Identify drug target by maximizing information flow
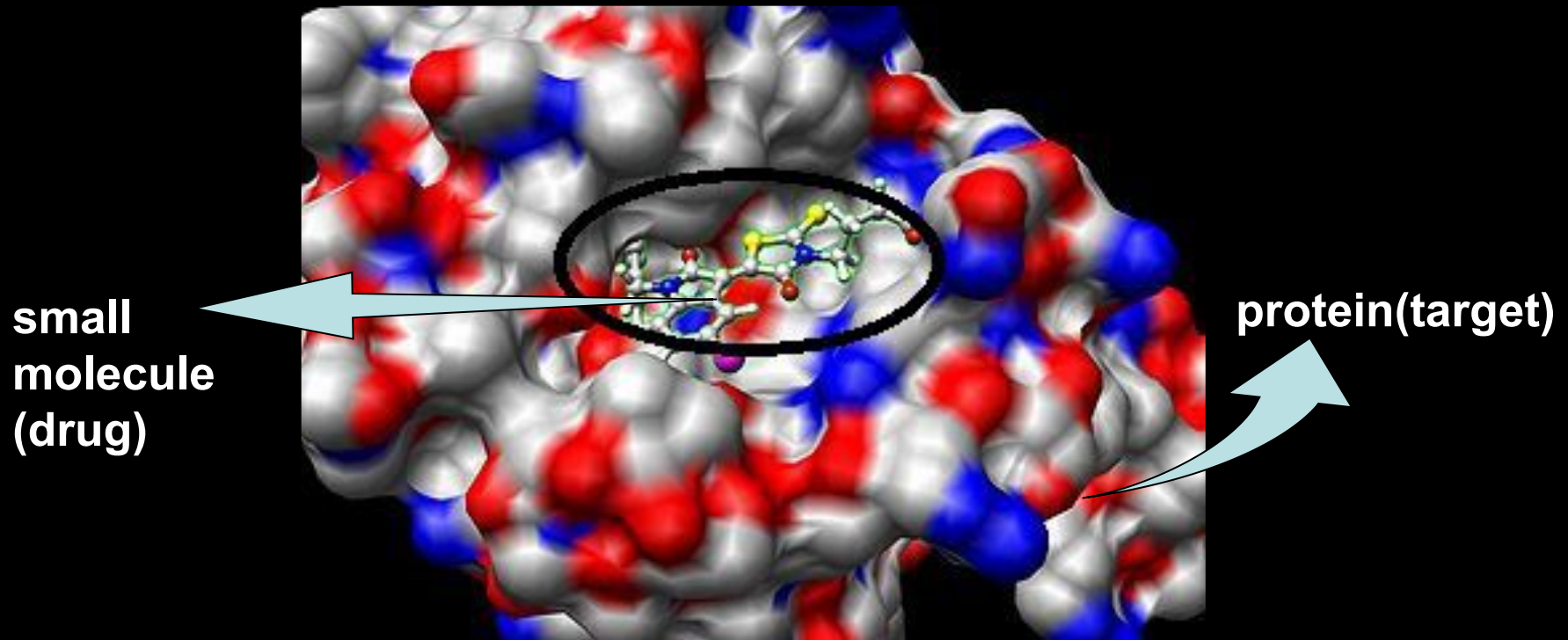
Helen zhou

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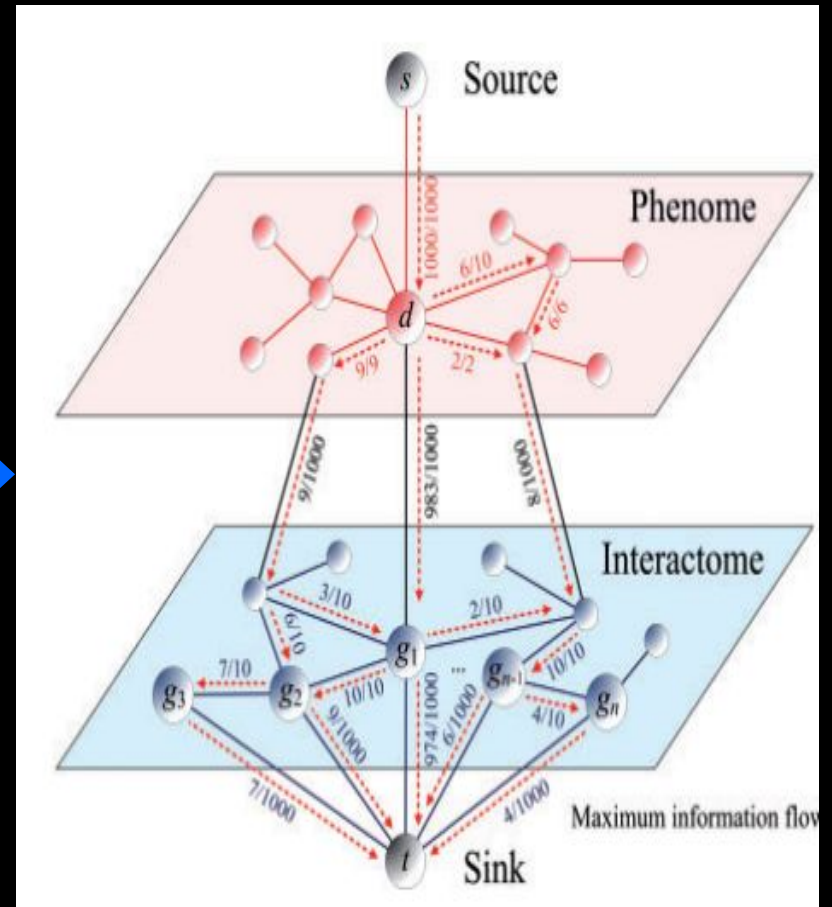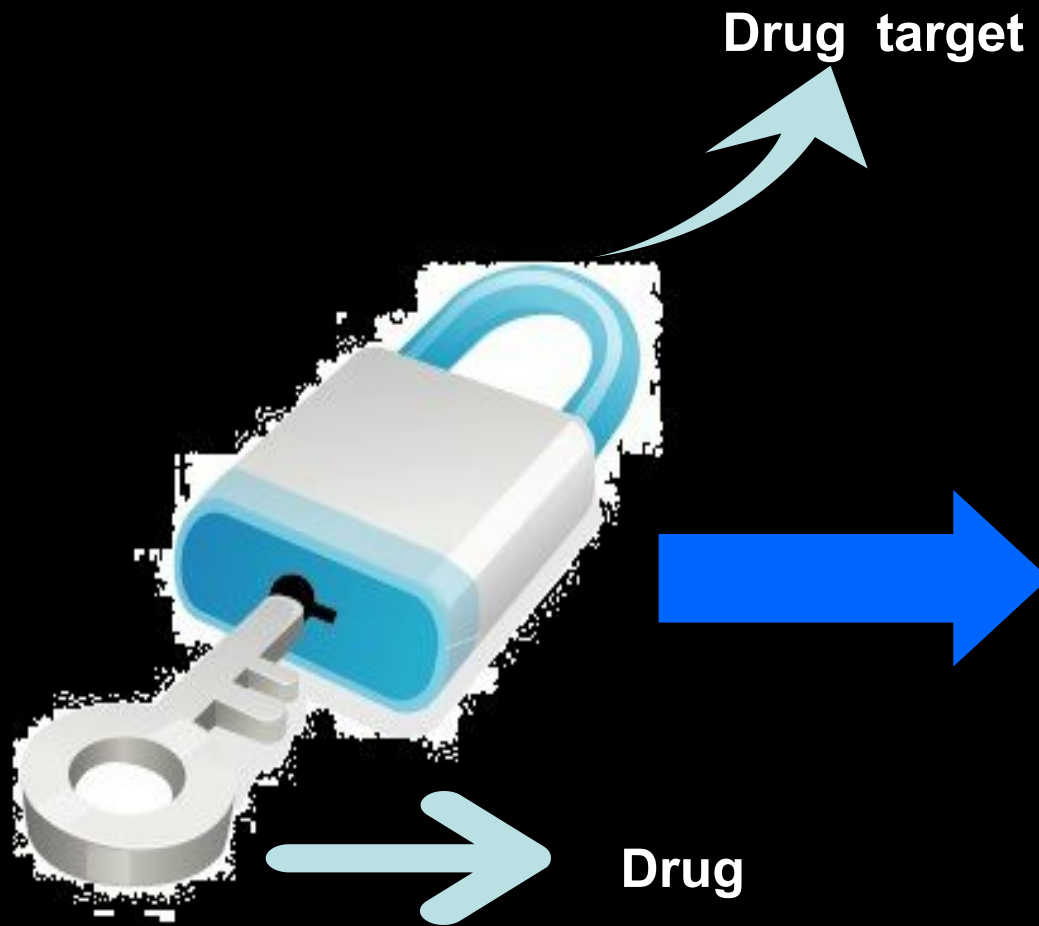**Tsinghua university**

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Drug target

Native protein in the body whose activity is modified by a drug resulting in a specific effect

small molecule (drug)

protein(target)

Application

- Identify new drugs target

- New applications of existing drugs/create new drugs

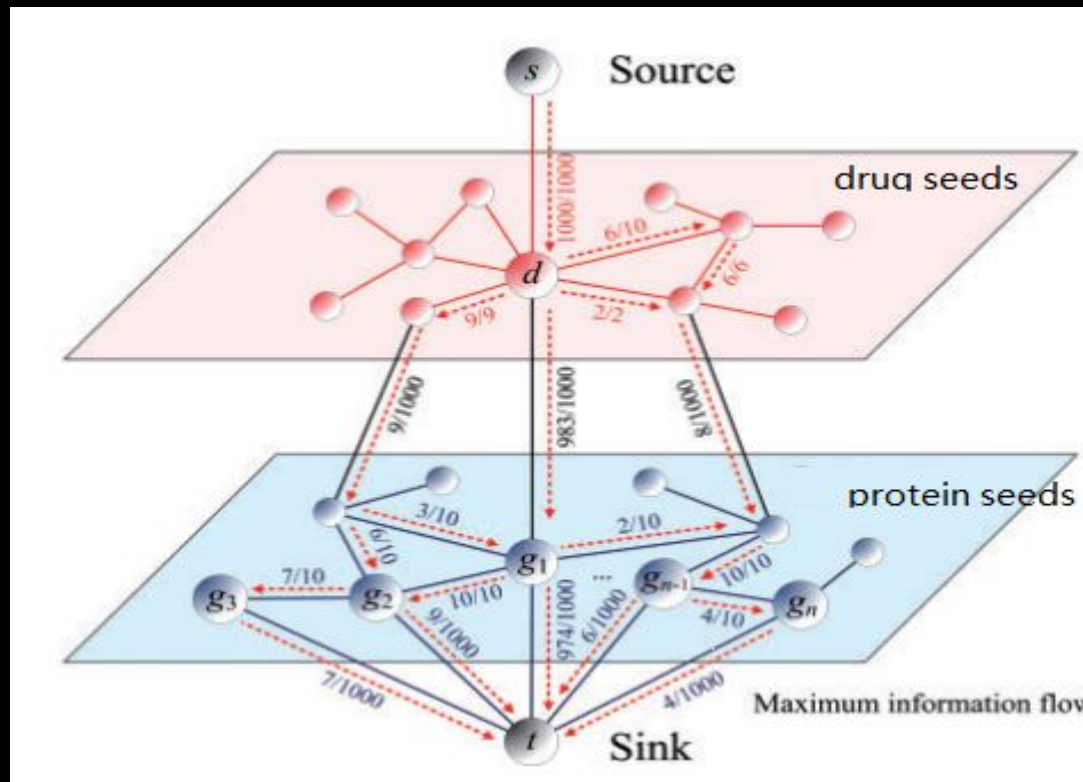- Understand side effects and toxicity

Network

Drug target

Drug

Yong Chen et al.(2011)
Uncover disease genes by maximizing
information flow in the phenome–interactome
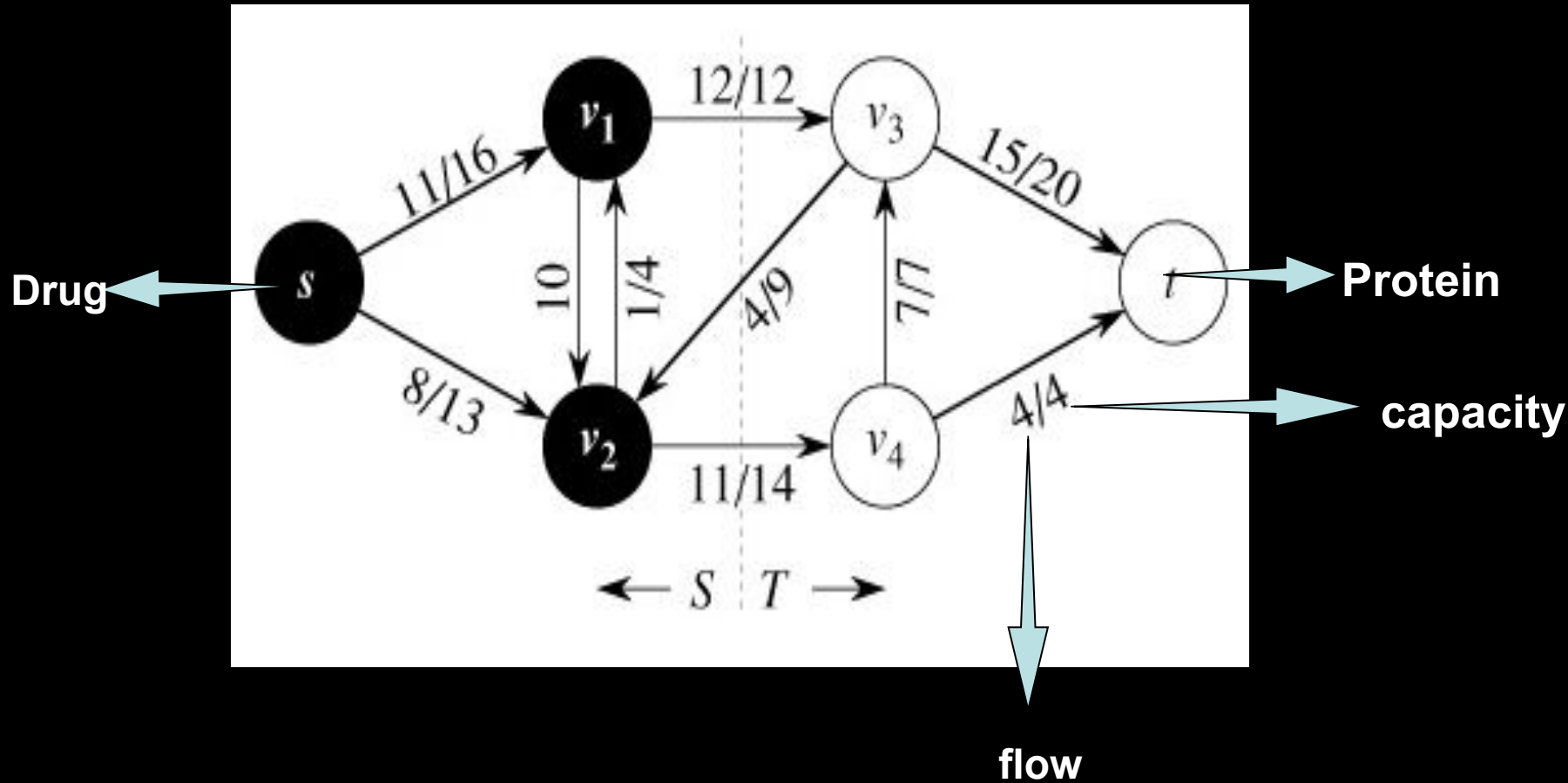network ISMB,2011,i167–i176

Assumption

molecules with higher similarity have stronger association(standard of association)

Yong Chen et al.(2011)Uncover disease genes by maximizing information flow in the phenome–interactome network ISMB,2011,i167–i176

MAXIF

Maximizing information flow

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Thank you for your attention