Riboregulators

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Overview

- Introduction
 - Biology as engineering discipline
 - Motivation
 - Types of riboregulation
- Specific riboregulation decision
 - Choice of self-cleaving ribozymes
 - General riboregulation model
 - Toggle switch model DNA-based
 - Toggle switch model riboregulation
- Second Section

Biology as engineering discipline

Motivation

- Invalidation of the Jurrassic Park and NASA discovery based projects.
- Proof of functional completeness
- (Possibilities discussed later, although implied by completeness)
- technical reasoning for Riboregulators.
 - Orthogonal
 - Predictable
 - Safe
 - Independence (special case of orthogonality)
 - FILL IN MORE

Types of riboregulation

Why shRNA sucks, because of cleaving mechanism. But this can be avoided.

Self-contained action. removes some dependencies.

Choice of self-cleaving ribozymes

General riboregulation model

Toggle switch model DNA-based

Toggle switch model riboregulation

Parameter Comparison

Blocks of Highlighted Text

Block 1

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Block 2

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Block 3

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Multiple Columns

Heading

- Statement
- 2 Explanation
- Second Example
 Second Example

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Table

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table: Table caption

Theorem

Theorem (Mass-energy equivalence)

$$E = mc^2$$

Verbatim

Example (Theorem Slide Code)

```
\begin{frame}
\frametitle{Theorem}
\begin{theorem}[Mass--energy equivalence]
$E = mc^2$
\end{theorem}
\end{frame}
```

Figure

Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

Citation

An example of the \cite command to cite within the presentation:

This statement requires citation [Smith, 2012].

References



John Smith (2012)

Title of the publication

Journal Name 12(3), 45 - 678.

The End