

[sg\_popup id="59" event="onload"][/sg\_popup]To remind millions of people of the legendary scientists, artists, inventors, and dreamers who have impacted our lives, [Google Doodle](#) highlights them on their birthdays with a fantastic animation on the Google homepage. On January 26<sup>th</sup>, 2018, Google Doodle highlighted American-Canadian neurosurgeon, Wilder Graves Penfield, in celebration of his 127<sup>th</sup> birthday.

At some point, you might have heard the saying, "I smell burnt toast!". This is not referencing charcoal bread, it means they feel like they are having a seizure. This saying would not have been possible without Dr. Penfield—a groundbreaking neurosurgeon who pioneered new treatments for epilepsy, called the Montreal Procedure, using non-other than toast.

Even though he was born and raised in the United States, Penfield studied medicine all over the world—Princeton, Merton College-Oxford, John Hopkins School of Medicine, and McGill University.

While working as a neurosurgeon at the Montreal Neurological Institute at McGill University during the 1930s, Penfield received a patient who reported smelling burnt toast just before she has a seizure. The hallucinatory scent gave Penfield the opportunity to isolate the section of the brain that was seizing and destroy the nerve cells causing it.

With the patient still awake under local anesthetic, he would stimulate the exposed brain with electrical probes and ask her what she felt, saw, heard, or smelled. When she suddenly shouted, "I smell burnt toast!" Penfield discovered that he had found the cause of her severe epilepsy. He removed a small piece of brain tissue, curing the woman of her seizures.

Having performed this miraculous technique more times than any other neurosurgeon working at the time, he was able to produce detailed maps of where sensory and motor functions happen in the brain, which areas of the brain receive input from, or send output to different parts of the body. His work made such an impact, that these maps are still used today, practically unaltered. He also discovered that using an electrode to stimulate the temporal lobes is able to produce exceptionally vivid sensory memories—much like burnt toast.

Penfield and his colleague, Herbert Jasper, published their Montreal Procedure in 1951 titled,

[\*Epilepsy and the Functional Anatomy of the Human Brain\*](#), which have helped generations understand the localization of brain function.

However, with many kinds of epilepsy, the Montreal Procedure doesn't work for all of them, but it makes a significant difference in lifestyle for a large number of people.

Penfield once said that to him, his work is "the best way to make the world a better place." We couldn't agree more.

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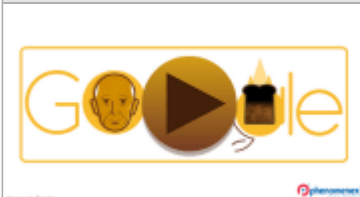
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Summary



Article Name

Wilder Penfield: Toast Burning Neurosurgeon

Description

Google Doodle highlighted neurosurgeon, Wilder Graves Penfield who is best known for his groundbreaking work in treatments for epilepsy.