

Beautiful Science

Scientists from the Mechanobiology Institute at the National University of Singapore have discovered that clusters of cadherin – a type of cell protein known for forming junctions between cells – also play a role in stabilising the cell cortex, a region under the cell membrane. The microscope images show a single embryo cell (right) and two cells after cell division (far right). The top set of images gives a surface view of the cells. Here, the green dots are the “non-junctional” and non-adhesive cadherin clusters on the surface of the cells. The bottom set of images shows a cross-sectional view of the cells – where a belt of cadherin (white-green line) can be seen forming a junction between the two daughter cells. With this new discovery, scientists around the world will have to re-evaluate their understanding of cadherin. They must now consider its role in stabilising the cell cortex, along with its classical function in maintaining junctions between cells. This fresh perspective may unlock new avenues of investigation regarding the role of cadherin in health and disease, the scientists said. The study was published in the scientific journal *Current Biology*. PHOTO: DR ANUP PADMANABHAN, NATIONAL UNIVERSITY OF SINGAPORE

