

A PAIR OF MEDICAL MARVELS

The Woman Who Can Smell Parkinson's

One woman's keen nose may lead doctors to diagnose a common disease. In the late 1980s, Joy Milne of Perth, Scotland, noticed a shift in the natural scent of her husband, Les. Les was diagnosed with Parkinson's disease in 1995, and when Joy attended meetings for the non-profit Parkinson's UK, she realized other Parkinson's patients had the same scent as Les did. She mentioned this to a scientist, who tested her by giving her 12 T-shirts to smell: Six had been worn for a day by people with Parkinson's; six by people without the condition. She correctly ID'd 11 but disagreed with researchers about the 12th. She said it was from a Parkinson's patient; they said it wasn't. To their shock, the person received a diagnosis eight months later. Scientists are now using information gleaned from Joy to try to pinpoint the biomarkers behind the

scent changes. This could enable them to devise a test for Parkinson's, which is currently identified through observation. "My husband suffered from the disease for 21 years ... but he had it many years before that," Joy told *Scientific American* (Les passed away in 2015). "I would like to see that people don't suffer the same way he [did]."

The Doctor Who Can Feel Your Pain

For most people, watching a horror movie means a chance to enjoy vicarious thrills. But for neurologist Joel Salinas, MD, the experience can seem all too real. Dr. Salinas, of Boston, has a condition called mirror-touch synesthesia. If he sees a person being hugged, punched, or pinched, for instance, he feels nearly the same physical sensations. When he went to see *The Last Exorcism* and the neck of one of the characters was broken, he suffered

a flash of intense, near-suffocating pain. Dr. Salinas has had this ability his whole life, but he learned the name for his condition—shared by less than 2 percent of the population—only after he was in medical school. He believes it makes him a better physician, since he's "able to vividly and involuntarily put myself in the shoes of my patients," he said in a forum on reddit.com. But on the job, he's also constantly walking the line between tuning in to a patient's discomfort or distress—when Dr. Salinas performs a spinal tap on a patient, for example, he can feel the needle entering his own back—and being overwhelmed by these feelings. He has developed coping strategies, like focusing his attention on his toes. While it may sound exhausting, Dr. Salinas has little interest in unplugging from his abilities. "Anything else would likely feel abnormal," he said.