

From “Lessons from the MH Hotline.” Written in 2012 by MHAUS President Henry Rosenberg, M.D. and found at [Lessons from the MH Hotline - MHAUS](#).

This past October, Dr. Sheila Muldoon Director of the MH Diagnostic Laboratory at the Uniformed Services University and Board member of MHAUS for many years, officially retired from her position on the faculty of the Uniformed Services University of the Health Sciences. Although she is no longer employed by the University, this does not mean that she will not continue to make contributions to the understanding and management of Malignant Hyperthermia.

The community of patients and clinicians and scientists interested in the problems of MH owe Sheila a huge debt of gratitude for her work on MH for more than 25 years. She and her colleagues at Uniformed Services have contributed enormously to our understanding of the molecular genetics of MH. She has guided, supported and trained many clinicians and scientists who themselves have made contributions to medicine and to MH. She has been on the Board of MHAUS for more than 20 years, has served as the Vice President for Scientific Affairs for most of that time and also served on the MH Hotline for 20 years. She has been a strong supporter of the activities and goals of the North American MH Registry and helped guide many of the important studies that have emanated from the Registry.

The laboratory for the study of MH at Uniformed Services has not only sponsored investigations in the molecular genetics of MH and described the relationship between unusual clinical presentations of the disorder and the pathophysiology of the disorder, but the center has been performing muscle biopsy diagnostic testing for MH for those in the military since the early 1980s. The laboratory she established has been one of only a few in North America that worked on perfecting the muscle biopsy diagnostic test, performed original research in animals who are MH susceptible, explored the molecular genetics of MH, as well as the cellular biochemistry of the disorder. In addition she has authored close to 100 original publications in the peer reviewed literature and has organized educational symposia and has herself lectured widely on MH.

Dr. Muldoon, however did not start her career with MH in mind. Rather, her first interests were in the physiology of vascular smooth muscle. It was only after she moved from Mayo Clinic in Rochester, Minnesota where she was performing clinical work as well as conducting research in smooth muscle, to the Uniformed Services University in 1977 that her interest in MH developed. In part, this was because the military was concerned about the implications of the diagnosis of MH in military personnel. In 1987 she was appointed Chairperson of Anesthesiology at the University. Despite clinical and administrative activities, in addition to her research in MH, she continued her active research in the pharmacology and physiology of smooth muscle. I played a part in her introduction to MH diagnostic testing when she visited my laboratory at the Hospital of the University of Pennsylvania, and later at Hahnemann University, to become familiar with the contracture test. We became fast friends and colleagues since that time. Later, in order to understand genetic testing, she spent several months in Wurzburg, Germany learning the techniques of working with DNA. A steady stream of original investigations demonstrating the relationship between molecular changes in MH susceptible persons and clinical manifestations of the disorder followed.

Dr. Muldoon established a cadre of excellent clinical and laboratory scientists at Uniformed Services to work with her on the problems of MH at every level. I hesitate to list them all for fear of omitting some of the names. Many were military anesthesiologists who worked with her for a few years and then moved on to other posts. A few however, have been collaborators for many years, such as Drs. Said Bina and Nyamkishig Sambuughin. One of her trainees who also has worked for many years on the problem of MH, Dr. John Capacchione has now taken over the leadership of the MH laboratory. In the early 1980's she established a collaboration with the Anesthesiology Department at the Children's National Medical Center (CNMC ) in Washington D.C. that offered diagnostic MH testing to non -military families in the Washington area. This collaboration continues to this day under the direction of Dr. Richard Kaplan and Dr. John Capacchione. Dr. Muldoon stepped down from the Chairmanship position in 2001, but continued to devote her time to the problems of MH and to support the North American MH Registry and MHAUS.

In recognition of her contributions to the Uniformed Services University and to the promotion of excellence in medical education and research, Dr. Muldoon was awarded the prestigious Carol J. Johns medal by the University.