

## In Memoriam: Charles Yingling, Ph.D., CNIM, D.ABNM



It is with great sadness that we lost a leading pioneer in intraoperative neuro-monitoring on May 2, 2021, Dr. Charles (Chuck) Yingling. Dr. Yingling's achievements and accomplishments are vast, yet he always found time to give back to every individual by answering phone calls for any IONM/EEG professional needing guidance on an IONM technique, delivering invited platform presentations, publishing research articles and serving as a peer reviewer for *The Neurodiagnostic Journal*. His passion was to expand the field and share his knowledge base to better care for patients.

While an internationally known top practitioner in the field of IONM, Chuck humbly started in New York City as an actor. That lovely baritone-bass voice projected first on the live stage before we ever heard at an IONM/EEG symposium, or a surgeon heard it loudly and abruptly in an OR suite. After acting, Chuck's curiosity of neuroscience took him to Rice University where he pursued his Ph.D. in 1975. Following his Ph.D., he landed at the University of California, San Francisco (UCSF), where he was Professor of Neurological Surgery and Anesthesia and Director of the UCSF Neuromonitoring service from its inception in the early 1980s until 2002. Even after retiring from UCSF, Chuck continued to contribute to the field of IONM by working in a privately held IONM company as the Chief Scientific Officer, training practitioners until 2013 when it was bought by a large commercial entity. At that time, despite his retirement, Chuck joined with two other partners and started Golden Gate Neuromonitoring in San Francisco, a small boutique IONM company taking on the challenge and passion to be the IONM practitioners who set the standards for collaborative (surgeon/practitioner) IONM delivery.

Drawn to traveling with a huge bucket list of places to go, as a younger man, Chuck spent his time on the water. As an avid blue water sailor, he once traveled to the north pole, across the southern Pacific to Pitcairn Island. Later in his life, Chuck spent time with his family, wife Pat Lund of 42 years, late son Noah, daughter

Shannon and granddaughters Cora and Ellie on a classic 1950's wooden motor vessel anchored in the harbor of Sausalito, California. Here, he spent many a night perfecting his skills as an aficionado of classical Indian music, playing a tabla and Indian flute, while digesting many a book. Chuck was an avid reader of IONM, neurosciences and personal readings. Over the years he amassed a great library filled with books from sports to religion to science. He always told me good readers are good writers and he then would promptly send me an article to read. When not on the water, you could find Chuck on the golf course or traveling to Austin, Texas, to visit his other daughter Arden, from his first marriage, and granddaughter Geta. He was always trying to perfect his passions. Whether it was seeking to "master" Beethoven's piano repertoire or studying different cultures while planning travel.

Dr. Yingling's other accomplishments include serving as a founding Board member of the American Society of Neurophysiological Monitoring (ASNM) and a Fellow of the ASNM. He served as ASNM President from 1997-98. He was also a founding Board member of the American Board of Neurophysiologic Monitoring (ABNM), and of the American Board of Neurophysiologic Monitoring Programs (ABNMP). He was a member and fellow of the American Clinical Neurophysiology Society (ACNS) and has published numerous journal articles and book chapters on many topics in neuromonitoring, most notably authoring articles on cranial nerve monitoring during skull base surgery, transcranial motor evoked potentials, corticospinal tract mapping, and selective dorsal rhizotomy. If I had to count, Chuck personally monitored over 4,000 surgical cases in the operating room keeping patients successfully safe from iatrogenic injury. It was not unusual to find Chuck crawling around on an OR floor troubleshooting and coming up with new ways to solve IONM problems. With that curious mind, he collaborated with a medical manufacturer during his days at UCSF and invented the Yingling Flex Tip Monopolar Stimulator Probe, a pliable probe for investigating those tight places where nerves are hiding during craniotomies, still selling commercially today.

Chuck was interested in lifting those around him up; up to being better surgical neurophysiologists, up to being outstanding neurodiagnostic technologists, and up to being better persons. He challenged mundane thought and played the devil's advocate in most situations where he feared complacency was the sense of the day. This perhaps made him intimidating at times and controversial at others. At the end of the day, however, Chuck's goal was to make an impact on the advanced delivery of intraoperative neuromonitoring. This he accomplished.

In closing, I hope everyone has a "Chuck" story. He touched so many lives throughout his career with his knowledge, big personality, thoughtfulness, and gift of curiosity. While I am deeply saddened of our loss, I have a smile on my face as I remember his multiple stories told in that wonderful bass voice.

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