

# Out of the limelight: Nobel medicine prize winner Ohsumi

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Some people are drawn to the flashy and popular, but Nobel laureate Yoshinori Ohsumi isn't one of them.

The 71-year-old Japanese scientist [won the 2016 prize in medicine on Monday](#) for his "brilliant" work on how [damaged cells](#) recycle themselves—known as [autophagy](#)—and the major implications it has for health and diseases, including cancer and neurological disorders.

But Ohsumi's field of interest was far from the limelight when he started his career.

Winning the Nobel "was my childhood dream, but it has not been the focus of my concern since I got into research—I don't like competing", Ohsumi told a press briefing in Tokyo Monday evening.

"I have fun doing what others don't do, rather than something that everybody is flocking to."

In response to questions, he said he was worried about budget cutbacks in scientific research.

"It's fun to do (research) without knowing where things will go," he added.

Born in southwest Fukuoka near the end of World War II, Ohsumi was initially interested in chemistry, but switched his focus to molecular

biology, according to a 2012 interview.

Ohsumi—the youngest of four brothers—received a PhD from the University of Tokyo in 1974 and spent several years at Rockefeller University in New York before coming back to Japan in the late 1980s.

He has been a professor at the Tokyo Institute of Technology since 2009.

In what the jury described as a "series of brilliant experiments in the early 1990s", Ohsumi used baker's yeast to identify genes essential for autophagy.

He then went on to explain the underlying mechanisms for autophagy in yeast and showed that similar sophisticated machinery is used in human cells.

Ohsumi's findings opened the path to understanding the importance of autophagy in many physiological processes, such as how the body adapts to starvation or responds to infection.

When autophagy breaks down, links have been established to Parkinson's disease, type 2 diabetes and other disorders that appear in the elderly.

"Autophagy has been known for over 50 years but its fundamental importance in physiology and medicine was only recognised after Yoshinori Ohsumi's paradigm-shifting research in the 1990's," the Nobel jury said Monday.

Ohsumi is the 25th Japanese person to win a Nobel Prize, and the fourth in the medicine category, according to local media.

Last year, Japan's Satoshi Omura shared the Nobel Prize medicine with two scientists from Ireland and China for unlocking treatments for malaria and roundworm.

In 2012, Shinya Yamanaka shared the medicine prize with Britain's John B. Gurdon for discoveries showing how adult cells can be transformed back into stem cells.

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