

PROPOSITIONS (STELLINGEN)

Koos Rooijers

1 Ribosome profiling can under certain circumstances be used as sensors for proteogenic amino acid availabilities (this thesis)

2 Global regulation of translation initiation and elongation, such as by 4E-BP1 and eEF2 phosphorylation, can be detected by ribosome profiling (this thesis)

3 RPF size selection can be relieved without inclusion of more contamination and associated loss of data quality (this thesis)

4 The pervasive transcriptional regulation exerted by P53 involves a number of non-coding genes that is at least comparable to the number of protein-coding genes (this thesis)

5 Compared to the large dynamic range of transcriptional regulation, translational regulation seems very minimal or absent for most genes (this thesis)

6 Positive and negative controls in bioinformatic analyses can be incredibly useful but are unfortunately often "unused".

7 Creating an intuitive and maintainable codebase for a program is much easier when the requirements of the program are known upfront.

Addendum to 7: In scientific programming, the requirements of a program are too rarely known upfront.

8 Designing pipelines that are both generic enough to be applicable in a variety of cases, yet specific enough to do something useful, is mostly a matter of experience and domain knowledge.

9 What is not communicated is essentially forgotten.

10 The best experiment you can do is the one you're afraid will prove your theory wrong.

11 Belief is so often the death of reason.