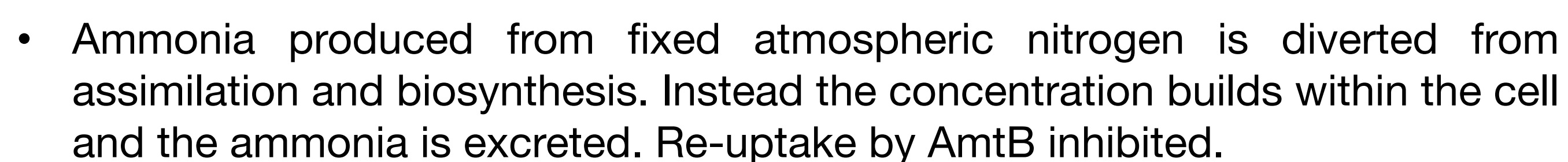
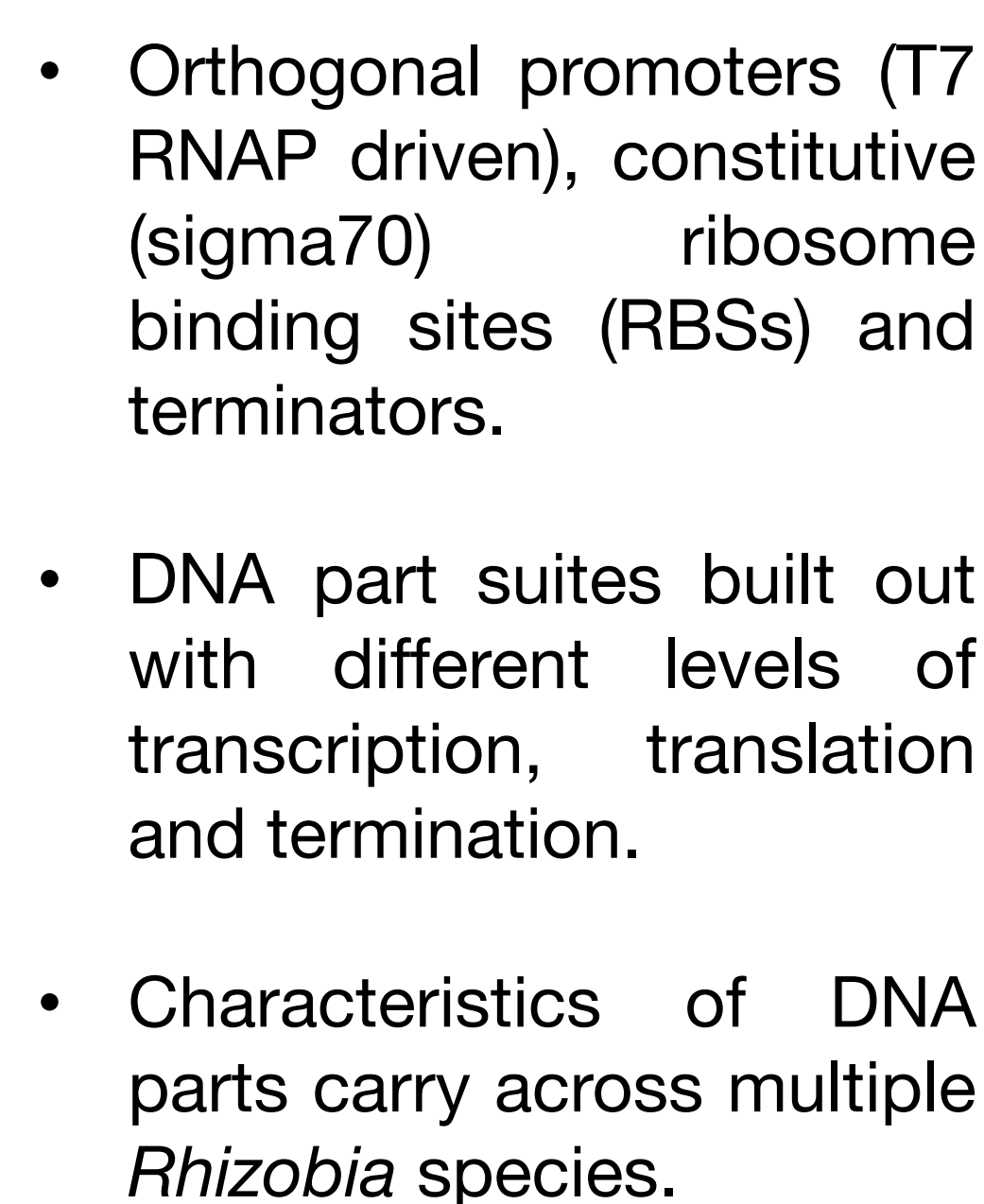


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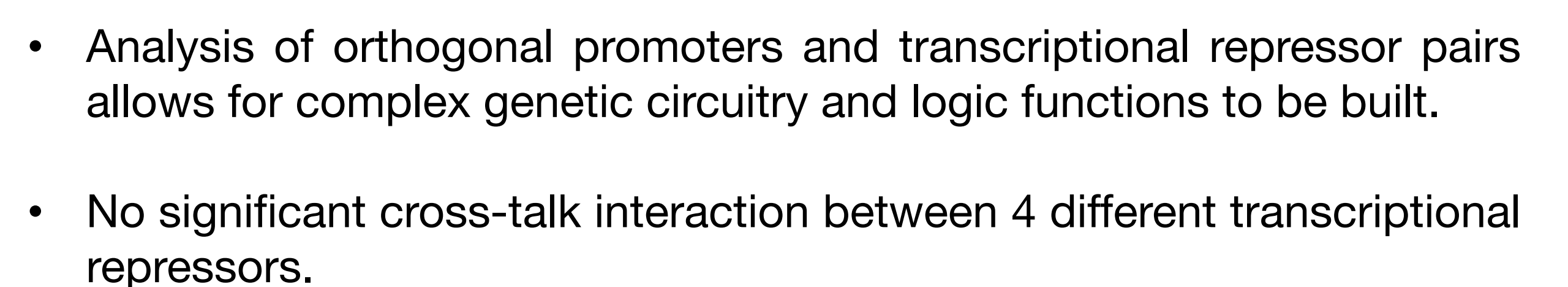
NATURAL AND SYNTHETIC SYMBIOSES



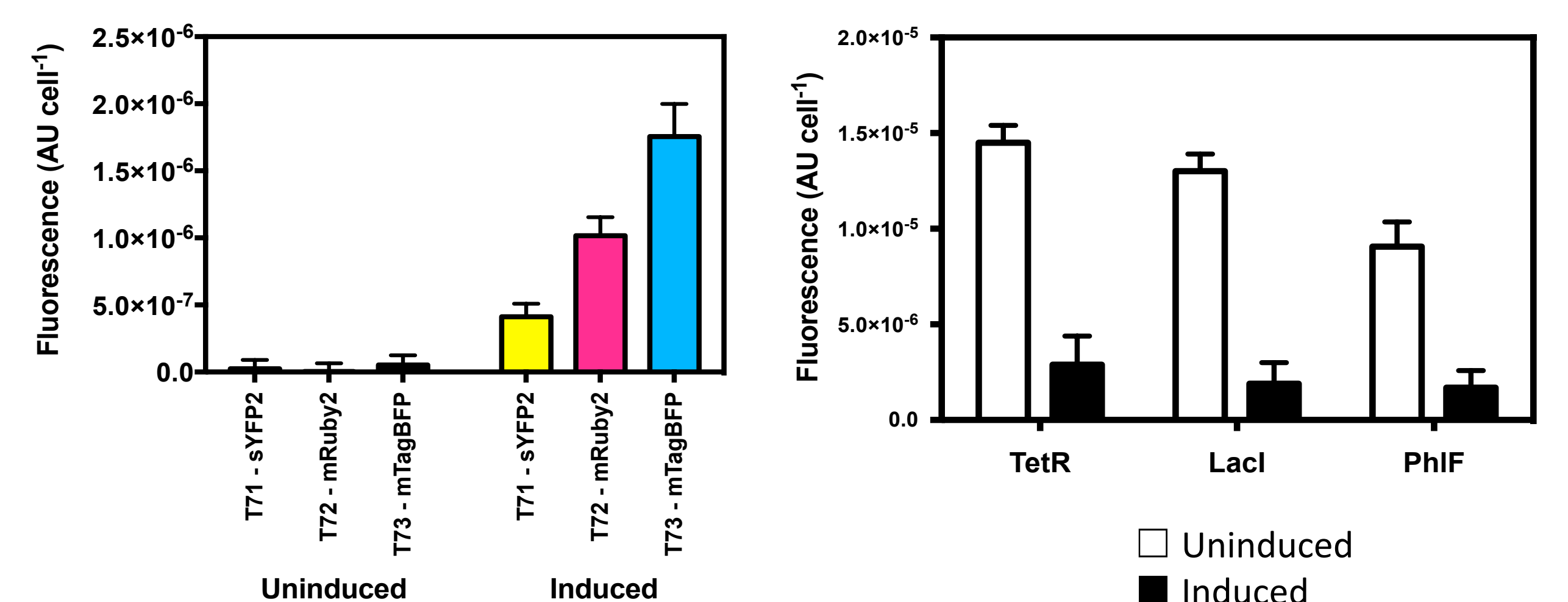
TARGETS FOR CONTROL:



TRANSCRIPTIONAL REPRESSORS



GENETIC SWITCH ARCHITECTURES



- T7 orthogonal transcription allows for simultaneous multigene expression with tuning of expression levels of each gene.
- NOT gate function allows for the repression of multiple genes and the construction of more complex logic functions such as AND gates.

FUTURE DIRECTIONS

- Test circuitry with phenotypically relevant genes (GlnA, AmtB, GltBD).
- Tune genetic circuitry for maximum ammonia release per cell with minimum affect on growth.

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