Genetically Engineered Swine Models to Study Diseases Like Cystic Fibrosis

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NSRRC
National Swine Resource & Research Center

MISSOURI

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Swine are being used extensively as biomedical models of human health

- Cardiovascular disease/Atherosclerosis, Cutaneous pharmacology/Wound repair/Dermatology, Cancer, Diabetes, Ophthalmology, Toxicology, Lipoprotein metabolism, Xenotransplantation
- NIH Spends over $100 M per year extramurally on pig research.

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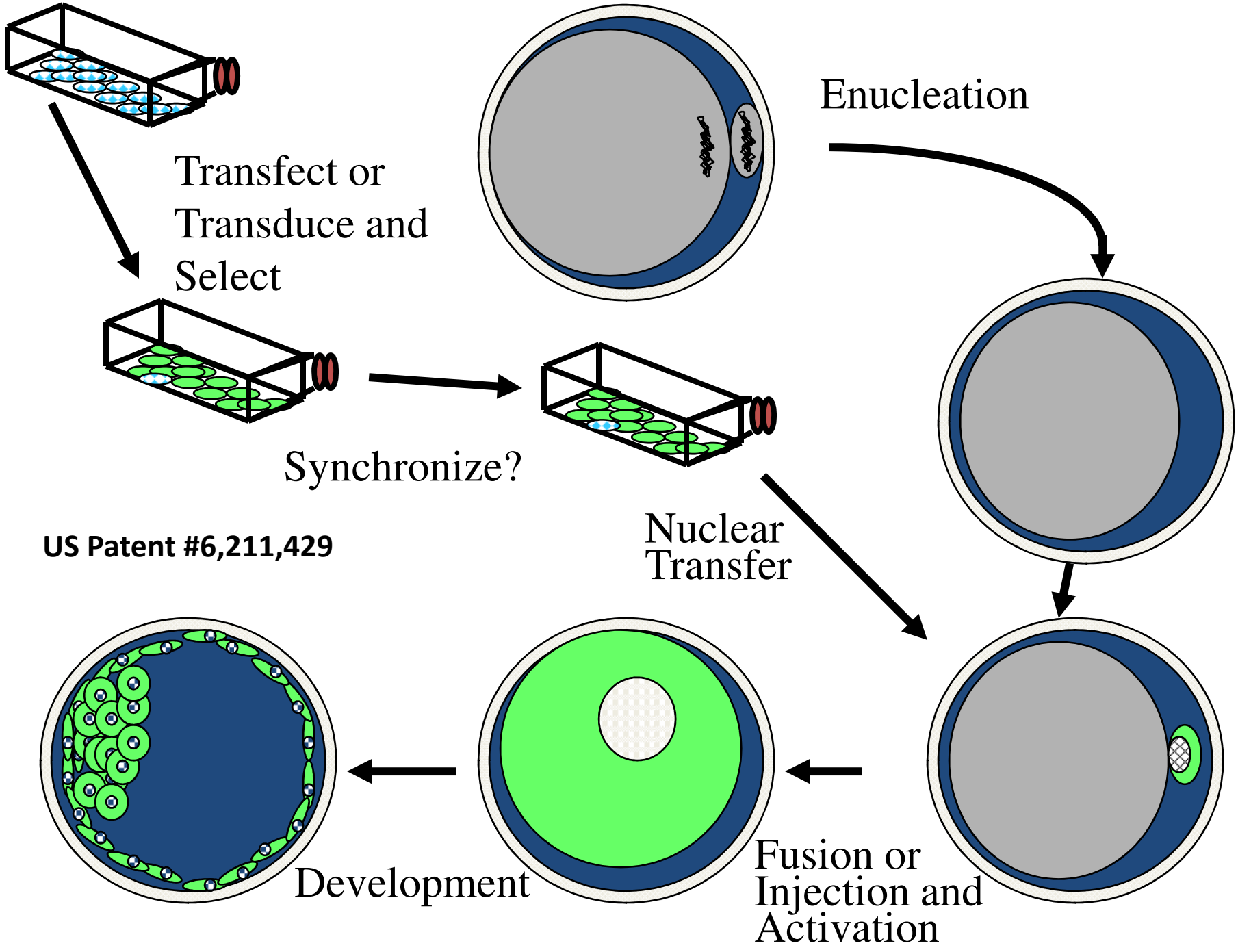
Things that Count in a Biomedical Model

- **Availability Counts**
- **Phenotype Counts**
- **Physiology Counts**
- **Size Counts**
- **Genome Counts**
- **Acceptability as a Preclinical Model Counts**


Transfect or
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US Patent #6,211,429
Development
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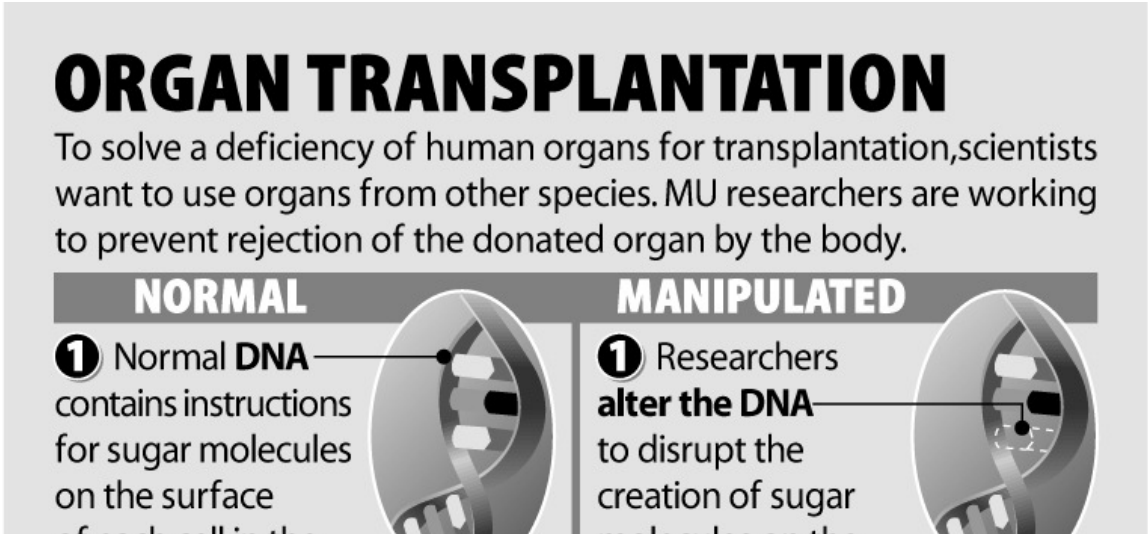
Activation

Swine Gene Modifications (1 of 4):

- **Xenotransplantation**



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