



Revolutionary Approaches and Devices for Nucleic Acid Analysis (READNA)

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Research Areas



Tool Development

Resource



Product Development

At a Glance

- Status: **Completed Consortium**
- Year Launched: **2009**
- Initiating Organization: **European Commission Seventh Framework Programme (FP7)**
- Initiator Type: **Government**
- Location: **Europe**

Abstract

The Revolutionary Approaches and Devices for Nucleic Acid Analysis (READNA) consortium includes projects to accelerate new breakthrough deoxyribonucleic (DNA) sequencing technologies and methods to enhance existing analysis methods. The ultimate aim is to advance DNA sequencing technologies to a level where a human genome can be analyzed at high resolution for less than €1,000 in less than one day.

Mission

The goals of the READNA consortium are to revolutionize nucleic acid analysis methods by improving elements necessary to use the currently emerging generation of nucleic acid sequencers in a meaningful and accessible way, providing methods that allow in situ nucleic acid analysis and methods capable of selectively characterizing mutant DNA in a high background of wild-type DNA, combining ribonucleic acid (RNA) and DNA analysis in a single analytical device, providing technology to efficiently analyze DNA methylation (genome-wide, with high resolution and in its long-range context),



implementing novel concepts for high-throughput HLA-screening, developing fully integrated solutions for mutational screening of small target regions (such as for screening newborns for cystic fibrosis mutations), developing a device for screening multiple target regions with high accuracy, and implementing strategies for effective and high-resolution genotyping of copy number variations.

Consortium History

December 2003: READNA began.

December 2013: READNA was awarded the Stars of Europe prize.

Structure & Governance

The project will be coordinated by the CEA (France) with partners coming from several European countries including the United Kingdom, France, Germany, Sweden, Denmark, and Holland. Apart from the research activities, READNA will also organize meetings and workshops and will be present at a number of international conferences.

The Scientific Advisory Board will consist of distinguished experts in the fields of applied genomics and diagnostics. It will receive all scientific reports and provide advice and guidance as required to the coordinator and to the Steering Committee, attending at least one meeting of the Steering Committee each year, as well as on an informal basis.

Financing

READNA is a four-year project running from June 1, 2008, until May 31, 2012, and is funded through a €12 million grant from the European Commission under the Seventh Framework Programme for Research and Technological Development, the European Union's main instrument for funding research in Europe, and it will run from 2007 to 2013.

Links/Social Media Feed



Homepage

www.cng.fr/READNA

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Delft University of Technology (TUD)

FEBIT (Comprehensive Biomarker Center

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