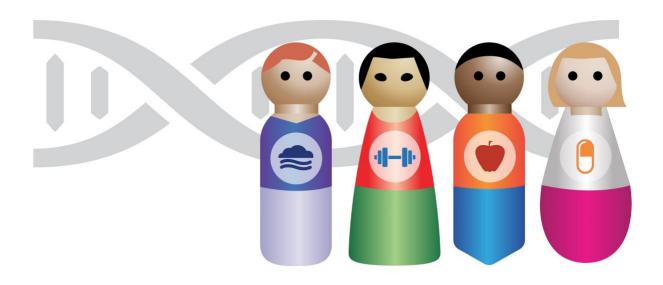
Take the DREAM Challenge! Crowdsourcing health solutions with PEGS data



The PEGS DREAM Challenge is aimed at translating the wisdom of the crowd into practices for tackling high cholesterol

NIEHS is calling all scientists to dive into an exciting new <u>DREAM Challenge</u> to tackle high cholesterol using data available from the Personalized Environment and Genes Study (PEGS) cohort. NIEHS' PEGS integrates genetic and environmental data to understand disease etiology, identify risk factors, and improve disease prevention.

The <u>PEGS data</u> includes an unprecedented amount of health and exposure data, as well as genetic data on common and rare variants, structural variations, high-resolution human leukocyte antigen (HLA) variants, telomeric content estimation, local and global ancestry estimations, and genome-wide methylation data. Geospatial estimates of exposure round out the data and include information on proximity to harmful environmental factors, air pollution, and social and environmental vulnerabilities.

For this challenge, NIEHS has partnered with Sage Bionetworks, the originator of DREAM Challenges hosted on their <u>Synapse platform</u>. DREAM Challenges engage the scientific community in collaborative problem-solving to address fundamental biomedical questions.

<u>PEGS DREAM Challenge</u> participants will compete in two tasks. In the first task, Challenge participants use PEGS data to classify individual risk of high cholesterol, using whatever data component(s) they choose. In the second task, participants generate creative hypotheses about high cholesterol beyond known clinical risk factors.

Winners will present their results at a <u>conference</u> and are first authors on papers describing the results, and all participants have the opportunity to be included as authors in papers describing the Challenge.

The PEGS DREAM Challenge in now open! <u>The submission deadline is August 15, 2024</u>. Winners will be announced August 31.

Key Dates

Challenge Release	May 1, 2024
Submission Deadline	Aug 15, 2024
Model Evaluation	Aug 15-31, 2024
Winners Announcement	Aug 31, 2024
RSGDREAM2024 Conference	Oct 1, 2024