

## Cataloguing brain cells to better understand how our minds work

If you stumbled across a radio or a computer and had no idea how it worked, you would likely first want to find out what it was made from—what its component parts were. Your next step might be to determine what each component actually did, taking care to note which parts were connected to others.

This is the approach to understanding the brain taken in two related studies published October 31 in *Nature*. The first used differences in the activity of genes to identify different cell types in mouse brains, finding more distinct types than previously known. The second took a close look at a few of the identified cell types to try to work out what they do, showing they perform two quite different roles in controlling movement.

...

[The first study found that] cell types fall into two broad classes: One, called inhibitory neurons, communicates using the chemical messenger [GABA](#) and inhibits the activity of other, nearby cells. The other class, excitatory neurons, uses the chemical glutamate and they serve as the brain's main cells for generating neural activity.

...

[The second study shows] three of the cell types identified in the first study play two quite different roles: one involved in preparing movements, the other in initiating and controlling them. "The answer's so clear and beautiful," [researcher Bosiljka] Tasic says.

**Read full, original post:** [New Atlas Used to ID Brain Parts for Plans and Actions](#)