

Program: Pictures at an Exhibition

Speaker: Robert Pascuzzi, MD, Chairman, Dept. of Neurology, IU School of Medicine

Guests: Ed and Penny Arauco, Bruce Morical, Sisir Dhar

Attendance: 120

Introduced and Sponsored By: Karen Bumb

Scribe: Tom Lauer

Editor: Ed Nitka

Dr. Pascuzzi was raised in South Bend IN and is a graduate of IU and IU Medical School. He did a residency and fellowship at the University of Virginia, and returned to IU Health in 1985 as a faculty member and has been Chair of the Neurology Department since 2004. His research interests include therapeutic trials for neuromuscular diseases such as ALS, Myasthenia Gravis and Lambert-Eaton Syndrome. He has held leadership and editorial roles in neurologic publications and has been a director and also past president of the American Board of Psychiatry and Neurology.

Dr. Pascuzzi gave a brief commentary on the IU Neuroscience Building and our field trip the previous week. He included commentary about dementia and Alzheimer's disease. He indicated we are all aging into degenerative brain disease. However, his specialty is neuromuscular disease, not dementia at IU.

The Musicians:

Rachmaninov had a neurologic problem. He was born in 1873 and had a tough childhood. He showed lots of musical talent, but suffered in the traditional school experience, typically failing most (all) of his exams. After writing his first symphony, the reviews were not positive and he became clinically depressed, ultimately not composing anything for the next three years. He came to the US in 1917 and began composing, but had a medical condition that haunted him on and off through most of this portion of his career. He had severe pain in the right temple at times that was intense, sharp and stabbing. During these episodes of horrible pain, he couldn't work. He did have multiple diagnoses by several doctors, but medical science at the time was unable to help him. He was, however, pain free while performing on stage. In Paris, he was treated by dentist and hypnotist. At some point the pain stopped. He had a neuralgia, that is, something was irritating a nerve in the face that was causing the whole problem. Unfortunately, it was not treatable at the time. He continued to tour, but died in 1943 of progressive malignant melanoma. Between 1887 and 1910 he composed 80 pieces of music, 2 symphonies, and 3 piano concerts. After 1910, when his facial pain began, he composed only 30 pieces (half were arrangements of compositions by other musicians).

In 1937, Cole Porter (from Peru, Indiana) was in a horse accident where both legs were crushed. He had multiple fractures which led to 34 surgical procedures and a life with a lot of pain. Ultimately, in 1958 his physicians convinced him to have an amputation, but he still needed a lot of care to simply move around. He also still felt pain in the leg that was amputated as though it was still there. This "Phantom Limb Pain" was real and has a neurological basis that associated with how the brain is wired. After this amputation, Porter never wrote another song and died in 1964.

George Gershwin was in the middle of a promising career as a composer in the 1920s and 30s, when in 1937, he began having blinding headaches and recurring impression that he smelled burning rubber but nothing was on fire. In the summer, his headaches became more severe and then he

Vol. 99 No. 22 June 11, 2018 Page 2 became lethargic and sleepy (one of the worst neurological symptoms you can get). He likely had

Papilledema – swelling in the brain. However, with no MRI or CT scans, diagnosis was problematic. Surgery was to be performed by Walter Dandy, the premier surgeon at the time, but weather grounded his plane on the east coast. Due to Gershwin's worsening condition, a respected surgeon from Colorado was imported assisted by Cedars of Lebanon Hospital (LA, CA) staff, surgery indicated he had a temporal lobe mass in brain causing high pressure. This mass was long thought to be a large glioblastoma multiforme brain tumor. The mass was taken out, but Gershwin died the next day, possibly related to the surgical procedure. More recently, it is believed most of the mass was fluid in a cyst, not a large mass, but causing similar symptoms. In hindsight, he may have lived if the cyst part had been drained rather than removed.

Joseph Ravel was born in France in 1875 to a family of modest means, but they supported his love of music. In 1889, he played in his first public performance and also entered the Conservatoire in Paris, although he was not an academic success. Ravel likely had a family history of dementia. In the early 1930s, Ravel was having symptoms of aphasia, that is, the inability to comprehend and formulate language because of damage to specific brain regions. Hence, Ravel could understand, but had trouble doing things, such as writing and expressing music. By 1937, the problem progressed until ultimately, he underwent surgery. Medical records described a build up of fluid and sub dermal hematoma but nothing else. The surgeon didn't see anything on surface, but poked a hole in the brain, spinal fluid bubbled out of the brain, and the cortex collapsed. The surgeon couldn't fix him and Ravel died on the table. The inability to observe anything out of the ordinary suggests Ravel's problem might have been Alzheimer's disease. [Note: Alison Brown, a club member who was an opera singer at one time, adds that Joseph Ravel was called Maurice Ravel in the music world.]

Woody Guthrie, folk song writer, wrote "This Land is Your Land" in response to Irving Berlin's "God Bless America". Woody had Huntington's disease. He wanted songs that were positive. In 1945, he began having symptoms of coordination loss, restlessness, and episodic disorientation. Guthrie had a chaotic social life, but ultimately died of Huntington's Chorea, or simply Huntington's disease, in 1967. His mother also had the same disease.

Mr. Kris Kringle was written by Silas Weir Mitchell. Had central tremor, poor hand writing, but was the physician that coined the term "phantom limb".

Dr. William Osler was an early 20<sup>th</sup> century advocate of not letting individuals live after age 60 due to the natural degeneration of the brain. Dr. Pascuzzi indicated he tried to buy (on eBay) microscopic slides of his brain (because that's what neurologists do), but was unable to based on cost and timing of the auctions.

A number of questions followed that dealt with dementia and aging.



Robert Pascuzzi MD

FOR FURTHER INFORMATION: A complete copy of Dr. Pascuzzi's slides from today's talk are available at the Sciotech website through the following link:

[www.Sciotechclub.org/presentationsslides/MusiciansAndComposers.ppt](http://www.Sciotechclub.org/presentationsslides/MusiciansAndComposers.ppt)