



DMDD

Deciphering the Mechanisms
of Developmental Disorders

dmdd.org.uk



@dmdduk



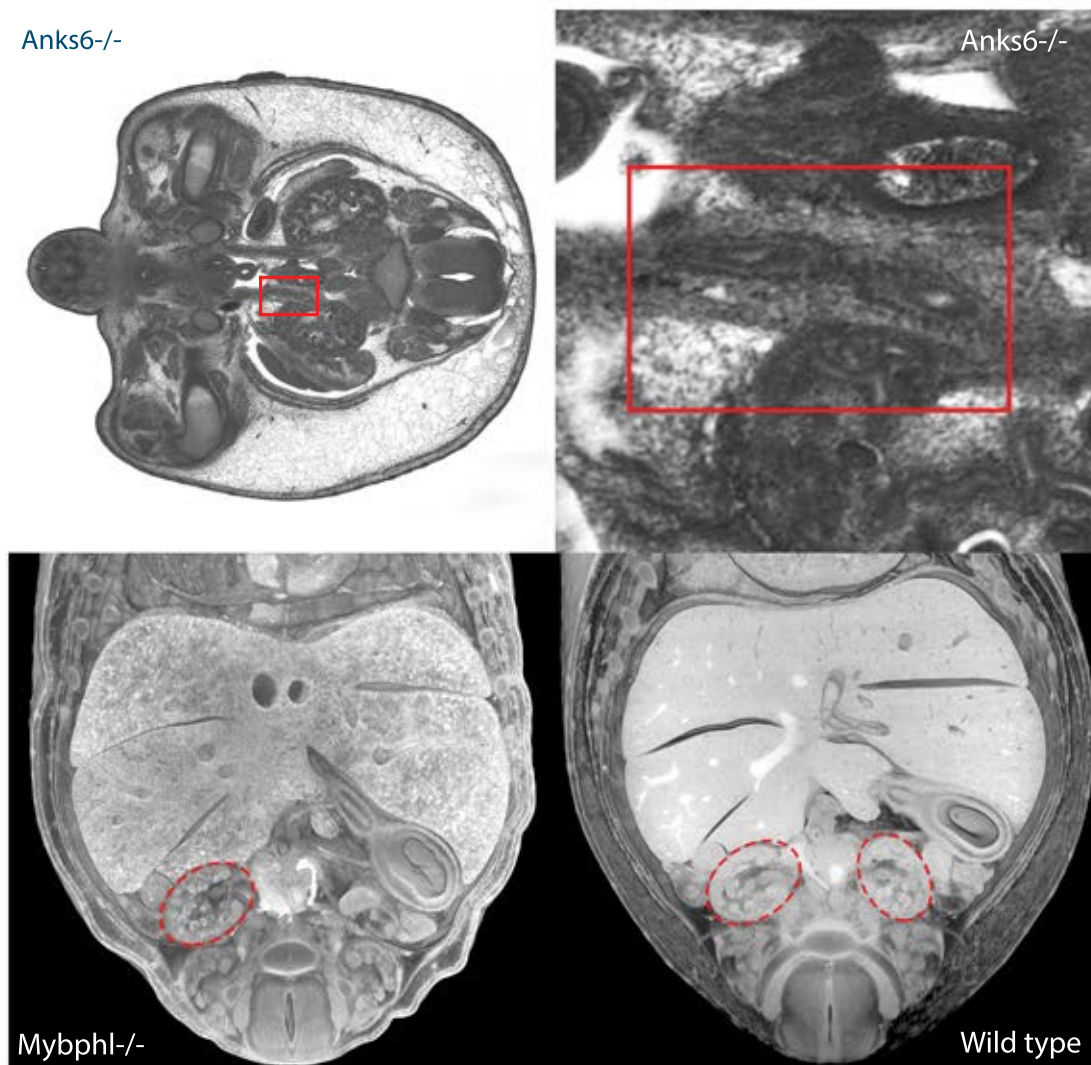
contact@dmdd.org.uk



Find gene knockouts giving abnormal renal/urinary system 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 renal/urinary system 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, 28 gene knockouts in the database have resulted in renal/urinary system phenotypes, including absent kidney, pelvic kidney and bifid ureter.



An *Anks6* knockout embryo (top row) has a bifid ureter, while a *Mybphl* knockout embryo (bottom left) has an absent kidney.

Users can search the data by gene or phenotype to find candidate genes related to renal/urinary system 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.