

3D “jelly doughnut” models brain, may prove vital to future research

A doughnut created in a lab and made of silk on the outside and collagen gel where the jelly ought to be can mimic a basic function of brain tissue, scientists have found.

Bioengineers produced a kind of rudimentary gray matter and white matter in a dish, along with rat neurons that signaled one another across the doughnut’s center. When the scientists dropped weights on the material to simulate traumatic injury, the neurons in the 3D brain model emitted chemical and electrical signals similar to those in the brains of injured animals.

It is the first time scientists have been able to so closely imitate brain function in the laboratory, experts said. If researchers can replicate it with human neurons and enhance it to reflect other neurological functions, it could be used for studying how disease, trauma and medical treatments affect the brain — without the expense and ethical challenges of clinical trials on people.

Read the full, original story: [Scientists create 3D model that mimics brain function](#)