

# American Association of Physicists in Medicine The Midwest Chapter

## Created in 1956

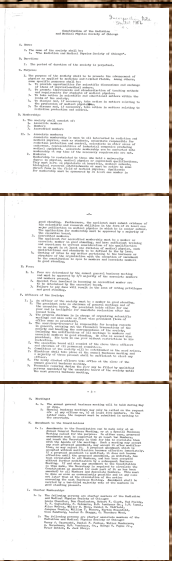


Alex Markovic (Past President), Plato Lee (President), Mary Ellen Smajo (President Elect), Mark Pankuch (Secretary), John Fan (Treasurer) John Roscoe (Board Member), John Matha (Board Member), Ina Sola (History Committee Chair)



**About the AAPM Midwest Chapter**  
The first organization was called "The Radiation and Medical Physics Society of Chicago" which had its first meeting on September 17, 1956 in Chicago, IL. The original Charter Members were the following: Louis Chastner, Don Chastner, Robert K. Clark, Ted Fields, P.F. Galanter, F. Heinenstein, R.S. Landauer, Sr., L.H. Lantz, Alice McCrea, Walter S. Moon, David G. Okinoff, Jacques Orada, William T. Prewitt, Martin Rosenfield, Glen Sandberg, Leslie S. Skaggs, and G. Theodore Wood.  
On May 20, 1957 the organization had a total of twenty (20) full members and eight (8) associate members. The annual dues for the organization were one dollar the first year and 2 dollars the following year. The name of the organization was later changed to "The Radiation and Medical Physics Society of Illinois". In 1959 the organization created the Illinois Board of Radiation Physics which was responsible for certifying individuals as Radiation Hazard Control Experts. The Board was composed of the following individuals: Robert Landauer, Lester Skaggs and Curtis Slichter.  
After a lengthy discussion, in May 8th of 1956 the Radiation and Medical Physics Society of Illinois finalized its previous discussions about affiliating with the American Association of Physicists in Medicine. The Resolution of the Midwest Chapter of the American Association of Physicists in Medicine was drafted on May 17, 1956.

### The Original Constitution - 1956



### Honorable MCAAPM Members

**Lawrence H. Landt (Lant)** to all his friends and colleagues  
Born April 6, 1921 in Chicago, Land grew up in Highland Park, IL. Both his parents had come to the United States from Germany. He earned his bachelor's degree in physics from Northwestern University in 1943. He then worked under Enrico Fermi at the Metallurgical Laboratory and at the Manhattan Project, at the University of Chicago. In 1944, he followed the project to Los Alamos Scientific Laboratory in New Mexico. After the War he entered a graduate program in physics at the University of Illinois, completing his PhD in 1951.  
He received his license to begin in medical physics at Northwestern University. After graduation, he joined the Manhattan Project, working first in Chicago, and then at Los Alamos. He returned for graduate study in physics at the University of Illinois. It was there, while he did research on the neutron multiplication constant in the thermal applications of the physical neutron. After a brief stint at the Argonne National Laboratory, Land came to the University of Chicago, where he worked as a medical physicist with Dr. Lester Skaggs. He was active in the design of a unit of radiation therapy unit and of electron linear accelerators before such machines became available commercially. Both were in service to patients for many years, his was instrumental in establishing a program of graduate study in medical physics, one of the first such programs in the country. He was named as a consultant in medical physics in various countries and as President of AAPM and the IOMP.  
After becoming a professor emeritus at the University of Chicago, he continued to be active, heading the medical physics program at Rush-Presbyterian-St. Luke's for a time. He published his lecture notes on medical physics and he never failed to help support of and enthusiasm for his chosen field. He was delighted when the Lant Institute in Seattle was named in his honor. However, if you had asked him what he considered to be his greatest professional achievement, Land probably would say he would have responded as follows: he received the "Culligan Award" - "to improve people's health, and establish the profession of medical physics, and by doing these things, to make the world a better one."  
After retiring from the University as a professor emeritus in 1980, Land continued his teaching and research career at Rush-Presbyterian-St. Luke's Medical Center. He set up a graduate program in medical physics there and served as professor and chairman of the department of medical physics, and as radiation safety officer, until 1991. He remained active in teaching and in a few months before his death.  
The author of several papers and several books, Land won many awards for his research and was active in the professional organizations in medical physics. He served as President of the American Association of Physicists in Medicine from 1988 to 1990, and of the International Organization for Medical Physics from 1985 to 1988. He served as a consultant on radiation safety and radiation therapy for the World Health Organization, the National Institutes of Health, the National Cancer Institute, the United States Atomic Energy Commission and the International Atomic Energy Agency. He was the editor of Health Physics from 1979 to 1983, and of Medical Physics World from 1983 to 1985. In 2003, The Lawrence Land Institute of Medical Physics, in Seattle, Washington, was named in his honor.

1) The University of Chicago Medicine, Communications 550 E. 616 Street, Third Floor, Chicago, IL 60637 Phone (773) 702-0005 Fax (773) 702-1171  
2) <http://www.aapm.org/history/2002/assent/CommProg/Program.asp#lnt>

**Dr. Lester Skaggs (1911-2009)**  
Born Nov. 21, 1911, in Trenton, Missouri, Lester S. Skaggs grew up on a horse three miles to high school. His father expected him, the oldest of three children, to take over the farm, but Skaggs enjoyed designing and building gadgets and opted instead for a career in science. He earned his bachelor's degree in chemistry from the University of Missouri in 1933 with a minor in mathematics, followed by a master's degree in physics in 1934. In 1935 he entered the nuclear physics graduate program at the University of Chicago, where he completed his PhD in 1939 [1].

A press release issued by the University of Chicago Medical Center noted that Dr. Skaggs began working as a radiation oncologist at Chicago's Michael Reese Hospital while he was completing his post-doctoral studies. His medical career was interrupted by World War II when he was assigned to the Department of Terrestrial Magnetism at the Carnegie Institute in Washington, D.C. While there, Skaggs helped design a radio wave system for detecting an anti-aircraft shell's proximity to an enemy target aircraft.

Skaggs was transferred to the Manhattan Project's secret laboratory at Los Alamos, N.M., in 1943, where he worked on a project that created a proximity fuse for the atomic bomb that was dropped on Hiroshima, Japan, on August 6, 1945. Three weeks before the Hiroshima blast, Skaggs watched the Trinity A-bomb test blast near Alamogordo, N.M., from a bunker that was 20 kilometers from Ground Zero. None of the scientists who developed the bomb could imagine the size and intensity of the explosion. As soon as he witnessed it, Skaggs realized that the fuse that was designed for the "Little Boy" bomb would detonate and consume the aircraft before it could escape from the blast. Skaggs and his colleagues quickly redesigned a detonation device that gave the Enola Gay, the plane that carried the bomb to its target, an extra 30 seconds to get away. The bomb was calibrated to explode at an altitude of about 1,900 feet from the ground. Although many details about the bombing remain classified military secrets, it is widely believed that extra time for the bomb's descent was accomplished by attaching one or more parachutes to the bomb.

Dr. Skaggs returned to Chicago immediately after war's end, and returned to his work in radiation oncology at Michael Reese Hospital. In 1948, he joined the University of Chicago faculty as an assistant professor in radiology. He was promoted to associate professor in 1949 and was put in charge of developing the radiation therapy facilities at the Argonne Cancer Research Hospital which when it opened in 1953, was the country's first hospital that was devoted entirely to the use of radiation to treat cancer.

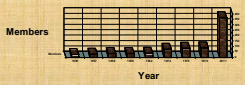
Skaggs, who was promoted to full professor status in 1956, also designed and built one of the first analog computers for calculating the radiation dose to various tissues for use in planning radiation therapy. Completed in 1953, the electronic components for the computer filled a small room.  
Skaggs retired from the university in 1979, and accepted a position with the King Fahad Specialist Hospital and Research Center in Riyadh, Saudi Arabia, where he spent the next five years developing a neutron-therapy facility [2].

[1] <http://www.uchicago.edu/news/2009/20090415-skaggs.html>  
[2] <http://techweek.wordpress.com/2009/04/28/8-lectures-skaggs-rl/>

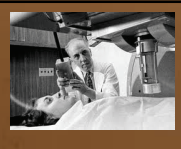
### Did you know?

- Annual membership dues for the original AAPM Midwest chapter were only 1 dollar when the organization was first formed in 1956.
- Dr. Skaggs, one of the pioneers in creating "The Radiation and Medical Physics Society of Chicago" (today known as the AAPM Midwest Chapter) was put in charge of developing radiation therapy facilities at the Argonne Cancer Research Hospital, the first medical facility to use radiation to treat cancer when it opened in 1953. (The hospital is now part of University of Chicago Medical Center).
- Robert S. Landauer, the founder of Landauer, Inc., which is still providing monitoring and dosimetry services, was one of the first charter members of the AAPM Midwest Chapter.
- In June 8, 1959 the Radiation and Medical Physics Society of Illinois decided to create an Illinois Board of radiation Physics charged with the responsibility for the certification of individuals as Radiation Hazard Control Experts.
- By April 7, 1960 the Illinois Board of Radiation had certified 12 physicists as Radiation Experts.
- The Radiation and Medical Physics Society of Illinois received and invitation to attend a meeting of the International Liaison Committee of Medical Physics held in Stockholm on August 4, 1961.
- Total Chapter assets in 1966 were \$203.00.
- AAPM became a Member Society of the AAP in 1974.
- Along with colleague Lawrence Lantz, Dr. Skaggs built a linear accelerator, called the Lineac, for medical applications. The Lineac took eight years to finish and cost \$450,000. Completed in 1959, the machine was used for 34 years to treat patients from all over the country.
- Dr. Skaggs designed and built an early analog computer to measure radiation dose to various tissues in the early 1950s. In the 1970s, he, with colleague Franca Kuchnick, developed a method to produce neutrons for radiation therapy.

### Membership History



### A glimpse of MCAAPM



1991 - Washington, Radiation Physics, Donald E. Young, who directed development of MCAAPM, and Publisher Lester Skaggs, of the University of Chicago discuss cancer therapy unit proposal during the 4th meeting of SARE Panelists. Photo by Tim Redding, RN.

Lawrence Lantz, PhD

Lester Skaggs

MCAAPM April 19, 2008 spring meeting at Alexian Brothers Hospital in Elk Grove Village, IL