



DIVERSITY OUTBRED PILOT GRANT PROGRAM

Looking to increase the translatability of your research beyond work in standard inbred mice?

Curious about the interplay between genetics and the environment in your studies?

Interested in genetic diversity but never had the opportunity to incorporate it into your research?

The Jackson Laboratory is pleased to announce the Diversity Outbred Pilot Grant Program to support increased study of genetically diverse mice in biomedical research. This program aims to enable a greater understanding of genetic diversity and its impacts on experimental findings. We invite you to apply and share in our mission to discover novel solutions for disease and improve human health.

Background

Research studies are typically designed with the intention of reducing the number of experimental variables. While this can be helpful to support mechanistic research, reducing variability can also impact translatability. This is particularly relevant in mouse research where inbred mice are commonly used. Testing in a single inbred mouse is genetically akin to testing in a single human, and this has led to a number of reproducibility issues in the clinic.

Genetically diverse mouse populations such as Diversity Outbred (DO) mice were created to overcome these barriers, and can enable researchers to better interrogate the genetic variability seen across human populations. Diversity Outbred mice contain ~90% of the genetic diversity observed in the *Mus musculus* species and an estimated >50 million potential genetic variants. This level of genetic diversity is well above that of traditional models, and

represents a unique opportunity to investigate the impact of genetic diversity on experimental outcomes.

Program Details

The Pilot Grant Program is open to investigators across all biomedical research areas, with the goal of supporting small scale research studies incorporating DO mice into standard experimental workflows. This includes, but is not limited to, studies that compare results in DO mice to those obtained in inbred mice and/or comparisons to in vitro studies of human cells or tissues.

The Pilot Grant Program will provide awards in the form of direct research funds up to \$10,000 and up to 50 free Diversity Outbred mice.

Applicants affiliated with any academic, government, or nonprofit institution in North American are invited to apply.

Key Dates

- Open Date 10/01/2021
- Application Due Date 12/03/2021
- Notification of Award 01/14/2022

Want to learn more? Visit our website at jax.org/jax-mice-and-services/diversity-outbred-grant and register to receive updates on key program details.