



DMDD

Deciphering the Mechanisms
of Developmental Disorders

dmdd.org.uk



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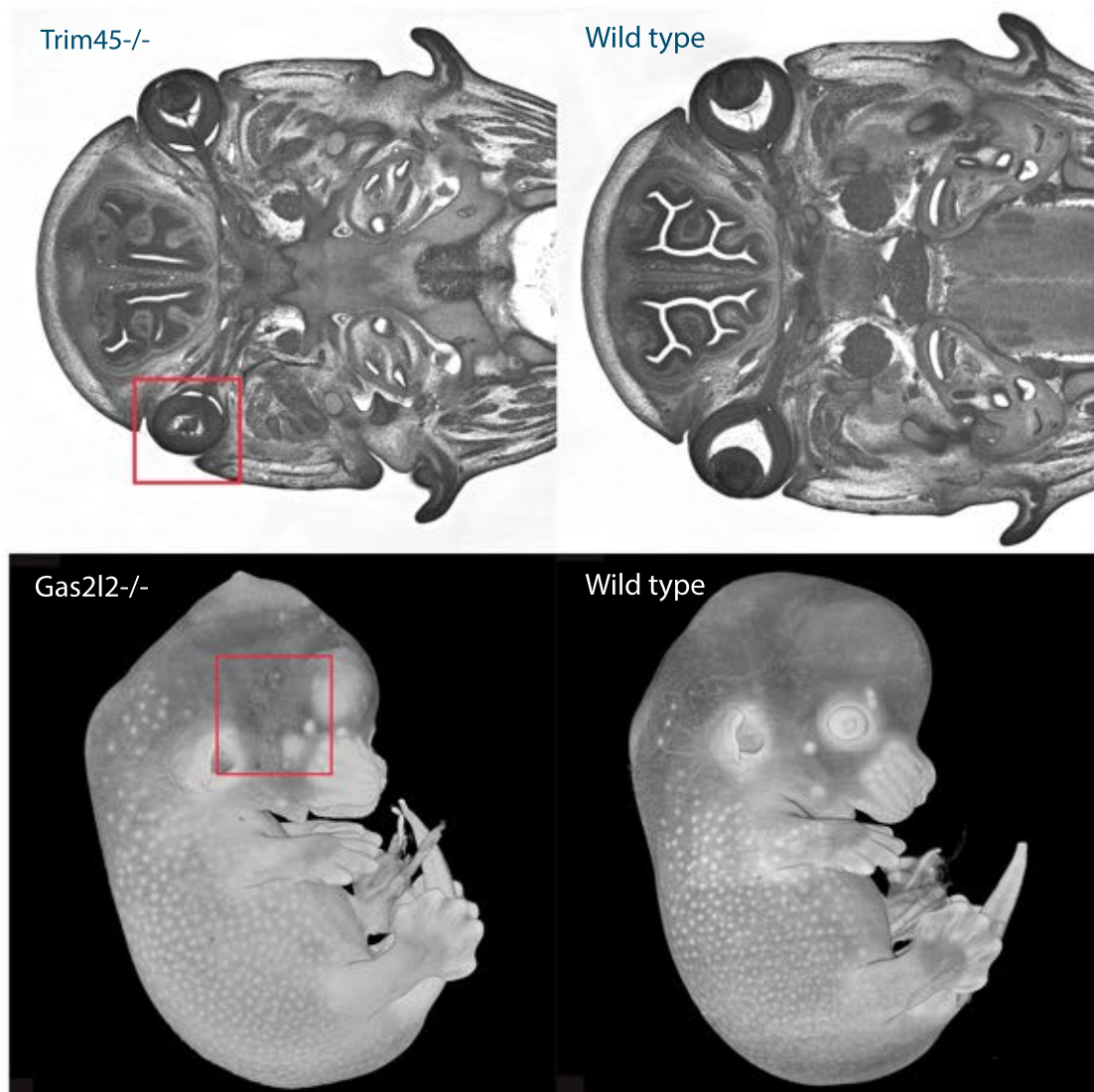
contact@dmdd.org.uk



Find gene knockouts giving abnormal eye development

The [DMDD database](http://dmdd.org.uk) is designed to help clinicians and developmental biologists identify gene mutations that may be linked to developmental abnormalities, including many eye phenotypes.

The project studies the morphological effects of targeted gene knockouts in mice. Using detailed 3D analysis of images, hundreds of phenotypes have been identified in developing embryos and all data is available online. Currently, 36 gene knockouts in the database have resulted in eye phenotypes, including aphakia and abnormal morphology of the eye muscles and optic cup.



A *Trim45* knockout embryo (top left) has aphakia, while a *Gas2l2* knockout embryo (bottom left) has anophthalmia.

Users can search the data by gene or phenotype to find candidate genes related to eye abnormalities and identify phenotypes that occur together.

The database is rapidly growing, with a goal to analyse a total of 240 lines by mid-2018.

Visit dmdd.org.uk to explore the data.