

**Ask A Genius 91 – Life and Death (6)**  
**Scott Douglas Jacobsen and Rick Rosner**  
**February 16, 2017**

*\*Footnotes in & after the interview, & bibliography after the interview.\**

*\*This session edited for clarity and readability.\**

Rick: The legal aspects of death will change along with all of the controversies to come about whether artificial or augmented or transplanted intelligence has rights. Some social changes happen easily. For instance, interracial couples are now completely acceptable, except among some fringe white supremacist lunatics. That change happened without a lot of political wrangling. It just kind of happened over a period of 10 or 15 years, where interracial couples moved into the media as a brand of coolness. There's a movie out about an interracial couple fighting for the right to marry in the 50s. That whole thing has gone away.

I'm sure if you're an interracial couple that it has, not entirely but, gone away to a significant degree. There might be some micro-aggressions, but it is lesser than some American controversies (University of Minnesota, n.d.; DeAngelis, 2009; University of California, n.d.). One big ongoing American controversy is abortion, which is about the beginning of life rather than the end of life. It remains a completely divisive subject, but a change that has happened with much less controversy is that most people believe that measure of whether or not you're alive is whether or not your brain can still function. About 12 years ago, there was the Terry Schiavo down in Florida controversy.

Where this woman fell into a persistent vegetative state, the husband wanted to pull the plug because it was pointless. She had no chance of recovery. Then religious conservatives including those in the government, e.g. Jeb Bush, took the other side and it turned into a whole years-long legal wrangle. That stood out from a bunch of other situations. Besides exceptional situations like that, you don't get a lot of people arguing that it's anything but your brain that defines whether you can go on living. There may be aspects of life and death connected to future technical capabilities we have to artificially extend the life of the brain.

Some of those issues might be resolved without abortion-level reactions. Others will make people go nuts on either side. We've talked about the ways in which the life of the brain can be extended. You can have add-on technology that rides on inside or outside it. Few people are going to freak out and say, "You're playing God," if there are parts of your body you can replace with either circuitry of bio-circuitry, or specially grown cells. What's the gland that helps determine whether or not you have Parkinson's (Mayo Clinic Staff, 2015a; Parkinson Canada, n.d.; Parkinson's Disease Foundation, 2017)?<sup>1</sup> It's not the pituitary, is it (The Pituitary Foundation, 2017)?

---

<sup>1</sup> *Parkinson's Disease* (2015) states:

*Parkinson's disease is a progressive disorder of the nervous system that affects movement. It develops gradually, sometimes starting with a barely noticeable tremor in just one hand. But while a tremor may be*

**Scott: No, that's for growth hormone (Ibid.). It might be the substantia nigra because it produces dopamine (U.S. National Library of Medicine, 2017; Parkinson Canada, n.d.). The cells of that die relatively fast. Say 40% of them die (or get damaged), you're left with 6/10ths of a substantia nigra, then you start getting Parkinson's. Horrible disease.**

Rick: People like Michael J. Fox have some kind of surgery. Have they put in some kind of pacemaker? Often with Parkinson's, you have trouble with initiating movement. Once you're walking, you're walking, and you're okay. But starting walking can be a struggle.

**Scott: The main problem is mid- to late-stage. You lose the precise ability to move and coordinate motor functions, I think.**

Rick: There's some procedure that they can do that I think puts them in some electronic device that helps with that (National Parkinson Foundation, 2017; Mayo Clinic Staff, 2015b).<sup>2</sup> There's

---

*the most well-known sign of Parkinson's disease, the disorder also commonly causes stiffness or slowing of movement.*

*In the early stages of Parkinson's disease, your face may show little or no expression, or your arms may not swing when you walk. Your speech may become soft or slurred. Parkinson's disease symptoms worsen as your condition progresses over time.*

*Although Parkinson's disease can't be cured, medications may markedly improve your symptoms. In occasional cases, your doctor may suggest surgery to regulate certain regions of your brain and improve your symptoms.*

Mayo Clinic Staff. (2015, July 7). Parkinson's Disease. Retrieved from <http://www.mayoclinic.org/diseases-conditions/parkinsons-disease/basics/definition/con-20028488>.

<sup>2</sup> Deep brain stimulation (2015b) states:

*Deep brain stimulation involves implanting electrodes within certain areas of your brain. These electrodes produce electrical impulses that regulate abnormal impulses. Or, the electrical impulses can affect certain cells and chemicals within the brain.*

*The amount of stimulation in deep brain stimulation is controlled by a pacemaker-like device placed under the skin in your upper chest. A wire that travels under your skin connects this device to the electrodes in your brain.*

*Deep brain stimulation is used to treat a number of neurological conditions, such as:*

- *Essential tremor*
- *Parkinson's disease*
- *Dystonia*
- *Epilepsy*
- *Tourette syndrome*
- *Chronic pain*
- *Obsessive compulsive disorder*

*Deep brain stimulation is also being studied as an experimental treatment for major depression, stroke recovery, addiction and dementia. Clinical trials may be available to candidates for deep brain stimulation.*

cochlear implants that replace the hair in your ears with computerized equivalents (National Institute of Deafness and Other Communication Disorders, 2016). That works well. There's crappy ones for your eyes (The Artificial Retina Project, 2013). You can always find some lunatic to object to anything, but nobody is complaining about implants to Parkinson's, deafness, and blindness.

I assume implants, whether organic or not, are not going to make people freak out as more of those things can address problems. Alzheimer's is a global brain dysfunction, but you have things like frontal lobe dementia (Alzheimer's Association, 2017a; Alzheimer's Association, 2017b). Where there might be a local fix that buys you another year or two of decent function by giving a boost to your failing frontal lobe, people with frontal lobe dementia are, some of them, pretty interesting. They lose some functions for inhibition.

There was a guy named Phineas Gage who had the steel rod through his skull (Twomey, 2010). It messed up his frontal lobe. He became a rougher guy. A Jekyll/Hyde deal to a certain extent. It's the same with some aspects of frontal lobe dementia. They found that if you run some current – you don't have to go internal – by earing some helmet deal that facilitates electrical fields that you get amplified brain function. On NPR, there was an autistic lady who had trouble interpreting social cues. She a doctor. She's always pissing people off because she doesn't understand sarcasm or subtlety.

They stimulated her brain for an hour. After that, she could understand social cues. It was like seeing in color after only seeing in black and white. Some of this stuff will naturally pass muster as acceptable medicine and a way to keep functioning, keep living. There will be other aspects of technologically extending function that will freak some people out, especially when you start moving the brain out of its natural enclosure or thought out of its natural enclosure – our skulls – and moving it elsewhere.

### References

- 1) Alzheimer's Association. (2017a). What Is Alzheimer's?. Retrieved from [http://www.alz.org/alzheimers\\_disease\\_what\\_is\\_alzheimers.asp](http://www.alz.org/alzheimers_disease_what_is_alzheimers.asp).
- 2) Alzheimer's Association. (2017a). Frontotemporal dementia. Retrieved from <http://www.alz.org/dementia/fronto-temporal-dementia-ftd-symptoms.asp>.
- 3) DeAngelis, T. (2009). Unmasking 'racial microaggressions'. Retrieved from <http://www.apa.org/monitor/2009/02/microaggression.aspx>.
- 4) Mayo Clinic Staff. (2015b, November 11). Deep brain stimulation. Retrieved from <http://www.mayoclinic.org/tests-procedures/deep-brain-stimulation/home/ovc-20156088>.
- 5) Mayo Clinic Staff. (2015a, July 7). Parkinson's Disease. Retrieved from <http://www.mayoclinic.org/diseases-conditions/parkinsons-disease/basics/definition/con-20028488>.
- 6) National Institute of Deafness and Other Communication Disorders (NIDCD). (2016, May 3). Cochlear Implants. Retrieved from <https://www.nidcd.nih.gov/health/cochlear-implants>.

---

Mayo Clinic Staff. (2015b, November 11). Deep brain stimulation. Retrieved from <http://www.mayoclinic.org/tests-procedures/deep-brain-stimulation/home/ovc-20156088>.

- 7) National Parkinson Foundation. (2017). Deep Brain Stimulation: What are the facts?. Retrieved from <http://www.parkinson.org/understanding-parkinsons/treatment/surgery-treatment-options/Deep-Brain-Stimulation>.
- 8) Parkinson Canada. (n.d.). What is Parkinson's?. Retrieved from [http://www.parkinson.ca/site/c.kgLNiWODKpF/b.5184077/k.CDD1/What is Parkinsons.htm](http://www.parkinson.ca/site/c.kgLNiWODKpF/b.5184077/k.CDD1/What_is_Parkinsons.htm).
- 9) Parkinson's Disease Foundation. Retrieved from <http://www.pdf.org/about> pd.
- 10) The Artificial Retina Project. (2013, February 7). Overview of the Artificial Retina Project. Retrieved from <http://artificialretina.energy.gov/about.shtml>.
- 11) The Pituitary Foundation. (2017). What is the pituitary gland?. Retrieved from <https://www.pituitary.org.uk/information/what-is-the-pituitary-gland/>.
- 12) Twomey, S. (2010, January). Phineas Gage: Neuroscience's Most Famous Patient. Retrieved from <http://www.smithsonianmag.com/history/phineas-gage-neurosciences-most-famous-patient-11390067/>.
- 13) University of California. (n.d.). Tool: Recognizing Microaggressions and the Messages They Send. Retrieved from [http://academicaffairs.ucsc.edu/events/documents/Microaggressions\\_Examples\\_Arial\\_2014\\_11\\_12.pdf](http://academicaffairs.ucsc.edu/events/documents/Microaggressions_Examples_Arial_2014_11_12.pdf).
- 14) University of Minnesota. (n.d.). Examples of Racial Microaggressions. Retrieved from <http://sph.umn.edu/site/docs/hewg/microaggressions.pdf>.
- 15) U.S. National Library of Medicine. (2017, February 7). Substantia nigra and Parkinson disease. Retrieved from <https://medlineplus.gov/ency/imagepages/19515.htm>

**Author(s)**



Rick Rosner  
American Television Writer  
[RickRosner@Hotmail.Com](mailto:RickRosner@Hotmail.Com)  
Rick Rosner



Scott Douglas Jacobsen  
Editor-in-Chief, In-Sight Publishing  
[Scott.D.Jacobsen@Gmail.Com](mailto:Scott.D.Jacobsen@Gmail.Com)  
In-Sight Publishing

## License and Copyright

### License



*In-Sight Publishing* and *In-Sight: Independent Interview-Based Journal* by Scott Douglas Jacobsen is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Based on a work at [www.in-sightjournal.com](http://www.in-sightjournal.com).

### Copyright

© Scott Douglas Jacobsen and Rick Rosner, and *In-Sight Publishing* and *In-Sight: Independent Interview-Based Journal* 2012-2017. Unauthorized use and/or duplication of this material without express and written permission from this site's author and/or owner is strictly prohibited. Excerpts and links may be used, provided that full and clear credit is given to Scott Douglas Jacobsen and Rick Rosner, and *In-Sight Publishing* and *In-Sight: Independent Interview-Based Journal* with appropriate and specific direction to the original content.