

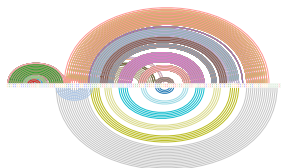
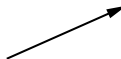
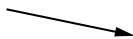
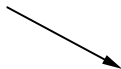
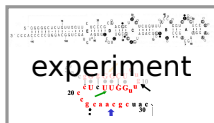
Compiling Data Sets from RNA Kinetic Simulations

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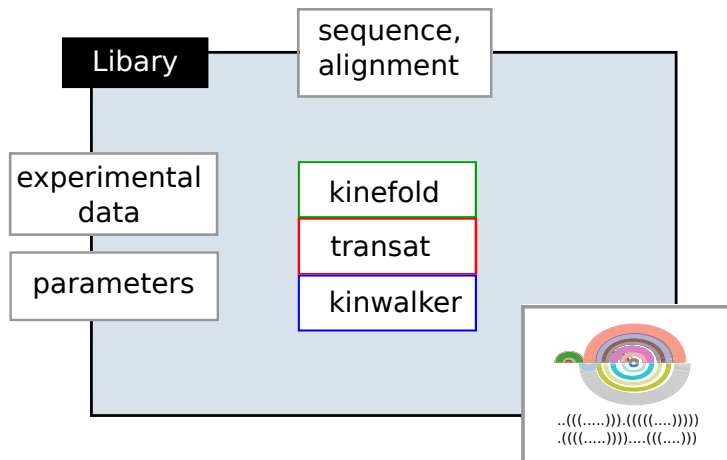
Bled, February 16, 2016

RNA folding kinetics



Lentz et al. (1996)
Wong et al. (2007)

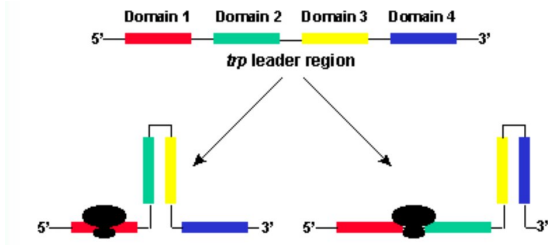
Library



Library

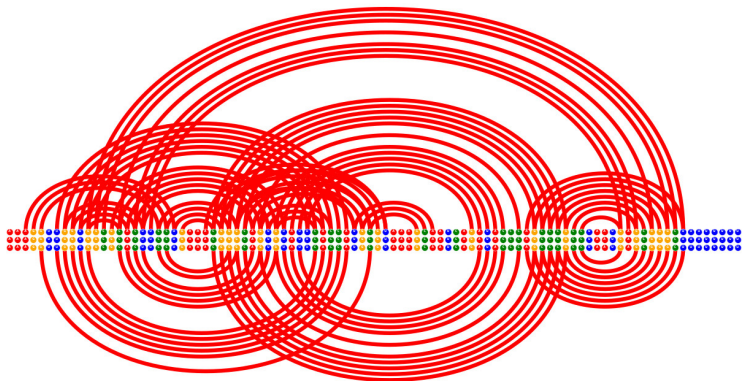
- ▶ Handle sequence files
- ▶ Run programs
- ▶ Extract structures
- ▶ Mapp structures to alignment
- ▶ Scoring

Example TRP operon leader

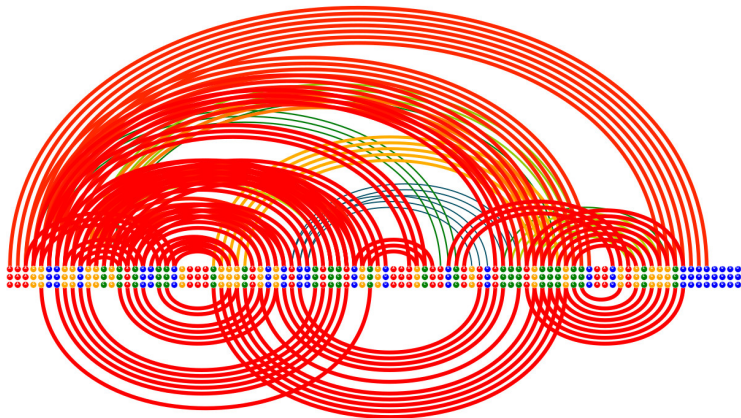


Yanofski (1981)
www.ndsu.edu

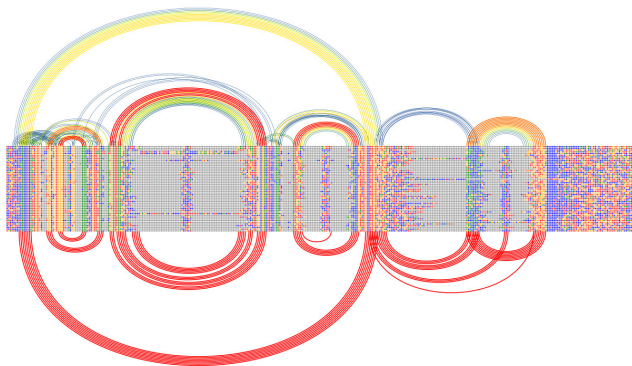
Example TRP operon leader - Kinwalker



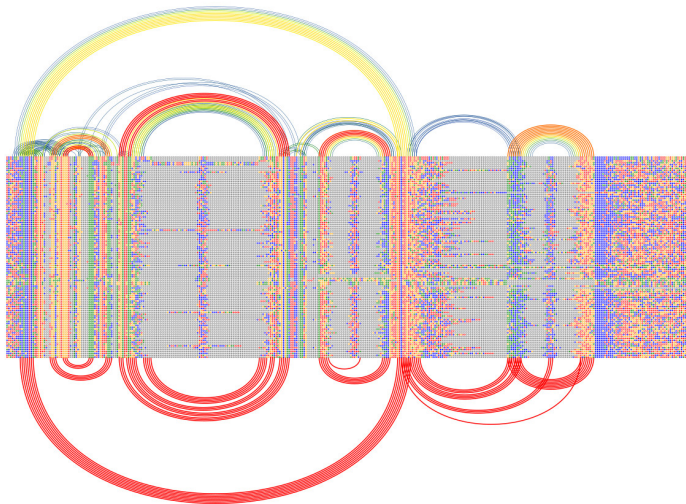
Example TRP operon leader - Kinifold



Example SAM riboswitch - Kinwalker



Example SAM riboswitch - Transat



Data Set

- ▶ pre-processed alignments
- ▶ predicted functional and transient structures and bp-lists
- ▶ experimental data
- ▶ visualization via `arcplotter`
- ▶ gtf-like data format

Data Set

⇒ currently we have 6 Rfam families:

bacterial RNase P RNA

bacterial SRP RNA

HDV ribozyme

TRP operon leader

Levivirus maturation gene

SAM riboswitch

data and suggestions welcome!

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<http://www.rnaland.net/>



Der Wissenschaftsfonds.