses Association; Kitty Kisker; Professor Emeritus, OSU College of Nursing; Kathy Peppe, former Chief, Division of Family and Community Health Services at the Ohio Department of Health; Carol Prince, recent past President of the OSU College of Nursing Alumni Society; Carol Robinson initiated the nursing history project six years ago and is a member of the Medical Heritage Center advisory committee; Rita Smith, Director of Nursing at Riverside Methodist Hospital; and Judith Wiener, Curator at the Medical Heritage Center.

The steering committee will meet quarterly to generate ideas for program and outreach initiatives and serve as voices to the greater nursing community regarding ongoing archival collecting.

Oral History Program

Three nurses who have given oral histories as part of the nursing history project at the Medical Heritage Center will participate in a panel discussion on May 11 at the Center. They will share their thoughts about being interviewed as well as experiences from their careers in nursing. Judith Wiener, MHC curator, will discuss technical aspects of oral history preservation, and Carol Robinson, who took the oral histories, will be the moderator.

The three nurses, Thelma Holmes, Grayce Sills, and Rosa Lee Weinert, bring a wealth of nursing experience to the program. Ms. Holmes, who taught nursing and was director of the School of Nursing at Grant Hospital, has been active for many years in the Mid-Ohio District Nurses Association. Dr. Sills, professor emeritus as well as former acting dean of the College of Nursing, was the August 2005 recipient of the Ohio State University Distinguished Service Award. Ms. Weinert was former head of the Ohio Board of Nursing and instrumental in founding the National Council of State Boards of Nursing.

The program, to be held during National Nurses' Week May 6-12, is one in a series of nursing programs offered by the Medical Heritage Center and supported by the Friends of Nursing History. A reception will be held at 4 pm, followed by the program from 4:30-5:30.

Recent Donations

The Medical Heritage Center thanks those listed for their recent support:

OSU Department of Anatomy: books in memory of Dr. Margaret (Peg) Hines • Marjorie Ball: "Nurses' Aid to Four Important Hospital and Surgical Procedures" • Dr. and Mrs. Walter Baum: Electrotherapy Device • Dr. Bob & Leslie Buerki: additions to the Lester Stein Collection • Capital University: Starling Medical School Class of 1881 and 1901 photographs • Alice D. MacAller: additions to the William Casper Parker Collection • Yvonne L. Snyder: medical instruments and case

Monetary Donations

Dr. Richard and Penny Lewis (Warren Memorial Endowment) • Myron and Eleanor Smith • Joann Sparks (gift of securities) • Linda Chapman Stone, MD • Mrs. Gloria Warren (Warren Memorial Endowment)

Special Donation Note

The Medical Heritage Center would like to thank Dr. Bill and Mrs. Mary Davis for their very generous donation made in 2001, which made it possible to install a motorized screen in the center's meeting space. This gift was not acknowledged due to an oversight, and the center apologizes for this omission and extends its gratitude to Dr. and Mrs. Davis for their wonderful donation.



For subscription information contact: e-mail: medhist@osu.edu, telephone: 614-292-9273 fax: 614-292-9919, website: http://library.med.ohio-state.edu/ heritage

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