Astrocytes release glutamate by regulated exocytosis in health and disease

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Parpura will present you with the evidence that astrocytes, a subtype of glial cells in the brain, can exocytotically release the neurotransmitter glutamate and how this release is regulated. Spatiotemporal characteristic of vesicular fusion that underlie glutamate release in astrocytes will be discussed. He will also present data on a translational project in which this release pathway can be targeted for the treatment of astrocytoma IV (also referred to as glioblastoma mutiforme IV), the deadliest brain cancer.