

Charles University of Prague

Faculty of Science

Dept. of Cell Biology
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Development

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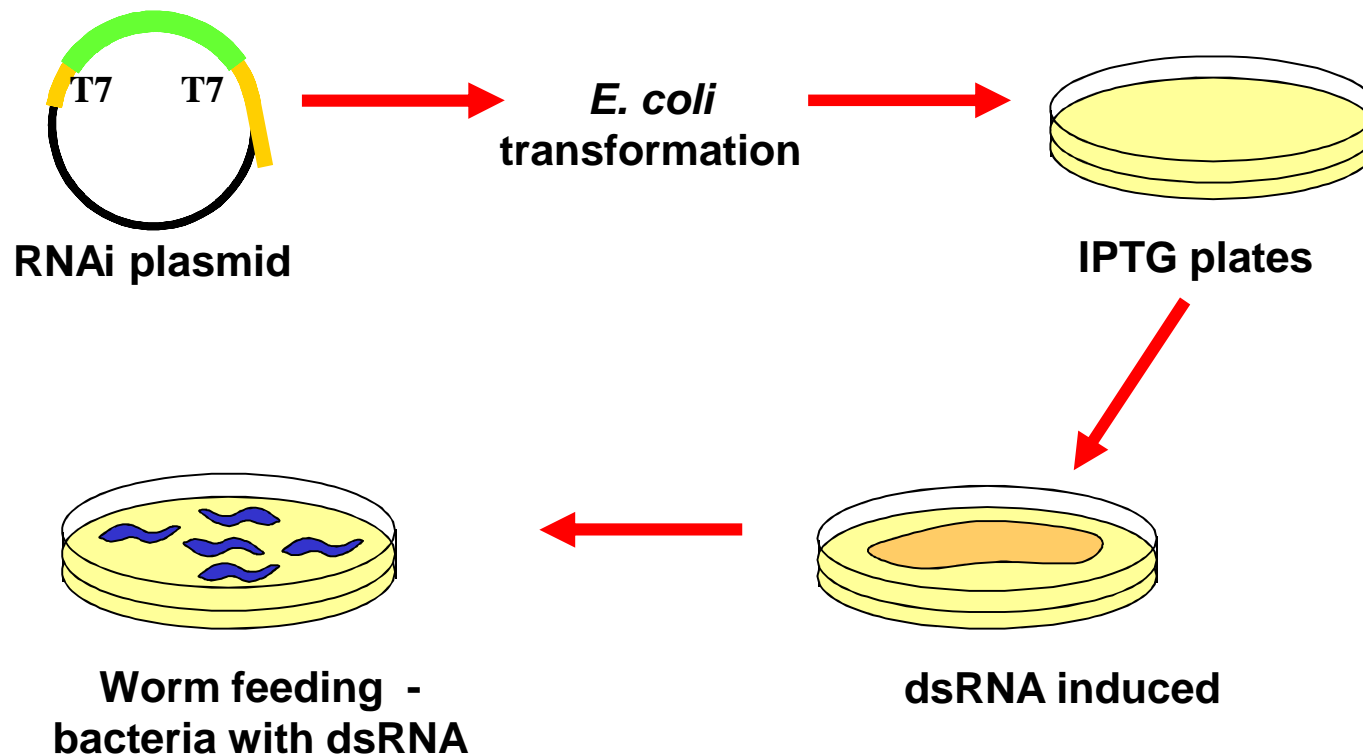


Our focus

- Vesicular trafficking and membrane recycling
- Cytoskeleton (actin filaments, microtubules)
- Wnt signaling / Wnt production

RNAi screen in *C. elegans*

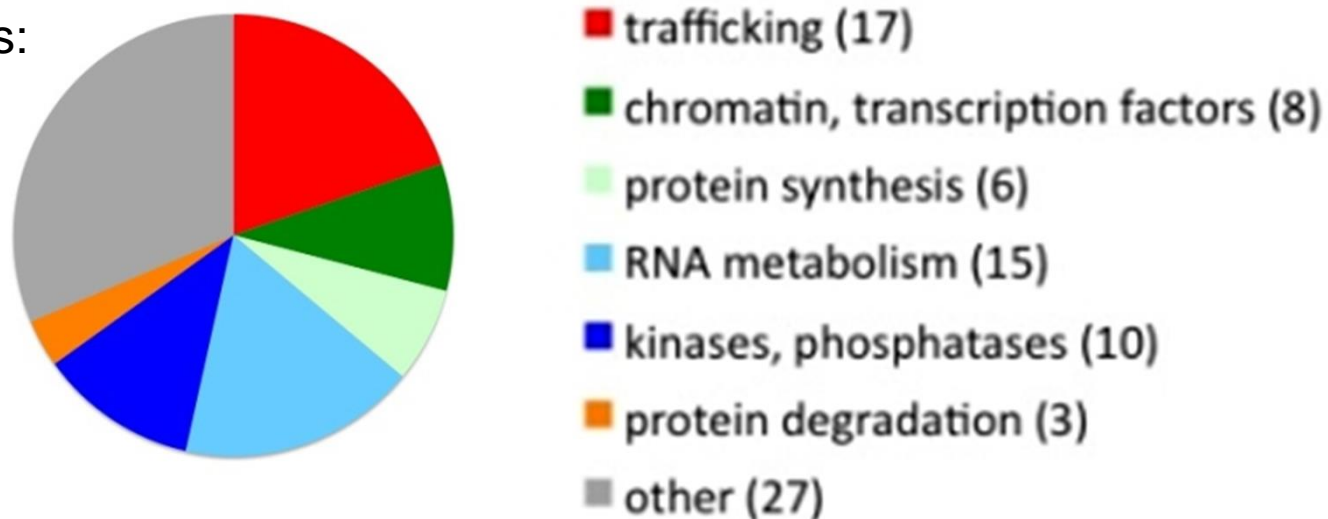
➤ genes involved in activation/inactivation of Wnt signaling



RNAi screen in *C. elegans*

- efficient, fast & low cost way of RNAi screening
- whole-genome RNAi library
(16 300 /19 000 genes in C.e.)
- screen works - in proper background → both enhancers & suppressors of Wnt signaling

Positive hits:





Future plans

- candidate genes . robust phenotype, conserved in mammals
- further characterization
 - *C. elegans*
 - human cell culture
- Norway grants
 - cytoskeletal projects
 - vesicular trafficking projects
 - budget 60 000 EUR/year + PhD student