

## What I'm Reading (Dec. 13)



By Chuck Dinerstein, MD, MBA — December 13, 2019

*Here's today's lineup: Why are there smell receptors in the kidney? ... Men and women see the world differently ... Spotify shows us how big data can inform and delight us ... and robots come for the village blacksmith.*



Image courtesy of scbailey via Flickr and Wikimedia [1]

***Some years ago, when Jennifer Pluznick was nearing the end of her training in physiology and sensory systems, she was startled to discover something in the kidneys that seemed weirdly out of place. It was a smell receptor, a protein that would have looked more at home in the nose. Given that the kidneys filter waste into urine and maintain the right salt content in the blood, it was hard to see how a smell receptor could be useful there. Yet as she delved deeper into what the smell receptor was doing, Pluznick came to a surprising conclusion: The kidney receives messages from the gut microbiome, the symbiotic bacteria that live in the intestines.***

And those signals, in turn, help to regulate our blood pressure around the time of meals. Once again, scientists uncover the beautiful underpinnings of our lives. From Quanta, [How Bacteria Help Regulate Blood Pressure](#) [2].

***“Science, as you know, my little one, is the study of the nature and behaviour of the universe. It’s based on observation, on experiment, and measurement, and the formulation of laws to describe the facts revealed.”***

With that opening, Neil Gaiman begins a poem on science and the seeing difference of the genders. It is presented as both text and a short YouTube animation. From BrainPickings, [The Mushroom Hunters](#) [3].

This week along with so many others who use Spotify, I received a summary of my Best of 2019, not a compilation of experts, a compilation of my choices. It was a delightful surprise in my inbox. It is hard to describe a personality that includes ZZ-Top, Black and Gold, and George Benson; Spotify calls it genre-fluid. It provided a lighter side to Big Data. Allegra Hobbs, writing on Medium’s Forge, provides a wider lens, [Spotify’s Year-End Lists Are the Ultimate Personality Test](#) [4]

I consider myself a maker, not so much in my long career as a surgeon, but more in my parallel interest in woodworking. Automation has come to this craft as it has to other handwork, so I am always on the lookout for articles on the changes being wrought in the world of craftsmanship, bespoke or production.

***“Machining cuts away raw material to get a desired shape; casting involves pouring molten metal into a mold; and forming or forging deforms and squeezes metal into new shapes. Casting and forging to shape usually needs custom molds or dies that can take considerable time and expense to design and manufacture, but once running are very productive; parts are inexpensive with highly reproducible properties. This is why nuts and bolts can be cheap and reliable.”***

From The Conversation, an update on the village blacksmith, [‘Robotic blacksmithing’: A technology that could revive US manufacturing](#) [5]

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**Links**

[1] [https://commons.wikimedia.org/wiki/File:Children\\_reading\\_The\\_Grinch.jpg](https://commons.wikimedia.org/wiki/File:Children_reading_The_Grinch.jpg)

[2] <https://www.quantamagazine.org/how-bacteria-help-regulate-blood-pressure-20171130/>

[3] <https://www.brainpickings.org/?s=mushroom+hunters>

[4] <https://forge.medium.com/spotify-s-year-end-lists-are-the-ultimate-personality-test-46b742e11a22>

[5] <https://theconversation.com/robotic-blacksmithing-a-technology-that-could-revive-us-manufacturing-125428>