

EURenOmics

 consortiapedia.fastercures.org/consortia/eurenomics/

Research Areas



Tool Development



Biomarker Research

Diagnostic, Genomic Biomarker

At a Glance

- Status: **Active Consortium**
- Year Launched: **2013**
- Initiating Organization: **European Commission Seventh Framework Programme (FP7)**
- Initiator Type: **Government**
- **Rare** disease
- Location: **Europe**

Abstract

EURenOmics is devoted to improving the lives of patients affected by rare kidney diseases. In line with the objectives of the International Rare Disease Research Consortium (IRDiRC), it aims to develop novel tools that will allow for more accurate diagnoses, predict the disease course and the efficacy of available treatments, and help develop new and better therapies for rare kidney diseases.

Mission

This project receives funding as part of the European Community's commitment to the IRDiRC initiative. EURenOmics has joined forces with Seventh Framework Programme partner NeurOmics (for neuromuscular disorders) and the RD-CONNECT infrastructure platform.

EURenOmics' research efforts focus on the following five groups of kidney diseases:

- Steroid resistant nephrotic syndrome (Work Package (WP) 2)

- Membranous nephropathy (WP3)
- Tubulopathies (WP4)
- Complement disorders such as hemolytic uremic syndrome (WP5)
- Congenital kidney malformations (WP6)

The consortium consists of 18 academic institutions and eight industry partners. It has access to the largest rare renal disease cohorts assembled to date (collectively more than 12,000 patients) with detailed clinical information and comprehensive biorepositories containing deoxyribonucleic acid (DNA), blood, urine, amniotic fluid, and kidney tissue.

EURenOmics will utilize a wide array of high-throughput technologies to find new genes causing or predisposing to kidney diseases, characterize molecular signatures unique to individual disease entities, identify prognostic biomarkers, and screen for potential drug candidates. These technologies include next-generation exome and whole-genome sequencing, chromatin immunoprecipitation (ChIP) sequencing, tissue transcriptome and epitope profiling, and miRNome, proteome, and metabolome screening in different body fluids.

The resulting datasets will be combined in a systems biology approach with high-resolution clinical phenotyping and findings obtained with a large array of established and novel in vitro, ex vivo, and in vivo disease models to identify disease-associated genetic variants, disease-defining molecular signatures, and potential targets for therapeutic intervention.

Consortium History

September 2012: Grant agreement signed

January 2013: Kick-off meeting with NeurOmics and RD-Connect

February 2014: Joint Rare Disease Meeting with NeurOmics and RD-Connect

December 2014: Second periodic report approved by the European Commission

April 2015: First EURenOmics newsletter published

April 2015: EURenOmics project meeting took place in Heidelberg, Germany

Structure & Governance

To facilitate organization and management, EURenOmics is structured into seven WPs. Each WP has an academic lead who is responsible for its management and results.

The Scientific Advisory Board will ensure a high standard of research and will monitor progress by taking part in the annual General Assembly meetings. Whenever appropriate, it will consult with the consortium and make recommendations to improve performance.

The Ethics Advisory Board will monitor all issues with respect to observation of ethics principles in human and animal studies. It will guarantee expert support in specific ethics issues arising from, for example, the handling of genomic information, prenatal molecular screening, and the use of stem cell technology. The Ethics Advisory Board will review the research plans and operating procedures for compliance with ethics standards and will consult with the partners during the course of the project.

Financing

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 305608.

Links/Social Media Feed

Homepage <http://www.eurenomics.eu/#>

Points of Contact

Project Coordinator

Franz Schäfer
Professor of Pediatrics
Head of Division of Pediatric Nephrology

and KfH Children's Kidney Center
phone: + 49 6221 563 2396
fax: + 49 6221 56 5166
email: franz.schaefer@med.uni-heidelberg.de

Project Office

Andre Durudas
International Projects Manager
phone: +49-89-288104-33
fax: +49-89-288104-933
email: andre.durudas@gabo-mi.com

Sponsors & Partners

Heidelberg University Medical
Center
Acquifer AG
Agencia Estatal Consejo
Superior de Investigaciones
Científicas
Assistance Publique - Hopiteaux
de Paris
Comprehensive Biomarker
Center
GABO:mi
Genomatix
Hacettepe University
INSERM iBV
INSERM U1048
INSERM U983
INSERM UMRS 702
INSERM UMRS 970
Istituto di Recerche

Farmacologiche Mario Negri
Katholieke Universiteit Leuven
Leibniz Institute for Natural
Product Research
Ludwig-Maximilians-Universität
Metabometrix Ltd.
mosaiques diagnostics
Multiplicom Inc.
Philochem AG
Philogen S.p.A
Radboud University Nijmegen
University College London
University Medical Center Utrecht
University of Bristol
University of Manchester
University of Michigan
University of Newcastle upon
Tyne
University of Oulu
University of Zurich

Updated: **04/14/2016**