

SPECIAL SPEAKER SEMINAR SERIES 2018

Australian Regenerative Medicine Institute

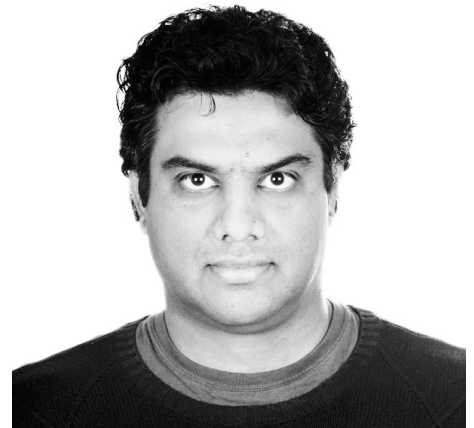
Unravelling how disease-linked protein aggregates are solubilized in human cells

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Abstract

Protein conformational diseases with pathophysiological consequences generally coincide with the formation of protein aggregates over time and often symptoms become apparent only at an advanced age. Therefore, efficient reversal, rather than prevention of protein aggregation is an attractive new direction for future therapeutic interventions in these disorders. Using a broad set of experimental approaches, we recently uncovered a cooperative network among J-protein co-chaperones, which fine-tune protein aggregate selection for a novel Hsp70-based aggregate solubilizing machine (disaggregase) in humans and other multicellular organisms. An improved understanding of this multi-tiered cellular protein quality control system is now needed to design rational therapeutic strategies to counteract cytotoxicities associated with protein aggregates linked to e.g. neurodegeneration, which is an increasingly prevalent feature in the long-lived, but aging communities of today.



DATE: Tuesday, 15th May

TIME: 2:00pm – 3:00pm

VENUE: Seminar Room
Level 3
15 Innovation Walk
Clayton, VIC 3800