How a military career shaped a life in sleep medicine

In this interview, we speak with Michael Russo, MD, about his journey from a military career to running a neurology and sleep disorders practice in Hawaii, his experiences serving around the world, and how meeting his wife Nataliya at SLEEP 2015 shaped his personal and professional path.

You've served in diverse locations around the world, including Central America, Germany, Korea, and several U.S. Embassies. Can you share a snapshot of your journey — how you got started and some of the most memorable or impactful moments from your international assignments?

I joined the U.S. Army as a ROTC cadet at Princeton University. I went to Chicago Medical School on a U.S. Army scholarship, graduating as a captain. I spent my internship at New York's Metropolitan Hospital Center. After completing my psychiatry internship, the U.S. Army in its infinite wisdom — sent me to the 98th General Hospital in Nuremburg, Germany, as an ER physician. As I knew nothing of ER medicine, and before I could kill someone out of ignorance, I transferred to the 1st Armor Division's Second Brigade as brigade surgeon, where I successfully managed the health of the 5,000 soldiers and served as a medical officer for the U.S. Embassy in Prague and in Budapest. At that time in the late 1980s. Americans were not welcome in Eastern Europe. I was there when the Berlin Wall came down and was relieved to see the Iron Curtain fall throughout Eastern Europe.

I began my residency in neurology at New York University / Bellevue Hospital Center in 1990, just as Saddam Hussein invaded Kuwait. I joined the Rainbow Division of the New York National Guard, but I was not deployed to Desert Shield or Desert Storm. I was able to complete my residency, but not without regrets for not being in the field with my fellow soldiers. I returned to the Army after my residency, and I was assigned to a hospital in Seoul, Korea, as the neurologist for the Army and Air Force members. In this austere environment I learned of the need for strength through deterrence. I remember that all of Korea was totally silent, in a state

of shock, when we learned of the death of North Korea's founding dictator, Kim II Sung, in 1994. I was assigned as visiting medical officer to the U.S. Embassy in Beijing and in Bangkok, where I again saw how our U.S. State Department personnel worked closely and carefully, so far from their homes, and in sometimes hostile environments.

After Korea, I was assigned to Brooke Army Medical Center in San Antonio, Texas, where I became the director of neurological research. During this period, I was deployed as a medical officer to the deserts of Kuwait with the infantry.

Driving down the "Highway of Death" with a 100-truck convoy was the first time I experienced the effects of sleep deprivation on military operational performance. The highway was straight, no curves, and wide, with smoking, burned tanks, cars, and trucks bulldozed off the sides. The brigade had no significant sleep when we were asked to form the convoy and drive to the desert outpost. Everyone in the convoy was half asleep, or fully asleep. Movement was slow. My driver and I both fell asleep. When we got bumped by the truck behind



us, we woke up, and we rolled about 10 feet forward bumping the truck in front of us, then we fell back to sleep. That bump awoke the driver who then rolled his truck 10 feet, bumping the truck in front of him. So it went, for hours, with a hundred vehicles, rolling and bumping and awakening the drivers ahead. As the highway was straight, no trucks rolled off the road.

I returned to Washington with a new understanding of the effects of sleep deprivation on military performance and joined the sleep research unit at Walter Reed Army Institute of Research's {WRAIR} neuropsychiatry division. The division was studying the effects of sleep deprivation on performance in military operations. In that period, temazepam was used to help military members sleep, and methylphenidate was used to keep them alert. We studied the newly developed caffeine chewing gum. Stay Alert, and newly released modafinil, and later armodafinil.

During this period, I worked with the Defense Advanced Research Projects Agency (DARPA) on sleep and wake mechanisms and became director of WRAIR's neurosciences division. Having developed an interest in pilot flight performance, I then transferred to the U.S. Asmy's Aeromedical Research Laboratory, a sister lab of WRAIR, at Fort Rucker, Alabama, where I worked with pilots from the Army, Air Force, Navy and NASA to study how to best maintain alertness and situational awareness under duress.

In 2000, I had the honor of being selected for the Chairman of the Joint Chiefs of Staff Award for Excellence in Military Medicine, an award given at the Pentagon by the chairman to the top physician in the U.S. Army.

Later, I transferred to Tripler Army Medical Center in Hawaii, where there is a chronic shortage of physicians. When I completed military service, I decided to stay in Hawaii when I retired and utilize the skills learned throughout the prior years.

We understand you met your wife Nataliya at SLEEP 2015. Can you share the story?

In 2015, I attended the SLEEP meeting in Seattle. I was placing my poster when I met Nataliya, who was presenting her poster next to mine on work completed while a Fulbright Scholar at New York University under the mentorship of Sanjeev Kothare, MD. Nataliya and I worked with the same NYU neurology faculty, and we found we shared similar interests. Our backgrounds were totally different. I was raised in New York while she was raised in Onipro, Ukraine. She was a pediatrician while I worked primarity with adults. We spoke for about two hours during the poster session. When she expressed that going home was unsafe, I invited her to Hawaii.

Nataliya arrived in Hawaii in July 2015 with her 8-year-old son Yuriy. In October 2015, we married in Honolulu, with a ceremony on the beach near my sailboat. We've been so very happy together. Yuriy now has a sister to share life with. Our daughter, Jeanne-Marie, is 6 years old.

Nataliya and I are entering our tenth year together. We plan to celebrate on June 9 at SLEEP 2025, 10 years to the day we met at the poster session.

After 34 years in the Army, what motivated you to open a neurology and sleep disorders practice in Hawaii?

None of my military training prepared me for the business of medicine or running a private practice. I had no training on billing, submitting claims or obtaining authorizations. Nataliya learned the basics of American health care management and turned our practice into a profitable one. We have three offices on two islands (Oahu and Big Island) and see about 200 patients per week. Nataliya runs the practice, and I consult the patients.

Can you describe some of the unique challenges and opportunities of providing neurological and sleep care in Hawaii?

Hawaii is a 350-mile island chain. Kauai, the northernmost inhabited island, is followed by Oahu. Maui, and the 8ig Island, each about 100 miles apart. Travel is by air, as there are no ferries.

Each island has its own hospitals and health care systems, typically unable to meet the demand of the population. We have about 20 practicing sleep providers in Hawaii, with about 15 sleep labs scattered over four islands. With sleep techs so scarce, some of the labs are closed temporarily while seeking new techs. I have patients flying from other islands for sleep testing.

Treating patients for sleep apnea is a challenge. Many Big Island patients live on the slopes of Mauna Loa or Maua Kea, where there is no public water or electricity. Water is captured into large holding tanks and purified, while electricity is from solar panels or generators. Patients are reluctant to add a CPAP to their already limited electric system. I've made house calls to some patients who cannot easily travel. Unpaved roads weave through the rain forest, where there is no cell service, no Wi-Fi, and no street signs of any type to guide the way.

Since being elected to the board of directors of the California Sleep Society, I hope to bring the extensive knowledge of colleagues in California to our underserved population in Hawaii.