'Spectre' villain fails neuroanatomy in latest Bond film

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James Bond's nemesis in the most recent film likely failed neuroanatomy, said real-life neurosurgeon and scientist Dr. Michael Cusimano of St. Michael's Hospital.

Ernst Stavro Blofeld, played by Christoph Waltz, tortured the famed hero using restraints and a head clamp system fused with a robotic drill, intending to first inflict pain and then erase 007's memory bank of faces.

But Blofeld didn't quite know his brain anatomy and would've probably hit Daniel Craig's vertebral artery and likely killed his character instead,
said Dr. Cusimano.

"Aiming to erase Bond's memory of faces, the villain correctly identified the lateral fusiform gyrus as an area of the brain responsible for recognizing faces," said Dr. Cusimano. "But in practice, the drill was placed in the wrong area, where it likely would have triggered a stroke or massive hemorrhage."

Today, the life-long fan of the Bond movie series Dr. Cusimano published a commentary on the error in the science journal, *Nature*.

"Although the filmmakers identified the correct part of the brain thought to be involved in the recognition of faces, the placement of the drill was incorrect, wrote Dr. Cusimano. The lateral fusiform gyrus is located in the temporal area just in front of the left ear; however Blofeld aimed the drill just below and behind the left ear, where the vertebral artery and bones of the neck are located.

"In terms of today's precision brain surgery, the villain was nowhere near the brain," said Dr. Cusimano.

Despite the anatomy fumble, Dr. Cusimano was impressed by Blofeld's grasp of Neuroscience.

"Because the lateral fusiform gyrus involved in memory, it's theoretically possible to impair a person's ability to recognize faces," said Dr. Cusimano. "There are documented patients that have 'face blindness' or prosopagnosia. But in this situation, he was so far off, that had Blofeld been my student, he would have surely failed his neuroanatomy."

*Spectre* opened to global success, breaking box office records in November 2015.
Dr. Cusimano said he remains a fan of the film and was highly entertained, but thinks Hollywood filmmakers should possibly hire a neurosurgery expert next time—he is happily available.


Provided by St. Michael's Hospital


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