

AANEM news

Generous Donation Honors Dr. Edward H. Lambert

The email simply read, “I wish to do something special to acknowledge the 100th anniversary of the birth of my late husband, Dr. Edward Lambert (born August 30, 1915), who was a founding member of the AANEM.” This brief message from Dr. Vanda Lennon, was both humble and understated, as her intention was to make the largest individual donation to the AANEM Foundation for Research & Education in its history, a legacy gift valued at \$100,000 to fund the Edward H. Lambert Lectureship. Established by the AANEM in 1976, this lectureship honors Dr. Lambert’s contributions to the field of neuromuscular and electrodiagnostic medicine research and his leadership in the AANEM.

A Beautiful Mind, and Love Story

When Dr. Lennon shared stories of her husband’s career and their 28-year marriage, she described her husband in many ways - brilliant, quiet, handsome, romantic, playful. They met in 1974, when Dr. Lambert flew to California to advise on a research project at the Salk Institute in San Diego where Dr. Lennon was an assistant professor. She and her basic scientist colleagues had developed an animal model of



Drs. Vanda Lennon and Edward Lambert

myasthenia gravis. “We fell in love over a rat,” Lennon laughed, “this started a long distance relationship that culminated in marriage 14 months later.” Even after marriage, they kept households in two states for several years – Dr. Lambert continuing his career at the Mayo Clinic in Minnesota, while Dr. Lennon continued hers in California. In 1978 she joined him in Minnesota as the founding Director of Mayo’s Neuroimmunology Laboratory.

Of course long before he met the love of his life, Dr. Lambert’s passion was medicine. Often referred to as the “Father of EMG (electromyography)”, he received his medical degree in 1939, from the University of Illinois, College of Medicine in Chicago, Illinois, and PhD in physiology in 1944, then completed a rotating internship at Michael Reese Hospital in Chicago and physiology fellowship at the University of Illinois, College of Medicine. Spanning World War II, he spent a total of 10 years in metabolic, cardiovascular, and pulmonary research, investigating medical problems associated with aviation, including factors promoting man’s endurance of cold and centripetal acceleration.

He joined the Mayo Clinic Aeromedical Laboratory, in Rochester, Minnesota in 1943, to study “acceleration on man in aircraft and human centrifuge”. One of the many framed photos of her husband Dr. Lennon keeps in her office is of a young Dr. Lambert, sitting on the wing of a war plane used in his research investigating the physiological effects of high performance flight on military pilots. This research yielded the first anti-gravity suits

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Joint AANEM Foundation/MDA Grant to Fund SMA Research

The first development grant jointly funded by the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) Foundation and the Muscular Dystrophy Association (MDA) was awarded in August of 2015 to Constantin d’Ydewalle, a postdoctoral fellow at Johns Hopkins School of Medicine in Baltimore. Dr. d’Ydewalle was awarded \$180,000 over 3 years to test a gene therapy designed to increase levels of SMN protein in spinal muscular atrophy (SMA).



Dr. d’Ydewalle

The work may lead to the development of a new treatment that could be useful by itself or in combination

with other therapies in development.

Dr. d’Ydewalle graduated from the University of Leuven, Belgium with a BS and MS in biomedical sciences, and a PhD in medical sciences in the field of neuromuscular disorders. In 2012, he joined the laboratory of Dr. Charlotte Sumner at the Johns Hopkins University School of Medicine, neurology department. Dr. d’Ydewalle recently shared his thoughts on the award:

What spurred your interest in this field, and your interest in SMA research?

There are two reasons why I wanted to study SMA. First, SMA is a

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AANEM Ethical Guidelines Published

The newest version of the *Guidelines for Ethical Behavior Relating to Clinical Practice Issues in Neuromuscular and Electrodiagnostic Medicine* was published in the December issue of *Muscle & Nerve* (Muscle Nerve, 52: 1122–1129) and is now available on the AANEM website. Ethics Committee members Drs. Naomi A. Abel, Eduardo A. De Sousa, Matthew P. Mayer, and David A. Simpson, completely revamped the Ethical Guidelines in 2015, investing nearly a year of research and editing.

Revisions made to the ethical guidelines include: a complete rewrite of guidance on informed consent; the addition of several subsections offering guidance on genetic testing of neuromuscular disease and potential ethical dilemmas; and the

addition of a section on the ethical conduct of technologists in the electrodiagnostic laboratory.

Four new Ethics Vignettes were also published to the AANEM website following their debut presentation at the 2015 Annual Meeting. Topics include: Deception and Non-Disclosure; Refusal to Care for Patients; Ethical issues in Managing Duchenne Muscular Dystrophy; and Bad Patient Experience vs. Good Patient Experience.

Access the AANEM Ethical Guidelines and Ethics Vignettes at: <http://www.aanem.org/Education/Ethics>. ■



Donation Honors Dr. Lambert's 100th Birthday

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(G-suits). “In addition to experiencing repeated episodes of loss of consciousness as human subject in centrifuge experiments, Ed would go up in a Douglas Dauntless dive bomber with the pilot - both provided by the US Army Air Corps, forerunner of the USAF - to monitor cardiovascular performance while flying in spirals over Rochester, to determine if G-suits were effective in diminishing the physiological effects of flight,” said Lennon. “He was a human guinea pig. As documented by state-of-art instrumentation - video, a spring-loaded indicator of g-forces, and a tool they constructed to measure blood flow at head level - he often fell unconscious during the flight, while the pilot wearing the prototype G-suit was unaffected.”



Dr. Lambert pioneered studies in G-suits for flight.

As for his storied history with EMG, in the 1940's, it was a new technology largely being applied to assess peripheral nerve injuries sustained by war veterans, but of emerging interest as a tool to evaluate myasthenia gravis. As Dr. Lennon described it, her husband had to build and maintain his own EMG machines and establish protocols based on physiological principles and normal values. His self-taught engineering skills helped him develop many “contraptions” to quantify pathophysiological findings, now the basis of standardized studies. “Ed was one of the first modern era scientists to utilize EMG,” she said. “Almost all physicians employing EMG today have been touched in some way by my husband's research and teachings.”

His most famed research began in 1948, with his application

of EMG to myasthenia gravis. In 1956, he and his neurologist colleagues, Lee Eaton and Doug Rooke, distinguished the myasthenic syndrome known since 1968 as the Lambert-Eaton myasthenic syndrome (LEMS).

Dr. Lambert was head of the Clinical Electromyography Laboratory at Mayo Clinic from 1947 to 1976. He moved to the University of Minnesota at age 70, after mandatory Mayo retirement, to continue his research until age 79. In 1994, he returned to Mayo Clinic as a special project associate working in the immunology department until final retirement at age 83. His 35-page curriculum vitae includes 281 published research papers and abstracts, 57 collaborative with Dr. Lennon. He passed away in 2003 at the age of 88.

As for his leadership in AANEM, Dr. Lambert was a founding member of the organization then known as the American Association of Electromyography and Electrodiagnosis (AAEE). He served as President in 1956, and served on the advisory board of the AANEM journal, *Muscle & Nerve*, for the first 12 years after its establishment. In 1995 he was awarded the AANEM's most prestigious honor, the Lifetime Achievement Award.

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- Vanda Lennon

Brenda Riggott, AANEM Director of Foundation & Corporate Relations, said “Meeting with Dr. Lennon and learning about Dr. Lambert's contributions to this field of medicine has been one of the highlights of my career at the AANEM. Her generous donation to the Foundation

is a testament to the love she has for her husband, and will assure that his contributions to the field of electrodiagnostic medicine and the AANEM will remain very much alive through the named lectureship.” The donation also includes numerous books from Dr. Lambert's personal collection, many signed and with handwritten notes. Select books will be included over the next several years in the AANEM Foundation's Silent Auction held in conjunction with the AANEM Annual Meeting.

For more information about Dr. Lambert visit www.aanemfoundation.org/donations/legacy donations. ■