

## Proteins on surface of egg and sperm must couple for fertilization

Juno, a long-sought protein named after the Roman goddess of fertility and marriage, has been discovered on the surface of the mammalian egg. This protein recognizes its sperm-riding counterpart, Izumo, at the very first interaction between egg and sperm. Although Juno and Izumo bind to each other weakly, the union is fateful, as it results in fertilization.

“We have solved a long-standing mystery in biology by identifying the molecules displayed on all sperm and egg that must bind each other at the moment we were conceived,” said Gavin Wright, D. Phil., senior author from the Sanger Institute. “Without this essential interaction, fertilization just cannot happen. We may be able to use this discovery to improve fertility treatments and develop new contraceptives.”

**Read the full, original story: [Sperm/Egg Fusion Depends on Pairing of His/Her Proteins](#)**