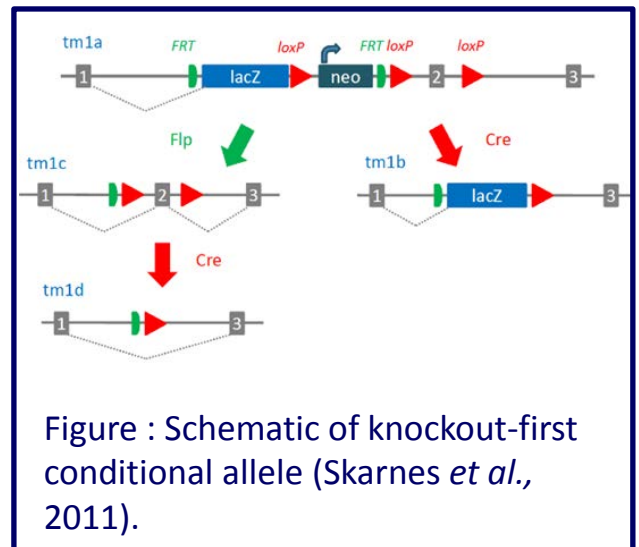




# BC Children's and Women's Collaborative Team Make Mouse Model of Pyridoxine-Dependent Epilepsy (PDE)

PDE affects newborn children and causes frequent seizures, structural brain abnormalities, and moderate to severe intellectual disability. The causative gene is *ALDH7A1*, and this new mutant mouse model will help physicians and researchers understand the underlying disease mechanisms, and explore improvements in therapy.

Working with the team of Drs. Clara van Karnebeek, Jan Friedman, and Blair Leavitt, MAPS imported and microinjected conditionally targeted EUCOMM embryonic stem cells into mouse blastocysts. The chimeras resulting from the first round of injection went germline, and MAPS led the breeding and generation of the four different EUCOMM alleles, all the while also cryopreserving each. Proving most valuable for study, by doctoral candidate and team member Hilal Al-Shekaili, are the deleted allele (*tm1d*) and the conditional allele (*tm1c*).



For more information regarding ESC microinjection, CRISPR, and other services provided by MAPS do not hesitate to contact us.

We look forward to working with you to further your research

**The Mouse Animal Production Service (MAPS)** at CMMT provides the research community with cost effective, state of the art technologies for the generation and maintenance of genetically modified mice. Directed by Dr. Elizabeth M. Simpson, the objective of MAPS is to advance discovery through mouse-based techniques.

## CONTACT US

For more information on our services or to place an order, please contact us:

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<http://cmmt.ubc.ca/facilities-services/mouse-animal-production/>

