DMDD

Deciphering the Mechanisms of Developmental Disorders

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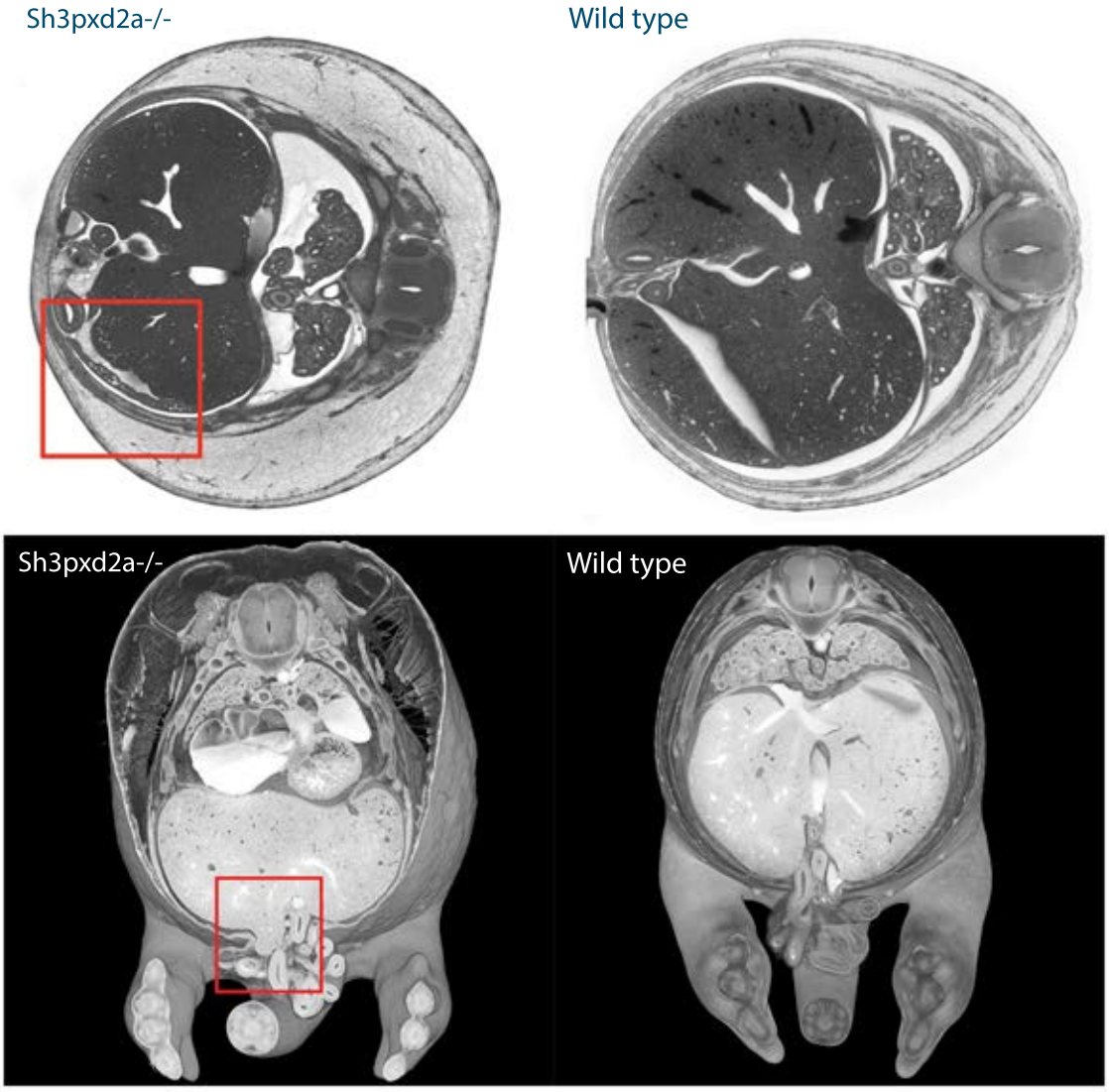
# Find gene knockouts giving abnormal liver development

The DMDD database is designed to help clinicians and developmental biologists identify gene mutations that may be linked to developmental abnormalities, including many liver phenotypes.

The project studies the morphological effects of targeted gene knockouts in mice. Using 3D analysis of detailed images, hundreds of phenotypes have been identified in developing embryos and all data is available online. Currently, 30 gene deletions in the database have resulted in liver phenotypes including herniated liver, hypoplasia and enlarged sinusoidal spaces.




Imaging of Sh3pxd2a embryos reveals that one has an abnormal lobe-like liver structure and enlarged sinusoids (top left), while another has a herniated liver (bottom left).

Users can search the data by gene or phenotype to find candidate genes related to liver defects 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.