

Conservation of tropical indigenous Suidae genetic resources using the induced pluripotent stem cells (iPSC) derived from somatic cells

Christian Tiambo, Moses Ogugo, Triza Tonui, Christine Muhonja, Tom Burdon, Karen Marshall. E-mail: c.tiambo@cgiar.org

Why pig?

- Local Suidae provide a large contribution to the genetic diversity of the domestic stock
- Their genetic variability is related to adaptation to harsh environments, disease resilience, and meat quality characteristics
- They are part of the cultural heritage of local communities, having an important socio-economic value,

But

- Deforestation, persecution and bushmeat hunting constitute substantial threats leading to their decline or extinction
- No existing conservation programme
- Genetic improvement can achieve rapid gains, but there is no infrastructure to enable this

Combining the iPSCs and the surrogate host technology is the game changer for conservation and restoration of tropical Suidae breeds without their genetic integrity being affected

