

The RNAi Consortium (TRC)

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Research Areas



Basic Research

At a Glance

- Status: **Active Consortium**
- Year Launched: **2007**
- Initiating Organization: **Broad Institute**
- Initiator Type: **Academia**
- Location: **North America**

Abstract

The RNAi Consortium (TRC) is a public-private consortium based at the Broad Institute to develop RNAi technologies that will enable the scientific community to probe the functions of human and mouse genes.

Mission

TRC's goal is to create widely applicable research reagents consisting of specific RNAi inhibitors targeting human and mouse genes. The reagents are composed of short hairpin sequences carried in lentiviral vectors. They can be used in a wide range of cellular and animal studies to discover the key genes underlying normal physiology and disease.

Impact/Accomplishment

The first phase of TRC's efforts is now complete. The researchers involved in the three-year, \$18 million initiative successfully built a library of 160,000 custom-designed RNAi constructs targeting

15,000 human genes and 15,000 mouse genes. They also developed methods to apply this library effectively for loss-of-function genetic screens. This fundamental resource is available to scientists worldwide through Sigma-Aldrich and Thermo Fisher Scientific (formerly Open Biosystems).

The project's second phase, a four-year collaboration launched in 2007 and known as TRC2, will further enhance this RNAi resource. A key goal is to provide at least two RNAi reagents for each human and mouse gene that achieves a high knockdown efficiency. Work toward this goal will include functional validation as well as efforts to improve library design. The consortium also hopes to enable widespread applications of RNAi by further developing and improving RNAi screening strategies.

Links/Social Media Feed

Homepage

<http://www.broadinstitute.org/rnai/trc>

Points of Contact

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