



# Seminar Announcement

## SLC1A transporters in health and disease

Date: 16 December 2019  
Time: 2 p.m.  
Venue: Classroom 4, SBS  
Hosted By: Assoc Prof. Konstantin Pervushin

Solute Carrier SLC1A family of transporters has a prominent role in the homeostasis of glutamate – major neurotransmitter in higher eukaryotes. In mammals, this family consists of seven members, five of which are capable to pump glutamate against its gradient using the energy stored in the sodium gradient (Excitatory Amino Acid Transporters, EAAT1-5) and two transporters perform the neutral amino acid exchange (ASCT1-2). Intriguingly, the expression of ASCT2 transporter is linked to the proliferation of many kinds of cancer, and furthermore it serves as a recognition partner for many retroviruses. In this talk I will summarize the progress we made over the past seven years in understanding how this family of transporters works based on numerous structures obtained for their archaeal homologs but also for human ASCT proteins.



**Speaker:**

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