Medical Xpress

New screening method quickly identifies mice bred for bone marrow regeneration studies

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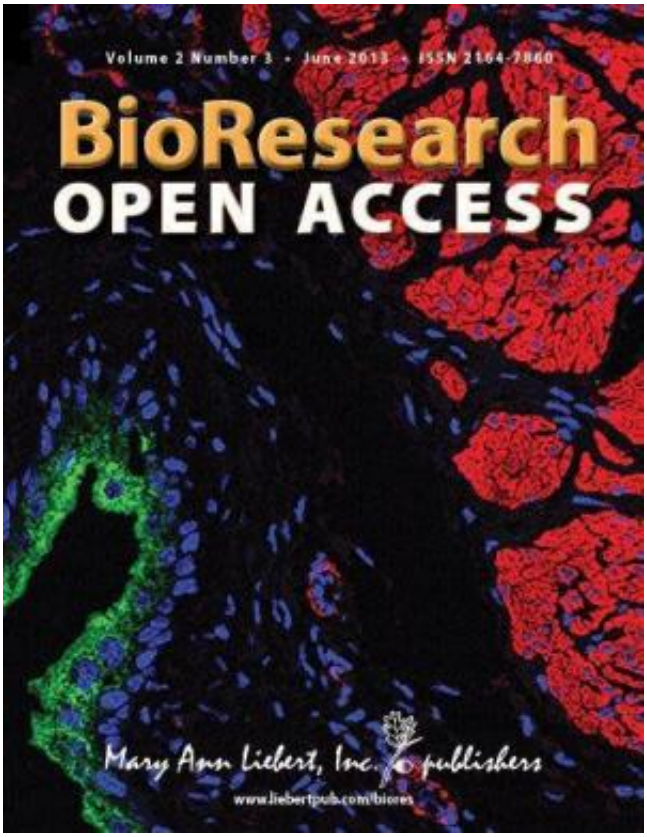

Immunocompromised mice, created by inactivating the genes that would allow them to recognize and attack donor cells or organs, are critical for studies of bone marrow reconstitution. A more rapid and reliable technique for identifying these mice in breeding colonies is described in

an article in *BioResearch Open Access*, a peer-reviewed open access journal from Mary Ann Liebert, Inc., publishers.

Alejandro Ferrer, Adam Schrum, and Diana Gil, College of Medicine, Mayo Clinic (Rochester, MN), designed a simple method for identifying mice with specific gene deletions or replacements, using a DNA amplification technique called polymerase chain reaction, or PCR. They describe the use of this approach in the article "A PCR-Based Method to Genotype Mice Knocked Out for All Four CD3 Subunits, the Standard Recipient Strain for Retrogenic TCR/CD3 Bone Marrow Reconstitution Technology."

"This technical report describes for the first time a simple PCR-based screen to identify TCR/CD3 knockout mice," says *BioResearch Open Access* Editor Jane Taylor, PhD, MRC Centre for Regenerative Medicine, University of Edinburgh, Scotland. "This rapid method will provide a valuable tool for all researchers using TCR/CD3 retrogenesis."

More information: The article is available free on the *BioResearch Open Access* website.

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