

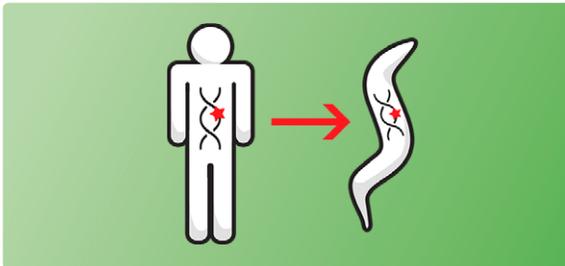
From Genes to Behavior

Platforms for discovery of gene-specific phenotypes

All heritable traits, including disease susceptibility, are affected by interactions between genes that are mutated. However, little is understood about how genes interact to produce phenotypes.

NemaMetrix provides a high-content analysis microfluidic platform that allows researchers to answer genome-to-phenome questions.

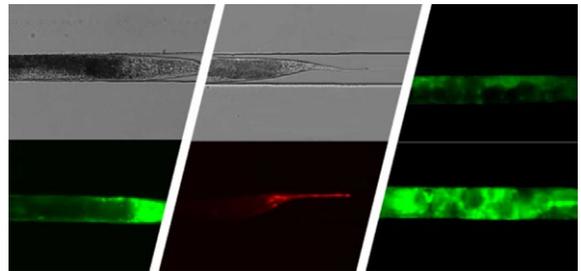
- ✓ Design, construction and delivery of custom *C. elegans* and Zebrafish transgenics
- ✓ Create animal models engineered for human disease discovery
- ✓ Quantitatively measure the variant phenotypes



Create Genotypes

Design, construction and delivery of custom *C. elegans* and zebrafish transgenics optimized to your specifications through our transgenic services.

[Turn over to see genotyping products...](#)

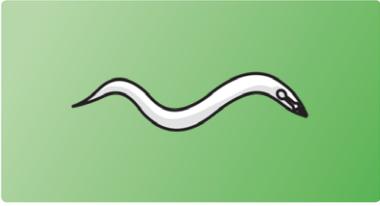


Detect Phenotypes

Visualize *C. elegans* behavior and collect phenotypic data for future analysis using our phenotyping platforms.

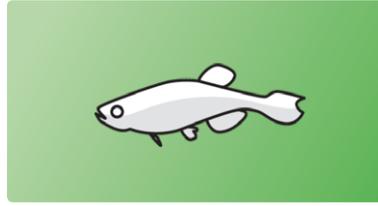
[Turn over to see phenotyping products...](#)

Transgenic services



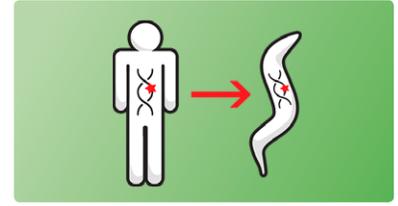
Custom *C. elegans* Transgenics

Design, construction and delivery of custom *C. elegans* transgenics optimized to your specifications. Choices of genome editing methods are CRISPR, MosSCI and extrachromosomal Arrays.



Custom Zebrafish Transgenics

Design, construction and delivery of zebrafish transgenics optimized to your specifications. Choices of genome editing methods are CRISPR and Tol2.



Humanized Transgenics

By inserting individual human mutations into the animal model genome, we can create animal models engineered for human disease discovery.

Phenotyping solutions



ScreenChip and NemaViewer Phenotyping Platforms

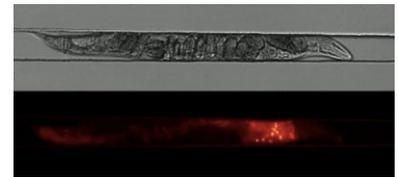
The ScreenChip System is an automatic worm screening and phenotyping platform that allows you to collect rapid and precise whole animal data. It enables you to quickly and reliably assess cellular and physiological responses to genetic mutations, drugs and other environmental changes.

NemaViewer Imaging System allows you to visualize and record worm behaviors. The NemaViewer Phenotyping Platform, which includes the ScreenChip System enables you to visualize and localize fluorescent probes, and measure worm morphology.

Reagent Kits

RediStain™ fluorescent staining kits allow visualization of various *C. elegans*' structures and are suitable for phenotyping studies.

Used with the ScreenChip System, these new staining kits enable the analysis of nematode phenotypes and their directly-related underlying genotypes that would not be possible with non-fluorescent techniques.



Disease Panels

Strains carrying genetic mutations that are associated with Alzheimer's disease and Epilepsy Disorder, validated via PCR and sequencing.



Learn more at nemamatrix.com or contact us at support@nemamatrix.com