

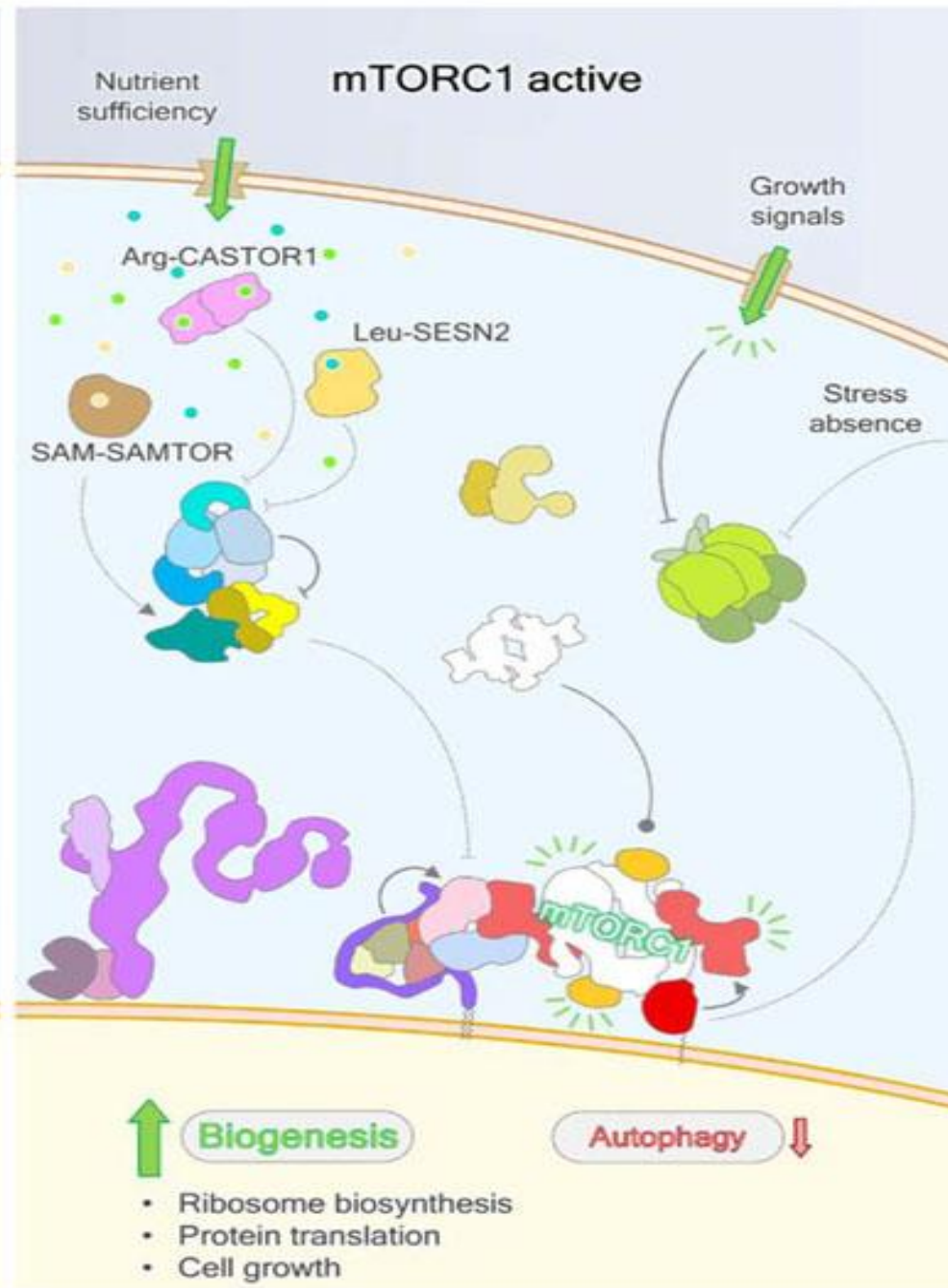
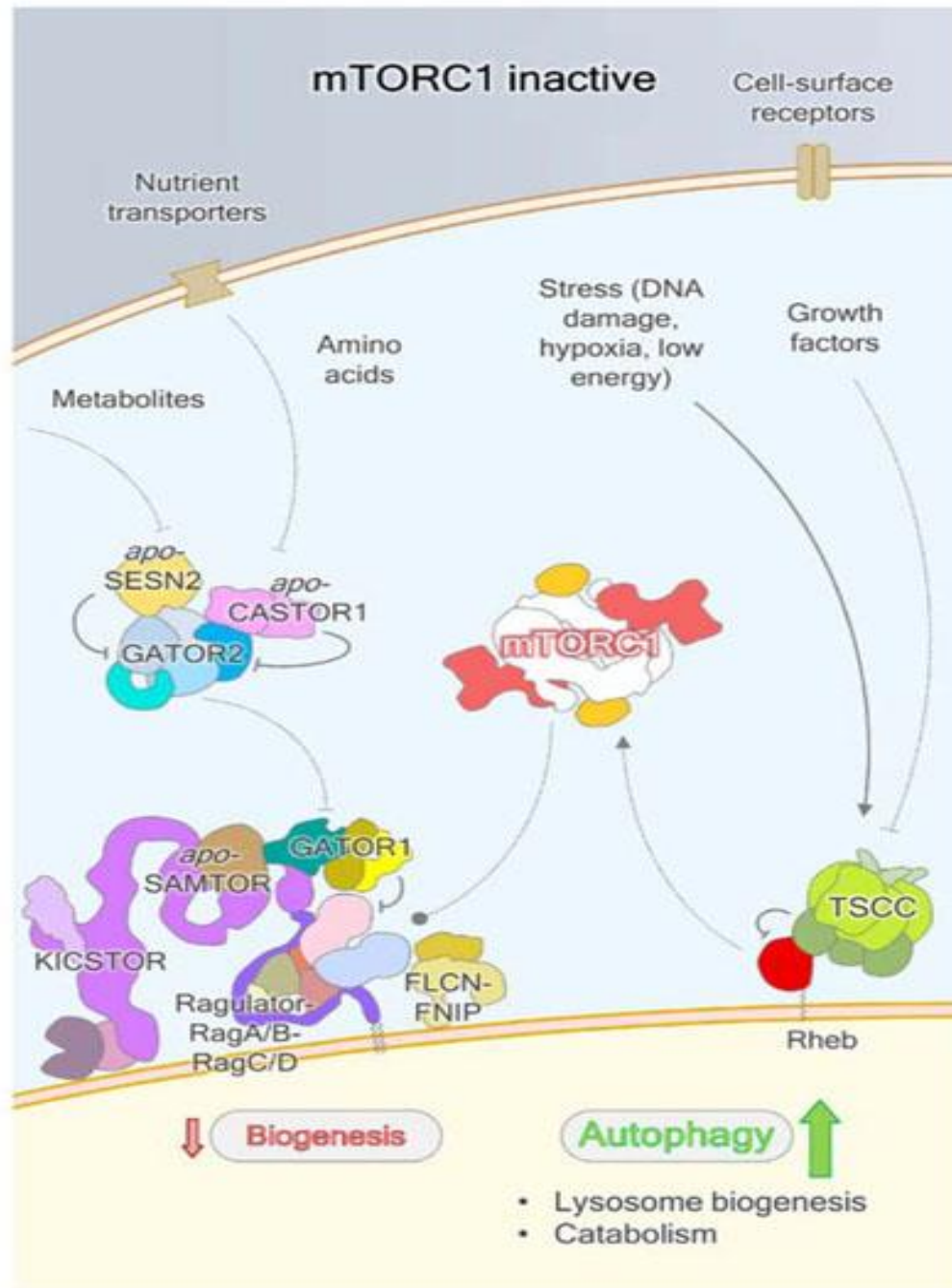


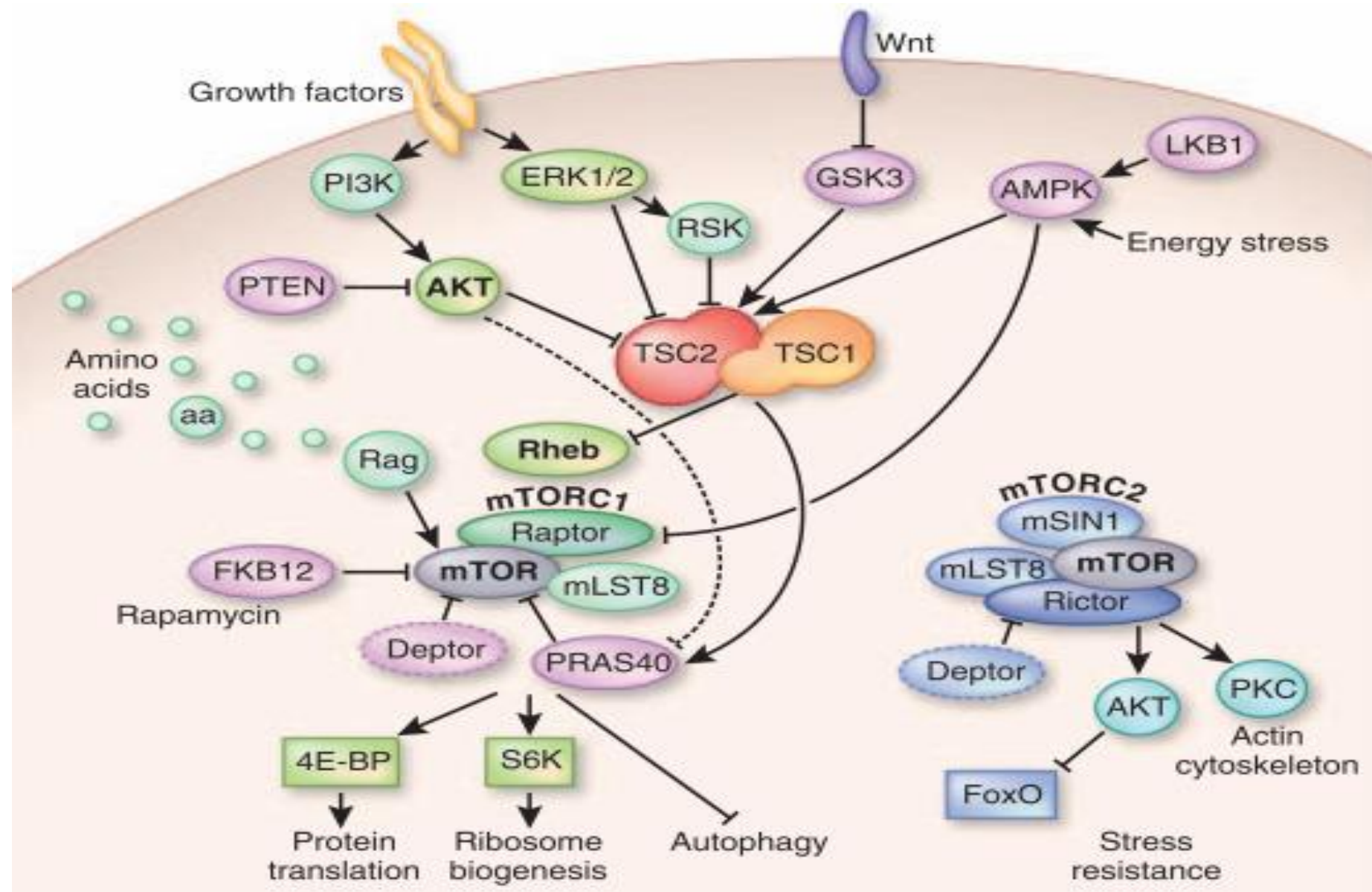
mTOR system ontogeny

By: Prof. Dr. Mohammadreza Ardalan

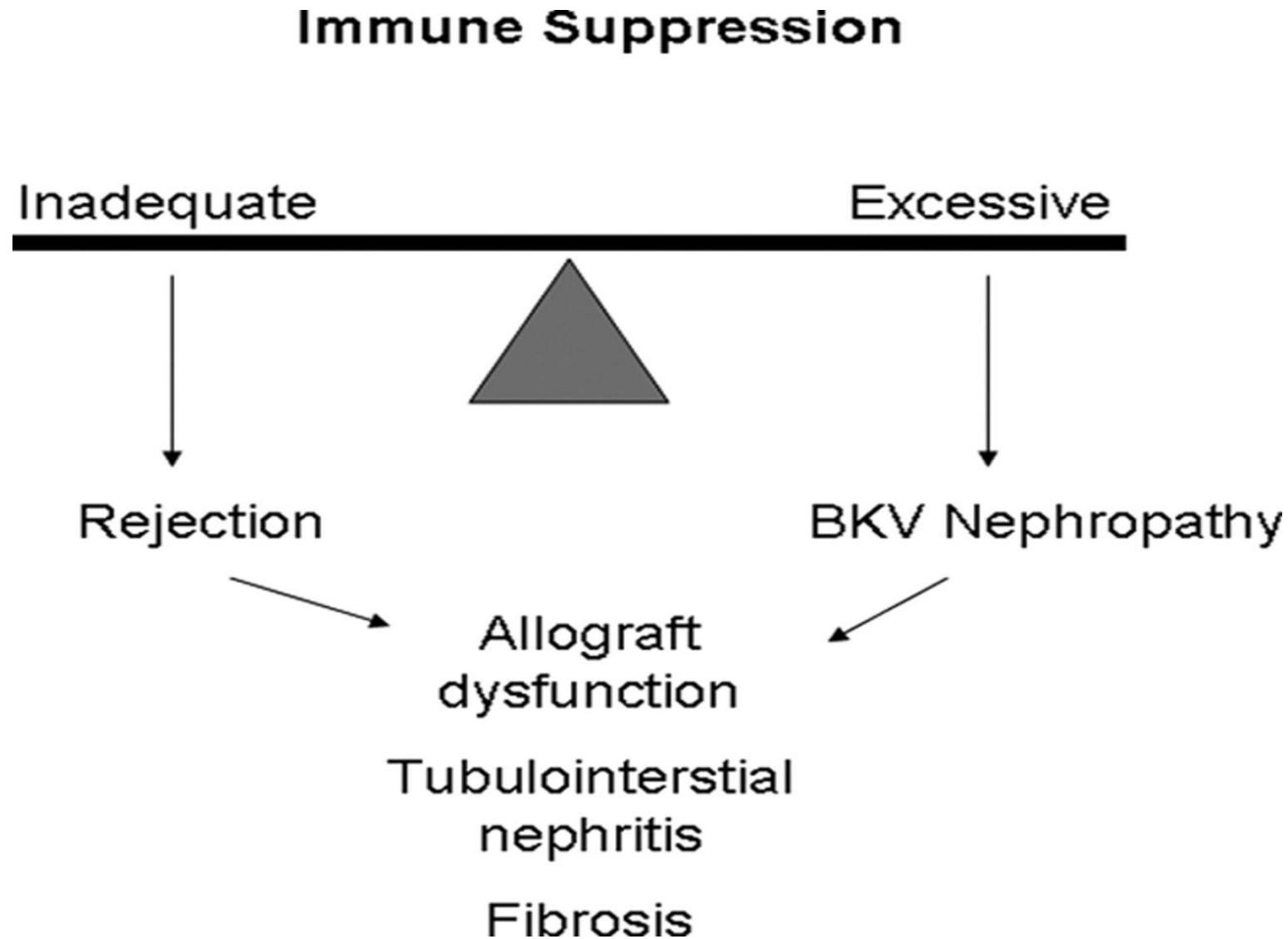
Kidney Research Center, Tabriz University of Medical Sciences

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Impaired immune suppression balance.



immunosuppressive effect, mTOR inhibitors have a number of characteristics that make them attractive for the use in KT:

- a) Ability to prevent renal graft dysfunction through mTOR-mediated mechanisms, such as the **reduction of glomerular hypertrophy and pro-inflammatory and pro-fibrotic cytokines**,
- b) Reduction of angiogenesis;
- c) Reduction of tumour growth and in de novo neoplasms;
- d) Cardioprotective effects;
- e) Reduction of viral infections due to an increase in the specificity of CD8+ T cells against pathogens such as CMV during the immediate post-transplant period.