The Intersection of Art + Neurosurgery

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THE BEAUTIFUL BRAIN

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THE LEGACY OF ALBERT L. RHOTON JR.
Audrius Plioplys, MD, is both a neurologist/neuroscientist and a professional artist. His neurologic concentration was on cognitive disorders; from autism in children to Alzheimer's disease in the elderly. During his career he worked to improve the care provided to severely disabled cerebral palsy children. He has 75 neurology articles and received $2.8 million in research grants. In addition to a productive clinical career, Dr. Plioplys is a prolific artist, seeking to blend his neuroscience background with artistic expressions through a number of different media. His art is neo-conceptual: a metaphorical investigation of thinking and consciousness. His works have been displayed in public venues in the US and internationally. He retired from neurology seven years ago, and is now engaged in art full time.

Congress Quarterly: Please tell us a little bit about your background and upbringing.

Dr. Audrius Plioplys: I was born and raised in Toronto, Canada. When I was 12-years-old, my family moved to the Chicago area. I graduated from the Pritzker School of Medicine at the University of Chicago in 1975. My medical internship was at the University of Wisconsin in Madison, adult neurology at the Mayo Clinic, pediatrics and child neurology at Toronto’s Hospital for Sick Children. This was followed by two years of neuroimmunology laboratory research in Quebec City, funded by the Medical Research Council of Canada. Subsequently I was a staff neurologist, and neuroimmunology researcher at Toronto’s Hospital for Sick Children, with a faculty appointment at the University of Toronto. In 1990, I moved to Chicago where I continued my basic laboratory research, and was the head of both child neurology and the Alzheimer’s disease research program.

CQ: Was there a seminal moment or event that led to your interest in the nervous system?

AP: When I was in seventh grade, I became enthralled by my science teacher. By the end of the year, I had decided to become a scientist. The late 1960s was an exciting time for physics, new atomic particles were being discovered almost daily, and quarks had just been postulated. When it was time to go to college, I chose the University of Chicago as it had one of the best physics programs. Everything was going well until the start of my second year when I found out that I would have to take a year of biology. I had no interest in frogs, bugs, or blood. Begrudgingly, I attended a biology class taught by Richard Mintel. When he started lecturing about the nervous system, I was mesmerized. How is it that this ensemble of cellular tissue could produce thought, self-awareness, and consciousness? This question gradually became of immense interest to me. So I left physics.
CQ: Why did you choose to go to medical school?
AP: In starting to pursue my interests in the nervous system, I had two options. Either enter a neuroscience doctorate program, or go to medical school and become a neurologist/neuroscience researcher. I decided to take the longer and harder course—medical school. I reasoned, correctly, that if I want to understand how the brain functions, having access to patient material would enhance any laboratory work that I might undertake.

CQ: You have mentioned that you spent a lot of time as a medical student on the neurosurgical wards. Is there a memorable patient or surgical case that you can recall?
AP: When I started medical school, my interest was in the nervous system, although I did not know if I should pursue neurology, neurosurgery, or psychiatry. Somehow, operating rooms appealed to me, and I decided to pursue this route. During free time and summer breaks I attended neurosurgery clinics and assisted in neurosurgical operative procedures. The chairman of neurosurgery at the university at that time was Sean Mullan, a pioneer in aneurysm surgery. He took a liking to me and acted as my mentor. In my third year of medical school I actually opened, drilled the burr holes, removed the skull flap, and prepared the surgical site for Mullan’s aneurysm clipping. I also closed at the end of the procedure. I was well on my way to a career in neurosurgery. But when visiting neurosurgery residency programs, I discovered that residents were on call every other night—they rarely slept. I understood my own biology and knew that I would not be able to physically handle that kind of work load.

CQ: What were your earliest artistic endeavors?
AP: When I was growing up in Toronto, my best friend was a mischief maker, constantly in trouble. One summer, his parents decided to keep him off the streets by enrolling him into an art program. When I visited him, I saw him start with a blank canvas, which then, very gradually, would get filled with lines, then layers of colors, resulting in a beautiful painting. Beauty from nothing! That stunned me. This was the seed for art that was planted in my soul during childhood. It started to grow when I was in medical school.

CQ: What led you to begin painting during medical school?
AP: I started painting at the beginning of my second year. In addition to medical school and my volunteer work, I avidly painted, studied art, and went to museums and galleries. The passion for art became so great that it reached a crisis situation. I thought that I had made a mistake by going into medical school. Instead of dropping out, my friends convinced me at least to finish my internship, which I did, and then I left medicine. I had no intention of returning to neurology or neuroscience. I thought that neurology and art were incompatible worlds.

CQ: You initially left medicine to pursue your artistic career, but then decided to resume your medical training and profession while maintaining your artistic endeavors. Was there a moment or event that led you to this decision?
AP: I moved to Washington, DC, and established a studio. Everything went very well. My art quickly adapted to the current trends of conceptual art, with installations using light and sound systems. I had art exhibits and received positive reviews and write-ups from the major DC magazines and newspapers. However, I gradually started feeling guilty. I had accumulated so much knowledge of neurology, but I was not using any of it to help others. In a gospel story, Jesus said that no one puts a lit candle under a bushel basket. That is exactly what I was doing. I decided that I had made an error. I realized I could blend the two disciplines—I could make neurology/neuroscience compatible with art.

CQ: What have been the most important sources of inspiration for your art? What about your practice of clinical medicine and research?
AP: For me art has always been a profession, an occupation. I actively work on creating images, hopefully attractive ones, with depth and content. Inspiration does not play a role. How much inspiration does it take for a neurosurgeon to successfully perform a surgical procedure? In that regard, the practice
of neurology, neuroscience research, and art are all similar—hard work and dedication are the cornerstones to success.

Artistically, I have been exploring the origins of thought, of consciousness. Approaches have included large scale paintings, prints on paper, site-specific installations, and light sculptures with LED light systems. The underlying images are of my own previous art works. I transform them into exotic forms, just as our memories transform visual impulses into vast neuronal web-works. Multiple layers are assembled, modified, and blended. Cerebral cortical neuronal drawings, superimposed and subtracted from the surrounding color, reveal deeper layers of thoughts and memories. My own MRI brain scans and EEGs are interwoven. From neuronal complexity, words, thoughts, and consciousness emerge. Basic neuroscience issues are incorporated into my art work.

CQ: Do you have a painting of which you are particularly proud? What is it about that piece that makes it stand out for you?

AP: Actually two pieces, Dreams / Explorations and Blue Consciousness. These are paintings on canvas, 5-by-6-feet and 10-by-10-feet, respectively. The underlying image in Dreams / Explorations are the foot paths on the cliffs of Sagres, Portugal, where Christopher Columbus started to dream of distant travels. The work appeared on the front cover of the January 2013 issue of Neurology. It was the first time that a visual image graced the cover of the most widely read neurology publication. Blue Consciousness was commissioned by the Blue Man Group in Chicago. The 10-by-10-foot original painting was installed in September 2013 on an exterior wall of the theater. The underlying image is that of a polar bear that I photographed on Beechey Island in the high Canadian arctic. In the near future, Blue Consciousness will also grace the front cover of Neurology.

CQ: There is much talk recently about a rising tide of burnout amongst physicians. As someone who spent a long time practicing medicine and other intellectual pursuits, what do you think are the remedies to this growing trend?

AP: This is the one question that I do not have a good answer for. I was very fortunate in that I was able to balance two professional careers with a host of personal matters. I wish that others would likewise be able to do so.

Dr. Plioplys’ art can be found at his website, www.plioplys.com, and select items are available for purchase at www.plioplys.net.