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#### Meet the Inventors

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Pharmacology and Cancer Biology

## Estrogen Receptor Action Indicator (ERIN) Mouse

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To address globally the issue of tissue specificity of ER ligands, Duke scientists have developed a transgenic mouse that functions as a reporter of ER activity, termed ERIN (estrogen receptor action indicator). ERIN provides a model system that can be used to identify tissues and cells that contain functionally active ER and to define their ability to respond to different ER-ligands. This model system integrates the upstream requirements in ER action (including ER itself, ligand, and accessory comodulators) and results in expression of the enzyme P-galactosidase b-gal) that allows for enzymatic amplification of the signal and histological localization. After a systematic evaluation of seven different estrogen responsive reporters, (3XERE-tk-ZacZ) with the highest absolute level of induction was selected.

