

Publication Again!

Brown Lab Grad Student

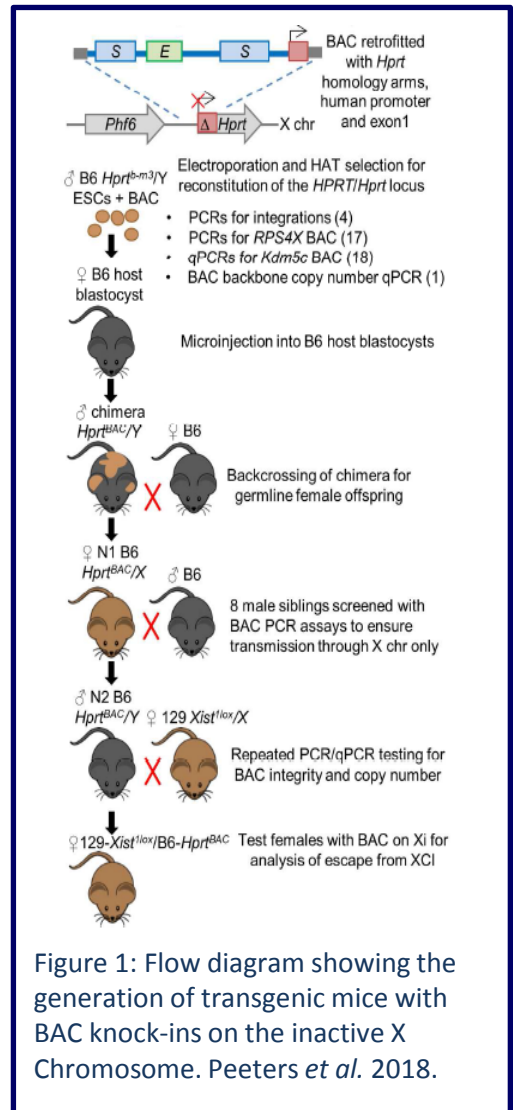
– Two New KI Mouse Strains

Dr. Carolyn Brown's Lab at UBC studies the regulation of gene silencing and escape from X-chromosome inactivation (XCI). This work is important in understanding epigenetics and sex differences in gene expression, since as much as 20% of human X-linked genes escape from inactivation (Balaton *et al.*, 2015).

MAPS generated two mouse strains carrying bacterial artificial chromosomes (BACs) encompassing the human gene *RPS4X* and mouse gene *Kdm5c*, which were knock-in 5' of the *Hprt* locus on the X chromosome. This work demonstrated that mouse was able to recognize human DNA elements for escape-level expression, and corresponding low promoter DNA methylation. Thus, this is a system that can be used for future studies in XCI of human genes in mouse (Peeters *et al.*, 2018).

Make sure to pick up a copy of:

Peeters *et al.* 2018 "Human cis-acting elements regulating escape from X-chromosome inactivation function in mouse" (PMID: 29401310).



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:

MAPS team at mapsinfo@cmmt.ubc.ca

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